

Abstracts

Trauma System Development

C. James HOLLIMAN, F.A.C.E.P., F.I.F.E.M.

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The increasing incidence of trauma as an epidemiologic problem for all countries points out the need for all countries to develop trauma care systems. Trauma care systems have been shown to clearly reduce mortality and morbidity from trauma and have been shown to be cost effective. The World Health Organization has called upon all countries to develop effective systems of trauma care and emergency care delivery. Emergency Medicine has been shown to be a critically important component of a trauma system, and Emergency Physicians have been shown to be able to provide effective care for trauma. The important core components of a trauma system include designated trauma care facilities, prehospital

care, Emergency Department and trauma team care, surgical and operating room care, postoperative intensive care, rehabilitation, healthcare personnel training, public education, and prevention programs. Secondary components of an effective trauma system include case registries, research, and cross international border cooperation in case referrals. Resources for trauma system development include the World Health Organization Trauma and Emergency Care System Committee, the International Federation for Emergency Medicine Specialty Implementation Committee and its Core Curriculum and Education Committee, and a number of standardized trauma care training courses.

Romancing with Emergency Medicine

Gautam G. BODIWALA, CBE, DL, JP, DSc (Hon), MS, FRCS, FRCP, FCEM, FIFEM
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Human beings have been romancing with Emergency Care for a long time. History of Emergency Medicine could be traced back to 50 BC. Ancient civilisation of India, China, Egypt and Europe, all have evidences of practicing Emergency Medicine in some form probably not recognisable in the modern age. 500 years ago practice of medicine in Europe was certainly different. Although modern medicine saw its birth somewhere in 19th Century, we did not fall in love with Emergency Medicine truly until late 20th century.

I want to trace back how four founding members of the International Federation for Emergency Medicine struggled to establish the specialty, who were the heroes and who were the villains of this story. I want to trace the path they chose to develop the specialty, what were the obstacles, how they overcame. I also want to look why we picked up emergency care as a measure of standard of healthcare provided in a country, look at the current problems and come up with suggestions for possible solutions.

Update on Trauma Resuscitation

Eric LEGOME, MD

Kings County Hospital SUNY Downstate College of Medicine Brooklyn, New York, USA.

Will be speaking on the care of the critical trauma patient. He will review the science behind permissive hypotension, massive transfusions and balanced ratio of blood products.

He will discuss options for intubation and review the literature regarding best options for stabilizing these critical patients.

The Anticoagulated Trauma Patient

Murat ERSEL, MD, PhD

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Advances in the care of chronic diseases have increased the number of elderly people with active lifestyles, which predispose them to injury. Also the number of patients are placed on anticoagulation therapy is increasing. More anticoagulated individuals are presenting to emergency departments (ED) following trauma. Managing these patients in the ED became a challenge for emergency physicians.

Antithrombotic drugs are divided into 3 classes: anticoagulants, antiplatelet agents, and fibrinolytic agents. Patients admit emergency department with an anticoagulation therapy are mostly on anticoagulants or antiplatelet agents. Emergency physicians should identify on which drug the patient is, how to monitor anticoagulation status and how to choose the correct treatment option according the type of the drug.

Little is known about the effects of antiplatelet agents mainly aspirin and clopidogrel and other agents on traumatic bleeding. Aspirin does not increase risk of bleeding and mortality especially in patients with pelvic fractures, nevertheless some observational

studies found increased risk in patients with traumatic intracranial hemorrhage (ICH). These risk is more significant on clopidogrel. Administration of platelets in patients with substantial bleeding or ICH in use of antiplatelet agents and desmopressin administration after platelet function measurement is recommended.

Protamine can be used to reverse the anticoagulation effects of heparin and to partially reverse the anticoagulation effects of the LMWH. Vitamin K replaces the factors affected by warfarin. Prothrombin complex concentrates are effective for the emergency reversal of vitamin K dependent oral anticoagulants, and also for the novel anticoagulants which effects on direct prothrombin.

All patients with massive bleeding should be managed according the guidelines, tranexamic acid, plasma, platelets and red blood cells should be administered initially, further administration of plasma or fibrinogen should planned according to plasma levels or thromboelastometric measurements.

Evidence-Based Rules for Radiologic Evaluation of Brain and Cervical Spine Injuries

Ashley BEAN, MD, MA, FACEP, FAAEM, FAWM

University of Arkansas for Medical Sciences, USA

Traumatic brain and spinal cord injuries are leading causes of death and disability. Experienced physicians can often predict the likelihood of pathology in the patient with moderate to severe neurotrauma. It is far more difficult for even experienced physicians to determine which patient with minor or mild trauma has a significant injury or requires acute

surgical intervention. In this talk, we will discuss evidence-based rules to determine the need for imaging of the brain and spinal column after traumatic injuries. These guidelines can identify low-risk patients in whom imaging can be avoided, reducing cost and decreasing ionizing radiation exposure.

From Hippocrates to FOAM: A History of Medical Education

Joseph R. LEX, Jr., FACEP, MAAEM
Temple University School of Medicine, USA.

If you want to know how we practiced medicine 5 years ago, read a textbook. If you want to know how we practiced medicine 2 years ago, read a journal article. If you want to know how we practice medicine now, go to a good conference. But if you want to know how we will practice medicine in the future, listen in the hallways and use FOAM – Free Open Access Meducation. We have entered an era when self-education is king, and the tools for self-education are available on the web – blogs, podcasts, tweets, and personal exchanges – at no charge. Self-directed asynchronous learning acknowledges that adults learn best by being self-directed, problem-orientated and by relating new knowledge to past

experiences. Learn how to take responsibility for your own learning and develop the skills you will need for life-long learning beyond the walls of the lecture hall.

New Drugs and Devices

Every year the US Food and Drug Administration approves dozens of new drugs for use in the United States, and other countries frequently follow suit. But only occasionally is a drug an improvement over what is already available, and even more rarely is it something that changes the practice of emergency physicians. The last few years have been no exception, but there is a handful of drugs that may help you improve care and outcomes for your patients.

Violence and Violence Prevention

Robert GORE, MD

Kings County - SUNY Downstate Hospitals, Brooklyn, NY, USA.

According to the Center for Disease Control, Youth Violence is the number 2 cause of death amongst U.S. Youth and is a major medical and public health problem that is seen in emergency

departments. The presentation will explore youth violence from the Emergency Medicine perspective, youth violence as a global health problem and explore school and emergency department interventions.

Diversity in Emergency Medicine

Lisa A. Moreno-WALTON, MD, MS, MSCR, FACEP, FAAEM

Louisiana State University Health Sciences Center- New Orleans, USA

Emergency Medicine is a global specialty. In virtually every ED, everywhere in the world, we treat patients from many nations. Emergency physicians are mobile, treating patients of multiple nationalities and cultures in many countries as we travel to meet the needs presented by disaster or simply to share knowledge and expertise. In order to meet the standards of excellence which we set in EM, we must first develop a diverse emergency physician workforce representative of the patients whom we

serve, and second, develop a level of cultural competency which allows us to treat every patient, anywhere with the sensitivity and awareness that will facilitate optimal outcomes. In this session, emergency physicians will gain the insight and skills necessary to render culturally competent emergency care to patients of diverse religions, ethnicities and cultures anywhere, anytime and in any circumstance. Attention will also be focused on the culturally diverse physician who is providing care in a disparate environment.

Koroner BT Anjiyografi (KBTA)

Önder TOMRUK, MD

Süleyman Demirel University, School of Medicine, Isparta, Turkey

KBTA, koroner arterleri görüntüleyen noninvasiv metottur. KBTA, koroner arter hastalığı (KAH) tanısı, stent restenozu tanısı ve koroner baypas açıklığının değerlendirilmesi amacıyla kullanılabilir.

AHA tarafından 2008 yılında yapılan açıklamaya göre, şüpheli stres testleri olan hastalar dahil başlangıç risk değerlendirmesi sonrası orta risk KAH olan semptomatik hastalarda KBTA, potansiyel yararı dolayısıyla endikedir (1). KBTA, tanisal doğruluğunun üstün olması nedeniyle koroner manyetik rezonans anjiyografi-den (MRA) daha çok tavsiye edilmektedir (2).

Dokuz derneğin ortak kararıyla KBTA çekilmesi gerekli hastalar şu şekilde belirlenmiştir (3);

1. Bilinen kalp hastalığı olmayan semptomatik hastalarda KAH tespiti,
2. Önceden KAH olmayan ve yeni başlangıçlı veya yeni tanı kalp yetmezliği olan hastalarda KAH tespiti,
3. Koroner olmayan kalp cerrahisi öncesinde preoperatif koroner değerlendirme,
4. Yapılan egzersiz testi normal ama semptomları devam eden hastalar veya orta risk Duke treadmill skoru olan hastaların değerlendirilmesi,
5. Stres görüntüleme işlemiyle egzersiz testi sonuçlarının uyumsuz olduğu hastaların değerlendirilmesi,

6. Geçmişte normal stres görüntüleme çalışması olan fakat yeni ya da kötüleşen belirtilerin değerlendirilmesi,
7. Revaskülarizasyon sonrası risk değerlendirmesi – CABG sonrası semptomatik veya ≥ 3 mm LAD stentli asemptomatik hastaların değerlendirilmesi,
8. Erişkin konjenital kalp hastalığında, kalp yapısı ve fonksiyonlarının değerlendirilmesi,
9. Ventriküler morfoloji ve sistolik fonksiyon açısından kalp yapısı ve fonksiyonlarının değerlendirilmesi,
10. İntrakardiyak ve ekstrakardiyak yapılar açısından kalp yapısı ve fonksiyonlarının değerlendirilmesi. KBTA'nun acil serviste kullanımıyla ilgili olarak; Hoffmann ve arkadaşlarının çok merkezli bir çalışmasında, AKS düşündüren semptomlarla başvuran hastalarda, triyaj stratejisi içine KBTA katılmasıyla, standart değerlendirme karşılaştırıldığında; klinik karar verme verimliliğinin daha iyi olduğu bildirilmiş ve acilden taburculuk belirgin artmış, hastanede kalış süresi azalmıştır. Bununla birlikte, KBTA eklenmesiyle maliyetler azalmamış ve radyasyona maruz kalma artmıştır (4). Puchner ve arkadaşları yaptıkları bir çalışmada ise, akut göğüs ağrısıyla acil servise başvuran hastalarda yüksek riskli plakların tespiti için EKG ve enzimler negatifse, KBTA çekilmesini önermektedir(5).

Kaynaklar

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Coping Strategies With Tachyarrhythmias

Yalçın GÖLCÜK, MD

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Tachyarrhythmias, defined as abnormal heart rhythms with a ventricular rate of 100 (or 120) or more beats per minute, are frequently symptomatic and often result in patients seeking care at the emergency department. Patients who present with a tachyarrhythmias may have potentially life-threatening disease, and their outcome is often directly related to the care they receive in the emergency department. In a matter of minutes, the emergency physician must quickly and confidently assess and support the ABC's and determine the need for interventions. The diagnosis of the various types of narrow and wide QRS complex tachyarrhythmias, which are often unpredictable, can be challenging for emergency physicians. A different type of tachyarrhythmias represent a unique clinical challenge for two major reasons; 1) diagnosing the arrhythmia is sometimes difficult, and 2) urgent therapy is often required.

Tachyarrhythmias are broadly categorized based upon the width of the QRS complex on the ECG. A narrow QRS complex (<120 msec) reflects rapid activation of the ventricles via the normal His-Purkinje system, which in turn suggests that the arrhythmia originates above or within the atrioventricular node (ie, a supraventricular tachycardia). A widened QRS (≥ 120 msec) occurs when ventricular activation is abnormally slow, most commonly because the arrhythmia originates outside of the normal conduction system (eg, ventricular tachycardia), or because of abnormalities within the His-Purkinje system (eg, supraventricular tachycardia with aberrancy). Much less common are pre-excited tachycardias; these are

supraventricular tachycardias with antegrade conduction over an accessory pathway, resulting in direct activation of the ventricular myocardium, similar to the situation with a ventricular rhythm. This only occurs in a minority of patients with pre-excitation syndromes (eg, Wolff-Parkinson-White Syndrome).

The most important clinical determination in a patient presenting with a various types of narrow and wide QRS complex tachyarrhythmia is whether or not the patient is experiencing signs and symptoms related to the rapid heart rate. Signs and symptoms related to the tachyarrhythmia may include shock, hypotension, heart failure, shortness of breath, chest pain, acute myocardial infarction, palpitations, and/or decreased level of consciousness. In anyone who presents with a symptomatic tachyarrhythmia, a 12-lead ECG should be obtained while a brief initial assessment of the patient's overall clinical assessment is performed. If the patient is hemodynamically unstable, it may be preferable to obtain only a rhythm strip prior to urgent cardioversion and not wait for a 12-lead ECG. Therefore, the management of various tachyarrhythmias include 2 questions. First; is the patient clinically (or hemodynamically) unstable? and second; is the QRS complex narrow or wide? Regular or irregular?

This lecture will provides a review of tachyarrhythmias with a focus on the detail ECG analysis and the evidence behind the most recent ACLS guidelines. And also, this lecture will provides to participants a systematic approach to wide complex tachycardia.

Senkop: Risk Katmanlandırılması

Özlem GÜNEYSEL, MD

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Senkop; aniden olan, geçici ve spontan olarak düzelen bilinç kaybı olarak tanımlanır. Acil Servis başvurularının yaklaşık olarak %1-3 kadarını oluşturduğu tahmin edilmektedir. Benign vazovagal senkop olduğu gibi, hayatı tehdit eden (abdominal aort anevrizması, ventriküler aritmiler vb) durumlardan da kaynaklanabilmektedir. Hayatı tehdit eden durumlar 2 kategoride incelenir: 1. Acil Servis değerlendirmesi sırasında belirgin olmayanlar (Aritmiler ve ölüm riski taşıyanlar) ve 2. Acil servis değerlendirmesi sırasında belirlenmesi gereken ve alta yatan ciddi durumlar (miyokart infarktüsü, ciddi yapısal kalp hastalığı, belirgin kanama pulmoner embolizm vb).

Senkop nedeni ile acil servise başvuran hastaların değerlendirme amaçlı hastaneye yatırılması ya da ciddi sorunlar doğurabilecek durumların ileri araştırılmasının planlanması amacıyla acil servis sürecine karar vermek zordur. Özellikle kalabalık, sedye ve zaman kısıtlılığının olduğu acil servislerde senkop hastalarının yönetimi zordur. Senkop hastalarının risk katmanlandırılması ve taburculuk kararı acil servis çalışanları açısından zorluklar göstermektedir. Bu tür

klirik kararları vermeye yardımcı olabilecek güvenli ve geçerli bir rehber henüz bulunmamaktadır. Senkop hastalarında klinik karar verme/risk katmanlandırma araçları, hastaların değerlendirilme, taburculuk kararlarını vermede ve standardize edilmesinde hem güvenlik sağlayacak hem de bedel etkin olabilecektir.

Klinik karar verme araçları/rehberleri orijinal araştırmalarda değerlendirilmiş olan öykü, fizik bakı ve basit tanısal testlerden hareketle hastaların ne kadar risk altında olduklarını belirlemeyi amaçlamaktadır. Hali hazırda, her üç majör basamağı içeren (Derivation / Türetme; Validation / Onaylama ve Implementation / Uygulama) her hangi bir klinik karar verme rehberi bulunmamaktadır. Bu amaçla üzerinde çalışılmış pek çok rehber denemesi olsa da muhtemelen bu alanda en iyi örnek San Francisco Senkop Kurallarıdır (SFSK). SFSK, senkop sonrası hastalardan derlenen 5 belirteç üzerinden çalışılmış ve bu belirteçlerin ciddi sonuçlar doğurması ya da yokluklarında riskin çok düşük olması üzerine kurgulanmıştır. SFSK araştırmacıları, yapmış oldukları validasyon/onaylama çalışmalarında %98 sensitivite ve %56 spesifite oranı rapor etmişlerdir.

How to Shape the Hearts Beyond Training the Minds of Your Residents

Shirley OOI, Ass. Prof. MBBS (S'pore), FRCSEd (A&E), FAMS (Emerg Med)
National University Health System (NUHS), Singapore

The National University Health System (NUHS), Singapore Residency program believes that to achieve our vision of shaping future medical leaders, we need to not only train the minds but shape the hearts of our residents. In this session we will share our novel orientation programme for new Residents consisting of a 3 day 2 nights Outward Bound Singapore experience together with the senior management, program directors and coordinators, allied health and nursing staff at an offshore island to induct our new residents into the way of life in NUHS. Each of the activities is designed to bring across a key learning point that is related to their work in the hospital and the NUHS TRICE values of Teamwork, Respect, Integrity, Compassion and Excellence. This is also an innovative introduction to the core ACGME-I competencies of professionalism, interpersonal and communication skills and systems-based practice. Exciting activities include scaling

and falling from heights, triyaking 17km across the seas and building a raft. Residents also get a detailed briefing by our CEO on how they fit into the overall healthcare sector and their roles. The highlight of the program is when our Chairman Medical Board presents to the new residents their newly minted staff pass – a sign that they have finally graduated from medical school and are now young trainee doctors. A video will be shown of one of the programs. The participants will get to try one of the indoor activities.

We will also share a few other initiatives to inculcate a sense of gratitude towards their teachers by the institution-wide annual Teachers' Day celebration organized by the residents. In addition, to teach them servanthood and to contribute to the community and to the region in need of medical help, we actively encourage our residents to be involved in local and overseas humanitarian missions.

Hospital Bed Capacity and Overcrowding

Lit Sin QUEK, MD

Alexandra Hospital, Singapore

An ageing population and a smaller family unit have led to increased demand for health care services in Singapore. From December 29 2013 to January 7 2014, the Bed Occupancy Rate at public hospitals ranged between 75 per cent and 95 per cent.

Figures by the Ministry of Health showed that waiting time for a bed ranged between two and nine hours at the ED.

This is the new norm where hospital bed capacity is stretched to the brink and has led to ED overcrowding.

This session will address some of the concerns, analysis and initiatives that has been tried, with limited success.

Conflict Management in the ED

Alan Hodgdon, MD, MBA, FACEP

University of Pittsburgh School of Medicine Pittsburgh, PA, USA

We will discuss how to prevent and deal with difficult patient encounters by looking at factors that influence the problem, including doctor, patient and environmental factors. We will discuss the violent patient and

how de-escalation may prevent the need for use of restraints, either physical or pharmacologic. We will also discuss dealing with consultants by looking at their areas of frustration.

Meeting Endpoints of Acute Ischaemic Stroke

LEE Shu WOAN, MD, MBBS, FRCS (Edinburgh)

Changi General Hospital, Singapore

Acute ischemic stroke is a medical emergency requiring urgent treatment. Randomized clinical trials have provided unequivocal evidence that intravenous thrombolysis with recombinant tissue plasminogen activator improves functional outcomes by restoring brain perfusion. This benefit is seen in patients presenting within 4.5 hours of stroke onset, with a greater benefit within 3 hours. Yet the rate of thrombolysis remains low in most hospitals. The American Heart Association estimates that only 3% to 5% of patients with acute ischemic stroke are treated with intravenous thrombolysis.

Community hospitals with limited stroke expertise or without an on-call neurologist face great challenges in providing a 24 x 7 acute stroke service.

To improve the rates of treatment with thrombolysis, telemedicine stroke networks (Telestroke) have been created. Telestroke operates via remote video assessment of patients and brain computed tomography (CT) scan reviews by stroke neurologists and have been shown to increase thrombolysis rates and functional outcomes of patients in smaller community hospitals.

Our hospital started offering thrombolysis treatment for stroke patients in 2008, but as it does not have an on-call neurologist, this treatment could only be offered to ischemic stroke patients who presented during office hours. To overcome this drawback, the hospital adopted Telestroke in October 2010. Staff from the emergency department, radiology department, and the hospital neurologist collaborated with the country's National Neuroscience Institute to set up Telestroke using an Internet web-based system.

Barriers of running this service includes improving public education, staff awareness, training and co-ordination between the various services: namely paramedics, primary care physicians, emergency department, medical intensive care unit, telephone call center, radiology department, IT support, and neurologist from the National Neuroscience Institute.

Implementing this service provides round-the-clock acute stroke service in our hospital for all patients who present within the therapeutic time window. We share our experience in starting-up and running the service.

Certifying Brain Death in the ER: Pearls and pitfalls

Hoe Chin CHUA, MD, MBBS, MRCP (UK), FRCP (Edinburgh)

Tan Tock Seng Hospital, Singapore

Historically death had been diagnosed by loss of consciousness, absence of breathing, pulse and heart beat (cardiac death). With the advent of modern intensive care in the 1950s, intubation, mechanical ventilation and cardiovascular support with inotropes became possible. In 1968 the Harvard Medical School Ad Hoc Committee for Brain Death defined ‘irreversible coma as a new criterion for death’, and described signs of brain death and testing procedures. Although over time and across different countries specific details of diagnostic criteria differ, the fundamental definition of brain death has remained constant. One exception is that whereas some countries (eg United States) understand brain death as “whole brain death,” others (eg United Kingdom) use the concept of brainstem death.

Before a diagnosis of brain death is made, the ER physician needs to be aware of brain death mimics. Broadly these are classified into 3 groups: the first group comprises acute poisoning, metabolic encephalopathies and hypothermia. The second group

includes neurologic conditions confused with brain death, the prototype being Guillain-Barre syndrome. The third group includes comatose states due to catastrophic brain damage such as persistent vegetative state.

Fundamental to the diagnosis of brain death is proof of a sufficient cause of extensive brain damage. Once brain death mimics had been excluded, the physician must establish presence of extensive brain damage. Common causes include severe traumatic brain injury, catastrophic intracranial hemorrhage and severe cerebral edema due to diverse underlying pathologies.

The next step is clinical brain death testing. A concise guide should be available to reduce variations in brain death testing techniques amongst doctors.

The discussion ends with the role of supplementary / confirmatory tests in brain death: when to order, and what to order. The principles of supplementary tests are discussed and, if time permits, the information each test yields and potential limitations.

The Therapeutic Approach to Seizing Patient

Rebecca LIGGIN, MD, FAAP

University of Arkansas for Medical Sciences, USA

Acute Seizure Management in the Emergency Department: Seizures are everyday presentations in most emergency departments. Whether it is a known seizure patient who is non-compliant with their medication or a patient who presents with a new onset seizure, management may be very simple or quite complicated. When is a CT needed, what labs are or aren't needed, should you get an MRI? Is a neurology consult needed on every new onset seizure or are they needed every time a known seizure patient comes in with a seizure. Also when do you start long term management for seizures and is that ever appropriate in the ED. Understanding the

management and workup for new onset seizures as well as worsening seizures in known seizure patients is important to providing appropriate and timely care. Also important to care is understanding the management of status epilepticus including when intubation and placement on continuous EEG monitoring is the appropriate next step. During this talk we will be discussing the management of acute seizures in the ED including a differential for new onset seizure, what the current recommended work up for new onset seizure is for patients in the ED, and the management for status epilepticus.

Surviving Sepsis Campaign: Update 2

Recep DURSUN, MD

Dicle University School of Medicine, Diyarbakır, Turkey

Amaç

Acil serviste ve yoğun bakımlarda kritik hasta takibinde sepsisin tanınması ve iyi yönetimi morbidite ve mortaliteyi azalttığı bilinmektedir. Uluslararası enfeksiyon ve kritik hasta bakım dernekleri bu konuda çalışmalar yapmakta ve klavuzlar oluşturmaktadır. Ortak bir konsensusun olduğu bu klavuzlar ile gerek sepsisin tanınması gerekse takip ve tedavisinde başarı artmaktadır. Bu sunumumuz ile başta European Society of Intensive Care Unit, Surviving Sepsis Campaign 2012 klavuzu ve 2014 update(güncellemesi) ile yapılan değişikliklerden ve sepsise genel yaklaşım ve tanı ve tedavi kriterlerinden bahsedilecektir.

Sunu hedefleri

Bu sunum sonunda katılımcıların herbiri sepsis tanı kriterleri ve tedavi yaklaşımları ve 2014 güncellemesi ile ilgili bilgi sahibi olacak, acil servise başvuran bir hastada sepsisi tanıyacak kritik bakım esnasında kullanılan parametre ve tedavi protokollerini uygulayabileceklerdir.

Sunu planı

1. Sepsisin tanımı
2. Sepsis tanı kriterleri
3. Sepsis ile mücadelede yapılması gerekenler
4. Sepsisin tedavisindeki yenilikler

Özet

Sepsis Tanı kriterleri

Enfeksiyon (ortaya konulmuş veya şüphelenilen) ve aşağıdakilerden bazıları:

A. Genel kriterler:

B. İnflamatuvar değişkenler

C. Hemodinamik değişkenler

D. Organ disfonksiyonu bulguları

E. Doku perfüzyon değişiklikleri

Sepsis İle Mücadelede Yapılması Gerekenler
3 Saat İçinde Tamamlanması Gereken:

- 1) laktat seviyesini ölçün
- 2) Antibiyotik verilmeden önce kan kültürü al.
- 3) Geniş spektrumlu antibiyotik uygulayın
- 4) Hipotansiyon veya laktat >4 mmol /L mevcudiyeti için 30 ml/kg kristaloid ver.
6 Saat İçinde Tamamlanması Gereken:
- 5) Başlangıç sıvı resüsitasyonuna yanıt vermeyen hipotansiyon hastalarında ortalama arter basıncı korumak için (MAP \geq 65 mm Hg) vazopresör uygula.
- 6) Sıvı resüsitasyon rağmen (septik şok) persistan arteriyel hipotansiyon olanlarda veya laktat \geq 4 mmol / L (36 mg/dL) olan hastalarda:
 - Santral venöz basıncı ölç (Hedef: CVP \geq 8 mm Hg)
 - Santral venöz oksijen saturasyonunu ölç (Hedef: ScvO₂ \geq %70)
- 7) İlk laktat değeri yüksek olanlarda laktatı tekrar ölç.

Kaynaklar

1. Surviving Sepsis Campaign: International Guidelines for Management of Severe Sepsis and Septic Shock: 2012
2. Surviving sepsis upto date 2014/ Literature review current through: Aug 2014. | This topic last updated: Aug 12, 2014.

Source Evaluation

Mustafa Burak SAYHAN, MD

Trakya University, School of Medicine, Edirne, Turkey.

Sepsis is a systemic disease. In developed countries, sepsis is dramatically increasing by an annual rate of between 8-13 % over the last decade. Severe sepsis and septic shock are major healthcare problems, affecting millions of people around the world and total cost of \$17 billion each year. Although prognosis has improved, because of increased incidence, actual deaths will increase. Worldwide, a person dies from sepsis every few seconds and early resuscitation of sepsis in the ED was associated with a lower mortality.

Sepsis has a high rate at patients admitting to Emergency Department and the doctors must use

the actual literature including management of sepsis, initial resuscitation, diagnosis. early goal-directed therapy etc effective and correctly.

In this presentation, we aimed to reach the new developments, current literature, guidelines and new published text books about the sepsis issues. To achieve these sources we can use PubMed, Google Scholar, UpToDate, U.S. National Library of Medicine (MedlinePlus), The Cochrane Collaboration, ISI Web of Knowledge, Surviving Sepsis Campaign, Global Sepsis Alliance (The World Sepsis Day), World Sepsis Declaration, The International Sepsis Forum.

Critically ill patient & Sepsis Screening for Sepsis

Özge Duman ATILLA, MD

Tepecik Training and Research Hospital, İzmir, Turkey

Sepsis is a significant challenge in health care. Overall mortality for sepsis has decreased over the last 20 years, but the increase in incidence has resulted in an increase in the total number of deaths. Despite the significant clinical researches achievement for improvement evidence-based therapies in sepsis, difficulties in the early detection of sepsis is still continuing. Delays in initiating early goal-directed therapy are associated with increased mortality; however, the search for a standardized screening tool in sepsis is currently underway. In a number of studies for early diagnosis of sepsis in the emergency department, various

biomarkers and clinical scoring systems are discussed. Although more than 100 biomarkers have been identified and studied in sepsis, biomarkers of most intensively researched are procalcitonin, C-reactive protein, lactate, various cytokines and cell surface markers. In addition, various clinical decision rules in the early diagnosis of sepsis such as the Modified Early Warning Score and Sepsis Screening Clinical Decision Rule have been investigated. While reliable biomarkers and clinical screening tool for early diagnosis of sepsis continuing research, powerful diagnostic tools may be on the horizon.

Visual Diagnosis

Selim SUNER MS, MS, FACEP

Alpert Medical School of Brown University, USA

Multiple interesting and some, not so unique but, common cases seen the emergency department at Rhode Island Hospital- Brown University will be shown using visual cues including high quality images and video clips. Most of the presentation will focus on diagnosis utilizing visual cues but several cases illustrating treatment techniques of rare occurrences, such as lateral canthotomy, needle cricothyotomy will also be presented. Experts often rely on learned visual cues to make a diagnosis. Often times these cues are hidden and subconscious. The visual signals travel through the ventral visual pathway

from the retina to areas such as the amygdala and give the clinician an “uneasy feeling” when they first encounter the patient. Learning to trust these cues should be a part of every clinician’s toolbox. This level of expertise can only be learned through repeatedly encountering multiple similar cases over time. Presentation of visual cases is one way to enhance and solidify this leaning process. The presentation of cases will be random, mimicking encounters in the emergency department. There will be opportunity for audience participation and candid discussion during this session.

7 Regions With 81 Programs. How To Fill This Teacher Gap

Arif Alper ÇEVİK, MD, FEMAT

Eskişehir Osmangazi University Medical Center, Eskişehir, Turkey

It is not long time that EMAT board sent their recommendations to Ministry of Health about opening new programs and how we can manage and plan the need of emergency medical care. Since then, approximately 60 new programs opened in the country. The number of faculty and resources are still not filling the gaps. In addition to recently closed departments because of inappropriate work

and education environment, we are not using some tools for long distance education as well as not sharing the resources with other departments who need educational support. This presentation will include current situation of the country about EM education and its resources, and also up to date recommendations for using long distance/online learning and sharing the resources.

Medical Education in Emergency Medicine

C. James HOLLIMAN, F.A.C.E.P., F.I.F.E.M.

President, International Federation for Emergency Medicine, USA.

Medical education in Emergency Medicine includes education of the public, other healthcare workers including pre-hospital personnel, nurses, medical technicians, and physician assistants, medical students, residents, postgraduate fellows, and physicians in practice. Provision of education in basic aspects of Emergency Medicine is important for all medical students, and for most other medical specialty residency training programs. Unique subjects to teach students and residents in the Emergency Department include cost-effective ancillary test ordering, efficiency in patient flow, managing multiple simultaneous patients, coordinating pre-hospital and Emergency Department care, and how to conduct efficient focused patient assessment and treatment.

Further education in advanced aspects of Emergency Medicine is of course important for training Emergency Medicine residents and postgraduate physicians in Emergency Medicine practice. The increased use of web based information resources which can be accessed during the provision of clinical emergency care, and the increased use of simulation

training have markedly changed Emergency Medicine Education in recent years.

The “2011 Model of the Clinical Practice of Emergency Medicine” serves as a useful guide for structuring Emergency Medicine education, particularly for Emergency Medicine residents. Just in the last year, the specialty of Emergency Medicine has taken a leading role in revamping the evaluation of residents in training with its development of the “Emergency Medicine Milestones”.

Extensive open access web based resources for Emergency Medicine Education have been developed by the International Federation for Emergency Medicine, the Society for Academic Emergency Medicine, the Council of Residency Directors, the American College of Emergency Physicians, the College of Emergency Medicine of the United Kingdom, the Australasian College of Emergency Medicine, and other national Emergency Medicine organizations. The future for Emergency Medicine education is very bright with numerous outstanding opportunities for Emergency Medicine physicians.

Career Alternatives in Emergency Medicine

Stephan RINNERT, MD

SUNY Downstate / Kings County Hospital, Brooklyn, NY, USA

Emergency Medicine recently got a bad reputation as the specialty with the highest burnout. In order to prevent burnout and to spice up your professional life there are multiple career paths an EM physician can take. The presentation will

outline some of these career paths and alternatives to the daily grind in the ED: From the business of EM to Academics, Administration and Research. The role of fellowships and advanced degrees will be discussed. Examples of other career alternatives will be shown.

Evidence Based Approach to RSI Drugs

Ayesha ALMEMARI, MD. FRCPC (EM & CC)

General Secretary Emirates Society of Emergency Medicine, UAE

Rapid sequence intubation (RSI) has established itself in emergency medicine specialty for the past 3 decades. Many studies had refined the way we deliver RSI and what medications to use and what not to use. A decade ago there were many pre medications recommended that fallen out of practice such as lidocaine for patients with suspected increase ICP. The ideal sedative agent used in RSI has to be hemodynamically stable, rapidly reversible and cause no side effects however such sedative does not exist; in this talk we will present the evidence with and against use of each sedative agent in various emergency conditions that require intubation. At the end we will present the evidence with use of various neuromuscular blocking agents, indications and contraindications of their use. In general I will start by presenting what we already know (Facts) then will present the literature published over past 3-5 years on the question discussed.

- 1- Pre medication agent- which one shall we use?
- 2- What sedative is best for what?
 - a. Ketamine
 - b. Propofol
 - c. Midazolam
 - d. Thiopental
 - e. Etomidate
- 3- What neuromuscular blocker to use?

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Takım Olmayı Öğrenmek (Learning to be a Team)

Özcan YAVAŞI, MD

Recep Tayyip Erdoğan University, School of Medicine, Rize, Turkey.

Hiçbir birey bir hastanın bakımını tek başına yapabileceğini düşünemez ve en uygun bakımı sağlamak için diğer branşlarla iletişim kurmalıdır. Diğer branşlarla olduğu gibi, aynı branştaki hekimler, hemşireler ve diğer sağlık çalışanları arasındaki iletişim de önemlidir. Tıp eğitimi sıklıkla “otonomi” konusuna vurgu yapmakta; fakat takım veya ekip çalışması konusunda eğitim, tıp müfredatında açıkça yer almamıştır. Ayrıca tıp, geleneksel olarak aşırı hiyerarşik olup, emir-komuta zinciri şeklinde bir iletişim yapısına sahiptir. Havacılık sektörü, askeriye, itfaiye gibi yüksek riskli ve yoğunluklu işlerde birarada çalışan ekipler, bireylerden daha az hata yapmaktadırlar. Buradan hareketle, takım çalışması sağlık sektöründe de ana konulardan biri haline gelmiştir. Çünkü etkili ve verimli bir takım çalışmasını destekleyen bir sağlık sistemi, hasta bakım kalitesini artırdığı gibi, sağlık çalışanları arasında tükenmişliğe neden olan iş yükü faktörlerini de azaltmaktadır. Hasta bakımının artan karmaşıklığı ve branşlara ayrılması, ko-morbid durumların artması, kronik hastalıkların artması, küresel işgücü kısıtlılıkları ve güvenli çalışma saati girişimleri gibi faktörlerden dolayı sağlık

sektöründe etkili takım çalışmasının önemi artmaktadır. Takım çalışması demek insanları bir araya getirmenin otomatik bir sonucu değildir. Etkili sağlık takım çalışmasını destekleyen 6 özellik vardır: ortak amaç, ölçülebilir hedef, etkili liderlik, etkili iletişim, iyi uyuma, karşılıklı saygı. Başka bir deyişle; takım elemanlarının belli rolü veya görevi vardır ve ortak bir gaye veya sonuç için birbirleriyle koordineli olarak çalışırlar, takımlar karar verirler, özel bilgi veya becerilere sahiptirler ve genelde ağır iş yükü şartları altında çalışırlar, takımın küçük gruplardan farkı iş dayanışmasından kaynaklanan toplu bir eylemi veya sonlanımı kapsamasıdır. Takımın lideri, rolünü sahiplenmeli, öncelikleri belirlemeli ve karar vermeli, performansı artırmak için kaynakları kullanmalı, takım içindeki çatışmaları çözmeli, takım içinde iş yükünü dengeli dağıtmalı, toplantılar yapıp değerlendirmeler yapmalı, takımdaki bireyleri serbestçe konuşup soru sorma konusunda cesaretlendirmelidir. Takım elemanları, nasıl bir arada çalışmalarını gerektiği ve her bireyin sorumluluğunu ve profesyonel rolünü anlamak için eğitime ihtiyaç duymaktadır.

Acil Serviste Triyaj

Ahmet BAYDIN, MD

Ondokuz Mayıs University, School of Medicine, Samsun, Turkey

Triyaj, yaralı ve hastaların acil servise başvuru anındaki durumlarının ciddiyetine ve/veya aciliyetine göre sınıflandırılarak, tedavi, bakım ve acil servisten taburculuk konularında önceliklerinin belirlenmesi için yapılan bir uygulamadır. Kelime anlamı olarak seçmek, ayırt etmek, sınıflandırmak anlamına gelen Triyaj ilk olarak 1. Dünya Savaşı sırasında Fransız ordusunda yaralı askerlere ihtiyaçları doğrultusunda acil bakım hizmeti verilmesi amacıyla kullanılmıştır. Uygulandığı yere göre farklı isimlerle anılan triyaj (hastane öncesi triyaj, alan triyajı, felaket triyajı, savaş triyajı, hastane acil servis triyajı, yoğun bakım triyajı gibi), sınırlı sayıda olan tüm tıbbi kaynakları ve tıbbi hizmetleri adil paylaşırmanın en iyi yoludur.

Hasta ve yaralının triyajı bu konuda eğitim almış bilgili ve deneyimli bir personel (hemşire ve/veya paramedik) tarafından yapılmalıdır. Triyaj sisteminde kayıtlar bilgisayar ortamında geliştirilmiş sınıflama sistemlerini içeren bir program ile yapılabileceği gibi triyaj formu kullanılarak da yapılabilir. Acil servis içinde yapılan triyaj ile hasta ve yaralı acil servisin baki-

alanlarına (resusitasyon, muayene odası, pansuman odası vb) uygun bir biçimde yönlendirilmekte ve bu şekilde tıbbi hizmetlerden azami bir şekilde yararlanmaktadır. Triyajı yaparken 5 basamaklı (resusitasyon, acil, ivedi, bekleyebilir, gidebilir) triyaj sınıflamasını kullanılabileceğimiz gibi triyaj renklerini de (Kırmızı, Sarı, Yeşil, Siyah) kullanabiliriz.

Özel ve kamuya ait bütün hastanelerin acil servisleri Acil Sağlık Hizmetleri Yönetmeliğine göre hastanın sosyal güvencesinin bulunup bulunmadığına bakmaksızın tüm acil başvurularını ayırım yapmadan kabul ederler ve stabilizasyon sağlanıncaya kadar bütün tıbbi hizmetleri sunarlar (Resmi Gazete Tarih:11.05.2000 Sayı: 24046).

Sonuç olarak, birçok hastanın aynı anda geldiği acil servislerde tedavi ve bakım önceliğinin hangi hastaya verileceği kararının verilmesi önem arz eder. Çünkü verilecek yanlış bir karar acil serviste hasta akışının sağlanmasını, hasta ve yaralının can güvenliğini ve acil servis personelinin etkin bir şekilde kullanılmasını olumsuz yönde etkileyebilir.

Being an Observer or Researcher in Japan EM

Dr. Mehmet KOÇAK

Eğitim ve araştırma hastanelerindeki acil tıp asistanlarının topluma hizmetin daha ön planda bulunmasından dolayı, hızla gelişen acil tıp bilgilerini takip etmesi, uygulaması bir hayli çaba gerektirmektedir. Yurt dışında bir eğitim kurumunda veya üniversitede araştırma ve/veya gözlem yapmak ise bu çabalar arasında yalnızca profesyonel alanda değil aynı zamanda yaşam tecrübesi açısından da ön plana çıkmaktadır. Dünyadaki en düşük perinatal mortalite

ve en yüksek yaşam yılı beklentisine sahip gelişmiş ülkelerden olan Japonya'nın acil servisine gözlemci veya araştırmacı olarak gitmenin yolları ve edinilebilecek deneyimler bu sunumun ana başlıklarını oluşturmaktadır. Amaç, asistan hekimlerin bilgi ve tecrübelerini arttırmak için yurt dışı eğitim haklarının olduğunu vurgulamak ve Japonya' da geçirilen sekiz aylık araştırma görevi sırasında edinilen deneyimler ile asistan hekimlere motivasyon kaynağı olmaktır.

Acil Tıp Asistanının Hollanda'da Acil ve Travmatoloji Bölümünde Üç Aylık Deneyimi

Dr. Gulhan COSKUN

Acil Tıp asistanının yurtiçi ve yurtdışında başka hastanelerde gözlemci/doktor olarak çalışabilmesi için birçok proje bulunmaktadır. Erasmus, Mevlana, Farabi Programları bunlar arasında sayılabilir. Erasmus Programı bir Avrupa Birliği eğitim ve gençlik programıdır. Öğrenci, öğretim elemanı ve idari personel öğretim ve staj amacıyla bu programa katılabilmektedir. Faaliyet süresi aynı akademik yıl içerisinde tamamlanması gereken 3 ile 12 ay arasında bir süre olabilmektedir.

Biz araştırma görevlileri de doktora düzeyinde öğrenci statüsünde kabul edildiğimiz için programa katılabiliyoruz. Erasmus Programı kapsamında ödenen harcırahlar gidilen ülkeye, bölgeye ve kıdeme göre farklılık göstermektedir. Katılımcıların tüm masrafları karşılanmamakta yapılan maddi destek masraflarının bir kısmını karşılamaktadır. Program süresi doksan (90) günü geçmediği sürece bu dönemde maaş ve döner gibi ödemeler de devam etmektedir.

Ben 1 Mart- 1 Haziran 2014 tarihleri arasında Erasmus Programı kapsamında 3 ay süre ile Hollanda'da Utrecht Üniversitesi Hastanesi'nde çalıştım. Danışman hocamın benim için düzenlediği rotasyon programı sayesinde ilk bir aylık sürede acil servis, ikinci ayımda travmatoloji servisi, üçüncü ayımda da cerrahi ara yoğun bakım ve genel yoğun bakımda bulundum. Ayrıca hastanede bulunan herhangi bir afet durumu için hazırlanmış olan afet hastanesini de görme imkanım oldu.

Program boyunca gözlemci olarak gidilen ülkenin sağlık sisteminin ve hastanenin acil servisinin nasıl işlediği, sağlık personelinin çalışma düzeni, eğitim programı hakkında fikir edinilmektedir. Gözlemci olunan kliniğin bilimsellik ve işleyiş yönündeki pozitif özelliklerini kendi çalıştığımız kliniklerde ve sonraki acil tıp hayatımızda hayata geçirebilmek için iyi bir fırsattır. Tüm acil tıp asistanının bu deneyimi yaşamasını tavsiye ederim.

ECGs You Cannot Afford to Miss in Your Practice

Shirley OOI, Ass. Prof. MBBS (S'pore), FRCSEd (A&E), FAMS (Emerg Med)
National University Health System (NUHS), Singapore

The aim of this lecture is to discuss ECGs that you cannot afford to miss in your practice, whether in terms of the diagnosis or the clinical implications. It will cover subtle and challenging ECG diagnoses of AMI (including ST elevation

equivalents), mimics of AMI (benign early repolarization, normal 'male' pattern variant, pericarditis, Wellens syndrome) and syndromes of sudden cardiac death (Brugada syndrome, prolonged QT syndrome and hypertrophic obstructive cardiomyopathy).

Fever in Children 0 to 36 Months of Age

Murat ANIL, MD

Tepecik Training and Research Hospital, İzmir, Turkey

Fever is a common symptom among children seeking medical care. Most children undergo evaluation for a febrile illness before their third birthday, and nearly one-third of pediatric outpatient visits are for fever. The majority of children with fever have either a self-limited viral infection or a recognizable source of bacterial infection. A complete history, including immunization status and complete physical examination, should be performed in all febrile children to identify obvious and subtle focuses of infection. When the history and physical examination cannot identify a specific source of fever in an acutely ill, nontoxic-appearing child less than three years of age, the illness is often called fever without a source (FWS). The decision to perform laboratory tests depends upon a variety of factors including age, immunization status, and obvious findings of infection. A cautious approach to neonates (0 to 28 days) and young infants

(29 to 90 days) with fever is prudent, given the risk and potentially adverse consequences of unrecognized and/or untreated serious bacterial infection (SBI). Multiple approaches to the evaluation of these infants, with varying inclusion and exclusion criteria, have been proposed and studied, including protocols from Boston, Philadelphia, and Rochester. While these approaches have a high negative predictive value, each suffers from a relatively low positive predictive value, resulting in many infants undergoing unnecessary laboratory testing, hospitalization, and exposure to unnecessary antibiotics. The evaluation and management of the children with FWS (3 to 36 months of age) must balance the consequences of not diagnosing a SBI with the decreasing prevalence of occult infection and the potential adverse effects of excessive testing and treatment. The likelihood of SBI varies significantly by clinical appearance, age, and immunization status.

Pitfalls in Procedural Sedation in the Emergency Department

Levent AVŞAROĞULLARI, MD

Erciyes University, School of Medicine, Kayseri, Turkey

Children undergoing painful procedures and diagnostic imaging in the emergency department (ED) need relief of pain and anxiety. Procedural sedation and analgesia (PSA) is a pharmacologically induced state for managing a child's pain and anxiety. PSA occurs on a continuum which ranges from minimal sedation/analgesia to general anesthesia. Consequently, a practitioner must be able to recognize each status of sedation continuum for safety.

A sedation process encompasses various aspects as follows: patient and his/her individual properties; drugs and their potential side and adverse effects; physician and personnel and their skills, trainings and experiences; facilities and equipment. A practitioner should consider multifaceted nature of a sedation process.

PSA is safe and acceptable as long as the standards of care are met such as active and close monitoring; trained and experienced physicians and personnel; premedication preparation; considering physiologic properties of each individual; intravenous access; etc.

Some examples of pitfalls in PSA are as follows: choosing a sedative when an analgesic is required or vice versa; under-sedation or over-sedation; failure to recognize impairment of ventilation; use of a long-acting sedative agent for a procedure requiring a short duration; not considering and discussing risks and benefits of PSA; not informing family of actions of drugs and potential adverse effects; not using reliable monitoring devices and methods; not obtaining informed consent; using a reversal agent to speed recovery.

Children should not be discharged from the hospital until they have awakened to their baseline ambulatory and mental status. Discharge instructions should be explained in detail to parents or other responsible adults before the sedation process and before discharge. They should be informed of importance of watching carefully and closely for signs of respiratory problems.

Pediatric Upper Respiratory Nightmares

Rebecca LIGGIN, MD, FAAP

University of Arkansas for Medical Sciences, USA

Since the advent of routine vaccinations many of the most feared childhood illnesses that affected the upper airways in children, such as epiglottitis, are rarely seen anymore. However, there are still children who present in extremis from diseases that in most children are benign or at least not life threatening. Diseases such as croup, RSV, the new [to the U.S.] enterovirus 68, and even foreign body ingestions can cause significant respiratory compromise that can be life threatening. Recognizing the

children that are at risk for complications or decompensation and knowing the current recommendations for management of these disease processes is imperative. During this talk we will be reviewing the most common presentations of these illnesses, disease course and potential complications, and recommended management options. We will also discuss when it is safe to discharge these patients vs. when these patients should be admitted for continued observation and care.

ETCO2 for non-Intubated Patients

Mücahit AVCIL, MD

Adnan Menderes University School of Medicine, Aydın, Turkey

End tidal carbondiyoksit (ETCO₂) ölçümleri her geçen gün yeni kullanım alanları bulan non-invaziv bir tetkiktir. Trakeal entübasyonun yerinin doğrulanması ve arrest hastalarda kardiyopulmoner resusitasyonun etkinliğinin değerlendirilmesi amacı ile sıklıkla kullanılmaktadır ve günlük pratiğimize girmiştir. Bununla birlikte bu hızlı ve non invaziv yöntem üzerine pek çok ilginç araştırma yapılmakta ve yeni kullanım alanları keşfedilmektedir. Hastane öncesi acil yardım hizmetlerinde altıncı vital parametre olarak görülmektedir ve hastane mortalitesini tahmin etmede en iyi parametre olarak iddia edilmektedir. Masif pulmoner emboli hastalarında arteriyel ve end tidal CO₂ gradientinin P(a-ET CO₂) reperfüzyon tedavilerini tedavi etkinliğini göstermede hızlı ve etkin bir yöntem olduğu düşünülmektedir. Yine ülkemizde yapılan bir çalışmada non invaziv ETCO₂ nin KOAH alevlenmelerinin ağırlığını ve tedaviye yanıtı değerlendirmede az da olsa bir katkıda bulunabileceğini bildirmiştir. Diğer

bir kullanım alanı sepsis vakalarıdır. Etkinliği düşük olsa da sepsis vakalarında laktat ile korele seyrettiği ve bu vakaların triyajı için kullanılabileceği bulunmuştur. İlginç bir çalışmada hiperbarik hava soluyan erkek ve bayanlarda ETCO₂ değerlerinin farklı olduğu ve bayanların beyinlerinin oksijen radikal hasarına karşı daha az duyarlı olduğu gösterilmiştir. Bu sonuçlar oksijen radikal hasarlarının önlenmesinde önemli olabilir. Yada dalgıçların çeşitli risklerden korunması için yeni cihazlar geliştirilmesine öncülük edebilir. Travma hastalarında hemodinamik stabiliteyi erken gösterecek bir yöntem olabilir. ETCO₂ imde perforasyonu göstermede bir yöntem olabilir ve laparoskopi ihtiyacını belirleyebilir. Son olarak, sağlıklı bireyler ile emosyonel bozuklukları olan adolosanlarda ETCO₂ değerlerinin farklı olduğu bulunmuştur. Görülmektedir ki ETCO₂, duyarlılığı düşük olmakla birlikte pek çok değişik klinik durumun tespitinde veya takibinde kullanılabilecek ve gelecek vadede bir yöntemdir.

Non-Invasive Ventilation Strategies in the ED

Dr. Özgür SÖĞÜT

Bezmialem University, School of Medicine, İstanbul, Turkey

Medikal tedavinin etkisi beklenirken, hastanın solunumunu desteklemek için pozitif basınçlı ventilasyon, invazif ya da non-invazif olarak uygulanabilir. İnvazif mekanik ventilasyon (IMV) için hastanın entübe edilmesi gereklidir. Non-invazif mekanik ventilasyon (NIMV) ise hastaya endotrakeal tüp takmadan, genellikle yüz yada nazal maske ile uygulanan bir destek tedavisidir.

Mekanik ventilasyon gereksinmesi olan bir hastada, IMV ile ilgili olası komplikasyonlar nedeniyle, entübasyondan önce hastanın NIMV için uygun bir hasta olup olmadığı araştırılmalı ve uygunsa mekanik ventilasyon non-invazif olarak uygulanmalıdır. NIMV için uygun hasta bilinci açık, yeterli öksürük refleksi ve yutma fonksiyonu olan yani havayollarını koruyabilen, hemodinamik olarak stabil olan ve maske-yüz uyumunun olduğu hastalardır.

Uygun hastalara NIMV uygulanması ile IMV sırasında özellikle entübasyondan kaynaklanan bazı

komplikasyonlardan kaçınmak ve mortaliteyi azaltmak mümkün olabilmektedir.

Akut solunum yetmezliğinde NIMV endikasyonları

- A- Obstrüktif akciğer hastalıkları
- B- Restriktif akciğer hastalıkları
- C- Hiposekmik (Tip I) solunum yetmezliği

NIMV uygulanması

NIMV'nun başarısı hastanın uyumuna bağlıdır. Hastanın motive edilmesi ve kullanılan araçlar ve yapılan işlemlerle ilgili bilgilendirilmeleri gereklidir. Başlangıçta başlık kayışları takılmadan maske yarı oturur pozisyon-
daki hastanın yüzüne uygulanmalıdır. İlk birkaç saat NIMV'nun başarısını artırmak için yakın gözlem şarttır. Özellikle uygulamanın ilk saatlerinde daha belirgin olmak üzere NIMV, invazif mekanik ventilasyona göre doktor ve hemşirenin zamanını daha fazla almaktadır.

Kaynaklar

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Akut Pulmoner Emboli Tedavisi

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Akut pulmoner emboli tedavi planlaması; hastaların erken mortalite risk sınıflaması hesaplanarak yapılmalı, buna göre hastalar erken mortalite riski yüksek, orta ve düşük olarak 3 gruba ayrılmalıdır. Bu ayırım yapılırken hastalardaki şok varlığı/yokluğu ve pulmoner emboli ciddiyet indeksi (PESI) kullanılır. Bunların ışığında;

- Şok (veya hipotansiyon) bulguları olan, PESI Sınıf III-IV olan, görüntüleme ile sağ ventrikül disfonksiyonu saptanan hastalar ve troponin (+) olan hastalar **yüksek riskli**,
- Şokun (veya hipotansiyonun) eşlik etmediği ancak PESI Sınıf III-IV olanlar, sağ ventrikül disfonksiyonu ve/veya troponin(+) olanlar **orta riskli**,
- Şok (veya hipotansiyon) bulguları yok, PESI Sınıf I-II olan fakat sağ ventrikül disfonksiyonu ve/veya troponin (+) olan hastalar **düşük riskli** olarak kabul edilir.

Buradaki şok veya hipotansiyondan kasıt, sistolik kan basıncının <90 mmHg olması yada 15 dakadan daha uzun süre boyunca hastanın mevcut sistolik

kan basıncından >40 mmHg daha düşük sistolik kan basıncı ile seyretmesidir. Ayrıca bu tansiyon düşüklüğünün sebebi hipovolemi, yeni gelişen bir aritmi veya bir sepsis olmamalıdır. Yüksek riskli PTE hastalarının ayırıcı tanısında akut koroner sendrom, kapak disfonksiyonu, tamponad, aort diseksiyonu da akılda tutulmalıdır.

Tedavide öncelik sağ ventrikül disfonksiyonu da göz önünde bulundurularak kontrollü sıvı verilmesi, gerekirse vazopressör ajanların (özellikle norepinefrin) verilmesi, oksijenizasyon, entübasyon ve mekanik ventilasyonu içeren destek tedavisidir. Tedavinin diğer basamakları heparin, parenteral veya oral yeni antikoagülanlar ve Vit K antagonistlerini içeren antikoagülasyon, trombolitikler, cerrahi veya perkütan kateter embolektomidir. Yüksek riskli hastalara hiç gecikmeden fraksiyone olmayan heparin başlanmalı, trombolitik tedavi düşünülmelidir. Trombolitik tedavi kontrendike veya başarısızsa cerrahi embolektomi önerilmektedir. Cerrahi embolektomiye alternatif olarak perkütan kateter eşliğinde tedavi seçeneği de düşünülebilir.

Critical Care Air Transport

Alan HODGDON, MD, MBA, FACEP

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Air Medical Services are being used with increased frequency in modern cities. In this session we will explore the use of helicopters in trauma and other critical diseases and injuries. By use of cases, we will explore under-triage and over-triage

scenarios. We will also examine data supporting improved survival with use of aeromedical transportation. Specialty team use will also be examined, such as Pediatric Teams, Balloon pump teams, etc.

Havayoluyla Taşınan Hastaların Stresleri Psikiyatrik Hastaların Havayoluyla Taşınması

Muzaffer Çetingüç, MD

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Havacılıkta azalmış dış basınç, yetersiz oksijen, düşük ısı ve ivmeli uçuş hareketleri gibi fiziksel stresörler, hem sağlıklı hem de hastalığı olan insanların fizyolojik durumunu bozabilir. Havayoluyla seyahat etme veya bir hastaneye nakledilme durumundaki hasta ve yaralı insanların, uçuş koşullarının yarattığı fizyolojik zorlanmalara bağlı olarak tıbbi komplikasyonlar göstermeleri de olasıdır. Hava aracı içinde tıbbi müdahale olanaklarının azlığı ve uzman sağlık personelinin bulunmaması, durumu daha da zorlaştırabilir...

Genelde ambulans helikopterler yere yakın uçtukları için önemli fizyolojik sorunlar görülmez. Ancak kabin basınçlaması olmayan uçakların 10-20 bin ft (3-7 bin metre) gibi irtifalarda gerçekleştirdikleri uçuşlarda, yetersiz oksijen soluma nedeniyle hipoksi; azalmış dış basınç yüzünden vücut boşluklarındaki (orta kulak, sinüs, diş, bağırsaklar) gaz genişlemesine bağlı barotravmalar ve dokularda bubble oluşumuna bağlı dekompresyon hastalıkları görülebilir.

Bu fizyolojik sorunlar kadar önemli olmak üzere, yerden binlerce metre yüksekte, dar / kapalı bir ortamda ve hareket olanakları kısıtlanmış olarak kalmanın baskıları, pek çok sağlıklı insanlar için bile anksiyete

nedenidir. Kendilerini bir uçuş kazasının kurbanı gibi görmeye başlamış olan insanlar psikolojik stres yaşayabilir, paniğe kapılabilir ve hastanın genel durumu bozulabilir.

Psikiyatrik rahatsızlığı olan kişilerin havayoluyla seyahatinde, normal sayılan insanlarınkinden daha farklı ve yüksek oranda zorluklar yaşanması olasıdır. Şizofreni, mani, depresyon, panik, demans, alkol ve madde bağımlılığı gibi hastaların beklenmedik tepkileri olabilir; kontrol altına alınması için sedatif enjeksiyonlar yapılması ve bazen tespit edilmeleri gerekebilir.

Tıbbi bakış açısıyla, fiziksel hastalığı olan insanlardan daha zor olmayan komplikasyonlar gösteren psikiyatrik hastalara, bazı önyargılar yüzünden daha itici davranıldığı görülmektedir. “Bir psikiyatrik hasta bir şekilde nakledilebiliyorsa, havayoluyla da nakledilebilir” genel ilkesine karşın, askeri ve sivil havacılıkta psikiyatrik hastaların havayoluyla taşınmalarına karşı bir direnç olmuştur. Halbuki sivil havacılık istatistikleri, uçaklarda olay çıkaran, tehlike yaratan ve huzur bozan kişilerin büyük çoğunluğunun, psikiyatrik hastalığı olanlar değil, “normal” sayılan insanlar olduğunu göstermektedir.

Geriatric Emergency Medicine Community Care Program - A new Frontier

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SAFE, Sub acute Ambulatory Care for Functionally challenged and Elderly is a comprehensive, integrated, multidisciplinary team management in the community to reduce elderly admissions from the emergency department.

Avoiding hospitalization will: cost savings for patients, caregivers, hospital and Ministry of Health bed days saved for hospital reducing complications resulting from inpatient admission (eg, nosocomial infection, iatrogenic complication, deconditioning)

The program integrates patients' care with community partners by forging closer ties with community medical services

Lessons learnt from this pilot program will be shared.

Hospital bed capacity and ED overcrowding

An ageing population and a smaller family unit have led to increased demand for health care services in Singapore. From December 29 2013 to January 7 2014, the Bed Occupancy Rate at public hospitals ranged between 75 per cent and 95 per cent.

Figures by the Ministry of Health showed that waiting time for a bed ranged between two and nine hours at the ED.

This is the new norm where hospital bed capacity is stretched to the brink and has led to ED overcrowding.

This session will address some of the concerns, analysis and initiatives that has been tried, with limited success.

Geriatric Abuse

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Geriatric abuse is an act of omission resulting in harm to the health or welfare of an elder person. Categories of elder abuse are; physical abuse, caregiver neglect, sexual abuse, financial or material exploitation, emotional or physiological abuse, abandonment and self-neglect.

Diagnosis; an awareness of risk factors is important for the recognition of potential victims of elder abuse or neglect.

Risk factors associated with the elders and the factors associated with the perpetrator.

History; the clinician should try to put the patient at ease by making the assessment seem like a routine part of the evaluation. Other individual accompanying the patient should be interviewed separately.

Although elder abuse is widely under-recognized and under-reported the physician must remember that underlying medical disorders are often associated with findings that could otherwise be identified with abuse.

Physical examination findings range from subtle and non-diagnostic to highly suspicious.

Treatment; addressing associated medical and psychological needs, ensuring patient safety and complying with local reporting requirements.

Patients in immediate danger should be hospitalized, transferred to the care of a friend or reliable family member, or placed in an emergency shelter.

Suspected abuse should be reported to government agency or local adult protective services agency in order to ensure a follow up investigation and a thorough long-term assessment.

If available, medical cases management teams can provide consultation and support by assisting on the multidisciplinary evaluation of suspected abuse cases and developing treatment plans. Team members generally are composed of a physician, a nurse and a social worker.

Special Considerations

Barriers to the detection of elder abuse

Abuse in long-term facilities; elder abuse in nursing home is well documented. Suspicion of abuse or neglect among patients in nursing homes should be reported to the government agencies.

ED social workers can help locate contact information for the local adult protective services agency.

Table 1. ACEP Practice Guidelines Reporting Elder Abuse:

1	ED's should have written protocols on the recognition and treatment of elder abuse.
2	Hospitals should have appropriate ancillary staff and other resources readily available to help in the assessment and disposition of those individuals.
3	Hospitals and ED's should establish relationship with agencies that oversee the management and investigation of elder abuse.
4	Further research should be conducted in epidemiology, detection, precaution and management of elder abuse and repeated.

Extracorporeal Membrane Oxygenation (ECMO) in ER

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Extracorporeal membrane oxygenation (ECMO) is an extracorporeal technique of providing both cardiac and respiratory support oxygen to patients whose heart and lungs are so severely diseased or damaged that they can no longer serve their function. There are basically two types of ECMO: Venovenous: potentially useful as a bridge to provide oxygenation and carbon dioxide removal while damage to the respiratory tract heals from irritant or alveolar injury. Veno-arterial: potentially provides oxygenation and carbon dioxide removal as well as cardiovascular support in circulatory shock. The Extracorporeal Life Support (ECLS) provides comprehensive short-term support for patients with severe, acute, potentially reversible lung or heart failure. The use of ECLS for adult patients with severe lung failure has increased in the past 5 years. Extracorporeal cardiopulmonary resuscitation (ECPR) using ECMO can restore blood flow in patients with prolonged cardiac arrest. ECPR has been assigned a Class 2b recommendation

in recent guidelines for reversible cardiac arrest. Percutaneous ECLS is now widespread for treating acute cardiac failure. ECLS has been used for treating in-hospital and out of hospital cardiac arrests. The only evidence in the out-of-hospital population was derived from nonrandomized observational study, which contained unbalanced possible confounders such as age, location of arrest, witness status, bystander CPR, initial cardiac rhythm, and cardiac arrest time and CPR duration. ECMO implanted by the ECPR team, which comprised well-trained emergency physicians and clinical engineers. The impact of ED ECPR on emergency medical services systems must also be considered. Emergency physicians encounter patients in extremis who present during the most critical phases of cardiovascular collapse, a time when decisive intervention can be life saving. Current trends based on historical data suggest that the ED offers little advantage toward meaningful outcomes for patients with cardiopulmonary arrest.

Vertigo ve Baş Dönmesi

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Genel bilgiler

Vertigo acil servis başvurularının önemli bir kısmını oluşturmaktadır. Genel popülasyonda 12 aylık prevalans %5, insidans %1.4. K=3E. Sol ve sağ vestibüler çekirdek arasındaki eşit olmayan nöronal aktiviteye bağlıdır.

Sınıflama

Periferik Vertigo Nedenleri: BPPV, Meniere, Perilenf fistülü, Vestibüler nörit, Vestibüler ganglionit, Labirintit, Ototoksikite (aminoglikozit, makrolit, loop diüretikleri, bazı kemoterapötikler, NSAİD, antimalaryal ilaçlar) , 8. kafa çifti lezyonu, Serebellopontin köşe tm, Posttravmatik, Kohlear implantasyon sonrası

Santral Vertigo Nedenleri: Serebellar hemoraji , infarkt, Wallenberg sendromu, Vertebrobaziller

yetmezlik, Vertebral arter diseksiyonu, MS, neoplazm Migren ilişkili vertigo

Diğer: Disequilibrium of aging, Nearsenkop, konvulsiv bozukluk, hiperventilasyon sendromu, psikiyatrik baş dönmesi

Tanı-Tedavi: Epley, Dix Hallpike manevraları kullanılır. Kulak bakışı, ayrıntılı nörolojik muayene, vestibüler muayene, timpanik membran otitis media, kolesteatom, diğer bulgular, fısıldayarak duyma muayenesi/Weber/Rinne , diğer kafa çiftlerinin muayenesi yapılır. Santral vertigo düşünülüyorsa korneal reflex, fasial parezi, yutma güçlüğü, disfoni, azalmış gag refleksi değerlendirilir. Vestibüler serebellar muayene (ataksi, ardışık yürüme, romberg testleri yapılır. Nistagmus değerlendirilir. Tedavide antikolinerjikler, antihistaminikler, antiemetikler, benzodiazepinler, kalsiyum kanal blokerleri, vazodilatör ajanlar kullanılabilir.

Kırmızı Göz

Mehmet Tahir GÖKDEMİR, MD

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Kırmızı göz sık görülen bir yakınmadır. Büyük çoğunluğu birinci basamak klinisyen tarafından tedavi edilebilir, ancak kırmızı göz yakınması olan bazı hastalar için, acil oftalmik sevk ve tedavi gerekir. Kırmızı göz ile ilgili az sayıda epidemiyolojik data bulunmaktadır. Konjonktivit (Allerjik veya viral) muhtemelen toplum içinde kırmızı gözün oluşmasında en sık nedendir.

Hasta Değerlendirmesi

Görme keskinliği ve penlight muayene bulguları ölçümü kırmızı göz yönetimini belirlemede temel oluşturur. Hastanın hikayesi ve genel hasta muayenesi, kırmızı gözü doğrulamada ve yönetiminde önemlidir.

Genel hasta muayenesi hastanın başvurduğu klinikte tedavi olup olmayacağı, olmayacaksa sevk gereksinimi olması bakımından önemlidir. Kırmızı gözde semptomlar subjektif ve çok farklı şekillerde kendini gösterebilir (Tablo 1).

Genellikle kırmızı göze neden olay, konjonktivit ya da subkonjunktival kanama gibi basit olaylardır. Bu gibi durumlar spontan olarak düzelir veya kolayca

tedavi edilebilir. Ancak kırmızı bir göz çok daha ciddi bir bozukluğun semptomu olabilir.

Acil oftalmoloji konsültasyonu gerektiren durumlar:

1. Tek taraflı kırmızı göz olan hastada ani bulantı ve kusma ile gelmişse (akut dar açılı glokom kaynaklı olabilir)
2. Kırmızı göz ile beraber ciddi ağrı ve görme kaybı varsa
3. Korneada infiltrasyon veya opasite (ülser.)
4. Hypopyon

Kırmızı gözde ağrı yapan nedenler:

1. İltihaplar
2. Ön segment travmaları
3. Akut glokom krizi
4. Sistemik hastalıklar
5. Göze yayıllı tümörler

Ağrı yapmayan kırmızı göz nedenleri:

1. Subkonjunktival kanama
2. Blefaritis
3. Kuru göz

Tablo 1. Kırmızı gözde nedenlere göre semptomlar

Parametre	Bakteriyel Konjonktivit	İritis	Keratitis	Akut Glokom
Görme	Normal	Bulanık	Bulanık	Belirgin bulanık
Ağrı	Yok	Orta-şiddetli	Keskin-şiddetli	Şiddetli bazen bulantı kusma
Fotofobi	Yok	Yok	Orta	Orta
Akıntı	Genellikle belirgin	Yok	Yok-hafif	Yok
Konjunktival kızamık	Diffüz	Kornea çevresi	Kornea çevresi	Diffüz
Kornea Görünümü	Berrak	Berrak	Bulanık	Bulanık
Pupil Boyutu	Normal	Daralmış	Normal	Dilate
İntraoküler Basınç	Normal	Normal veya azalmış	Normal	Artmış

Tedavi

Bir kapak bozukluđu, konjonktiva iltihabi bozukluklar, hafif kornea aşınması veya yabancı cisim şüphesi olduđu durumlarda normal keskinliđi mevcut olan hastalar birinci basamak klinisyenler tarafından

tedavi olabilirler. Buna karşın, Enfeksiyöz keratit, iritis, ya da dar açılı glokom gibi görme keskinliđi olan bir kırmızı göz varlığında, klinisyende daha endişe verici bir tanı kuşkusu olmalıdır. Bu hastaların tedavisi göz uzmanı tarafından yapılmalıdır.

Epistaksis Yönetimi

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Epistaksis, burun deliği, nazal kavite veya nazofarinksten kaynaklanan kanamadır. Acil hekimi tarafından yapılan müdahale ile major kanamaların %90'ı durdurulabilir. Burnun anatomik yapıları, karotid arterin eksternal ve internal dalları tarafından kanlanmaktadır. Anterior epistaksislerin çoğu Kiesselbach pleksusundan kaynaklanır. Travma, inflamasyon, tümörler, septal deformiteler ve yabancı cisimler gibi lokal nedenlerden kaynaklanabileceği gibi kanama diatezleri, koagülasyon bozuklukları (hemofili, ITP, Von Willebrand hastalığı..), ilaç (warfarin, aspirin, heparin gibi..) ve madde alımı gibi sistemik nedenlerle de oluşabilir. Hastanın sümürmesi oluşan pıhtıyı temizler ve muayeneyi kolaylaştırır. Lokal anestetik uygulamak kanamayı azaltır ve muayeneye yardımcı olur.

Hastanın ABC'sinin kontrol edilmesi ve gerekliyse entübasyon önceliklidir. Stabil hastada öncelikle 10 dakika nazal bası yapılmalıdır. Hipertansiyon çok nadiren epistaksis nedeni olabilir. Aşırı kan basıncı artışlarında antihipertansif kullanılabilir. Anksiyetenin giderilmesi daha önemlidir.

Anestezik-vazokonstriktör emdirilmiş pamuklu bezlerin nazal kaviteye yerleştirilerek 10-15 dakika bırakılması kanamayı durdurabilir. Kanama odağı görülüyorsa kimyasal koterizasyon (gümüş nitrat) yapılabilir. Elektriksel koterizasyon ancak lokal

veya genel anestezi altında yapılmalıdır. Geleneksel nazal tampon, hazır burun süngerleri veya balonlar ve emilebilir malzemeler diğer tedavi yöntemleridir. Geleneksel nazal tamponlar tecrübe gerektirdiğinden iyi uygulanmadığında kanama durmayabilir. Sıkıştırılmış sünger (merosel) topikal antibiyotik veya vazelinle nemlendirilerek uygulanır ve kan ile temasında şişerek nazal kaviyeti doldurur. Anterior burun kanaması balonları (Rapid Rhino gibi) farklı boylarda olup karboksiselüloz dış tabaka sayesinde trombosit agregasyonunu tetikler. Yerleştirilmesi ve çıkarılması kolay ve hasta için konforludur. Posterior nazal kanamalar için de çift balonlu aletler kullanılır. Bu amaçla foley kateter de kullanılabilir.

Absorbabl malzemeler olan oksidize slüloz (Surgicel), jelatin köpük (Gelfoam) ve jelatin-trombin kombinasyonu (FloSeal) anterior kanamalar için tampona alternatif olarak uygundur. Kanama alanında direkt pıhtı oluşumunu artırarak koruyucu rol alır.

Tüm bu yöntemlerle başarısız kalınan kanamalarda KBB konsültasyonu istenmelidir. Kanama bozukluğu varsa hematolog ile görüşülmelidir. Posterior kanamaların yaklaşık %30'u geleneksel tedbirlerle kontrol edilemeyip, radyolojik embolizasyon veya cerrahi ligasyon için yatırılmalıdır. Hastalara geniş spektrumlu antibiyotik ve analjezik verilmelidir.

UAE Experience

Arif Alper ÇEVİK, MD, FEMAT

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International emergency medicine (EM) is one of the unique area of our specialty. Recent development of EM in different countries and continents is obvious, and there are many different approaches. One of the role of EM specialist is that helping the

improvement of emergency health care and education as much as possible. It can be in their hospital, region, country or abroad. In this presentation, EM practice and education in UAE, and my professional thoughts on the processes to work abroad will be presented.

New Opportunities in Emergency Medicine

Cem ERTAN, MD

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The history of Emergency Medicine, which public demand, more than science, fueled the formation of, began in 1961 when James Mills, Jr., MD, and three colleagues started a full-time Emergency Medicine practice in Alexandria, Virginia.¹ By the late 1960's, hundreds of "Emergency Physicians" were in practice across the U.S. In 1968, John Wiegenstein, MD, and other founders organized Emergency Physicians to form the American College of Emergency Physicians (ACEP). Being a newly formed specialty, Emergency Medicine offered new opportunities to physicians in search of new areas of expertise.

Fifty years later, in the rapidly globalizing world -which is getting more and more crowded every day- Emergency Physicians have to seek for new opportunities, both for the specialty and themselves.

Although the basics of the specialty seems to be in favor of getting to know about "what harms and kills most" rather than learning deep in selected branches, today we know that we are never satisfied with "saving lives only" we must evolve EM to something better than it already is.

The future of Emergency Medicine is most probably bound to subspecialties such as Pediatric EM, Medical Toxicology, Disaster Medicine, and Emergency Medical Services etc. Each may offer new opportunities to EM physicians and help evolve the specialty.

Other areas offering possible occupational opportunities to EM physicians may be Administration of Emergency Medical Care, Medical Enterprise Management, and Medical Law Counseling and Education, all following appropriate master degrees and doctorates.

How to Measure the Quality of EM Education?

Stephan RINNERT, MD

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Anyone who has a clear answer to this question would be a Nobel Prize Laureate. For years the regulatory agencies in the U.S. have been trying to assess the quality of residency education. Expert opinions created catalogues of assessment methods and evaluation tools. The ACGME is diving head first into its New Accreditation System. Besides Core Competencies residents are now being assessed for reaching specific mile stones in their career development. Will those assessment tools give us the information we really want: Is this doctor safe? In this

session we will look at the New Accreditation System and position it against the traditional measurement of EM education, such as Board pass rate. The final judge of the quality of EM education is patient outcomes and patient satisfaction scores. Is it possible to measure those? Absolutely. Will these outcomes be used to evaluate education quality? The future will tell. However, there are certain interventions that can be and that are being used to boost and measure the quality of EM education.

Blast Injury

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The unique aspects of epidemiology, pathophysiology and treatment paradigms for blast injury will be presented. Situations where blast injury could be encountered will be discussed. Different types of blast injury (from primary blast injury, through quaternary) will be defined and discussed. Blast effecting different organ systems, including, ears, lungs, bowel

and cardiovascular system will be presented. Treatment priorities for patients suspected of suffering from blast injury will be presented. Unique pathophysiology and treatment techniques such as blast lung, arterial air embolism, proper positioning, etc. will be highlighted. Historical events and case presentations will be used to augment the presentation.

Battlefield Trauma Lessons from Afghanistan and Iraq

C. James HOLLIMAN, F.A.C.E.P., F.I.F.E.M.

President, International Federation for Emergency Medicine, USA

Goals of this lecture are to present the changes in epidemiology of combat related injuries in current military conflicts, describe the lessons learned in trauma care in the Afghanistan and Iraq wars, and point out how these lessons are relevant to civilian trauma care. The standardized use of body armor and the increased use of improvised explosive devices have changed the distribution and types of injuries seen in military conflicts. Truncal injuries are less common and extremity injuries more frequent. The same principles of medical care in the combat zone taught to military medics can be applied

to civilian mass casualty event care. Medical advances from the recent military conflicts include: improved recognition and treatment of primary and secondary blast injury, the use of “damage control surgery”, greater early use of whole blood and clotting factors, limb tourniquets, hemostatic agents and dressings, intraosseous fluid administration, and field use of antibiotics. Specialized compression devices have also been developed and field tested for control of bleeding from wounds not treatable by tourniquets. All these advances in trauma care have resulted in a 99% survival rate of soldiers who reach field medical care.

Wound Management of Gunshot Injuries

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Gunshot injuries are accounting for almost %20 of injury related deaths. The affected body part is the key factor for the mortality. The amount of energy exchanged between penetrating mass and tissue is directly related to the amount of damage. Tissue density and distance between the weapon and target are other influencing factors. Velocity of the injury mechanism, cavitation waves, additional injuries from secondary missiles such as bullet, bone fragments are

the key factors for understanding the gunshot wounds. Another important issue about gunshot wound management is the forensic side. Emergency staff should be aware of the specific issues like protecting the evidence. Although tourniquet use has limited indication in civilian gunshot injuries, it still has an important role in military medicine. Hemostatic agents are another important discussion point for external control of traumatic bleeding in military care.

Prehospital Hemorrhage Management

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Prehospital hemorrhage is responsible for one of the leading causes of preventable human deaths worldwide. The management of patients with hemorrhage is focused on recognition, triage, rapid transport, and stabilization of the airway, breathing, and circulation. Prehospital clinicians must be diligent about looking for signs of hypoperfusion, ideally recognizing traumatic or non traumatic shock before hypotension develops, and providing appropriate management. Detectable manifestations of the shock state secondary to the hemorrhage include: tachycardia, hypotension, cool extremities, weak peripheral pulses, prolonged capillary refill, narrowing of the pulse pressure (<25 mmHg), and altered mental status. On the battlefield or during transportation, management of hemorrhage is a real challenge and more complicated than solving pool problems of school term. Massive hemorrhage can occur in the chest, abdomen, retroperitoneum, and from major external wounds. Initial management of the patient with hemorrhage is focused on restoring intravascular volume, maintaining adequate oxygen delivery, and limiting

ongoing blood loss. Direct pressure is the primary and preferred means for controlling external hemorrhage. There are some new methods and materials for local pressure such as combat ready clamp. While surgical clamping bleeding vessels under direct visualization is acceptable when necessary. Battlefield tourniquet use can be lifesaving, but most reports are from hospitals with knowledge gaps remaining at the forward surgical team. Instead of MAST, junctional tourniquet, even abdominal aortic tourniquet used more effectively for controlling hemorrhage at last decade wars. For trauma patients with severe, ongoing hemorrhage, immediate transfusion of blood products in prehospital period is not possible at most of the cases. Fluid resuscitation in hemorrhage, including the optimal type and volume, is the subject of considerable debate. In some circumstances, external hemorrhage cannot be controlled using direct pressure and standard dressings. A number of hemostatic products are being developed to control such bleeding, including chitosan dressing, QuickClot powder, and fibrin sealant dressing.

Pulmonary Ultrasound for Undifferentiated Dyspnea

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Pulmonary ultrasound is increasingly recognized as a valuable, non-invasive, imaging technique that can rapidly impart relevant diagnostic information for patients with undifferentiated dyspnea. This lecture will discuss diagnostic applications of pulmonary ultrasound. Specific lung ultrasound

artifacts and findings of pulmonary pathology such as pneumothorax, hemothorax, plural effusion and congestive heart failure will be demonstrated via ultrasound videos. Finally, utilization of ultrasound to distinguish congestive heart failure from chronic obstructive pulmonary disease will be discussed.

Non-invasive Monitoring of Critically ill Patients in the Emergency Department

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It is not uncommon that we take care of very sick patients in the emergency department. We manage the ABC's of resuscitation, administer life saving therapies when indicated (i.e: IV fluids, blood products, antibiotics, pressors, etc) and provide some stability to the unstable. In the ideal world, these patients will go up for admission to the intensive care unit, operating theater or interventional radiology suite for definitive management. However, that is not always possible and we end up having to look after the critically ill patient in our department for many hours, even days. What are the available options for the busy emergency physicians to monitor these patients accurately and efficiently, so we can make appropriate decisions in management? There are multiple systems available in the market that can provide real time analysis of hemodynamics and provide beautiful graphs showing cardiac

output, pulse pressure variability, continuous venous and arterial oxygen saturation, etc. These systems are very expensive; require a trained operator and in most cases, a central line. They are great for the ICU but impractical for the emergency department. Ultrasound technology, in the other hand, is more readily available in the vast majority of ED's, provides practical information at the bed side within minutes, it is reproducible and even though requires the technical skill, learning bedside ultrasonography is within the spectrum of practice of any emergency physician. A basic understanding of cardiovascular physiology and a bed side ultrasound analysis of the heart's overall function, its chambers and a simple look to the IVC is all we need to make treatment decisions to initiate (or stop) IV fluids, pressors, inotropes or vasodilators to improve the hemodynamics of the critically ill patient in the ED.

Critical Care Pearls

Ayesha ALMEMARI, MD., FRCPC (EM & CC)

General Secretary Emirates Society of Emergency Medicine, UAE

Taking care of critically ill patient in Emergency department is a challenging. Knowledge of basic and advanced monitoring and resuscitation principles becomes handy even in a limited resource setting. In this talk I will discuss some critical care pearls such as various tools to minimize interruption of chest compression during resuscitation (ETCO₂, ED US), Basic and advanced tools to assess volume status in a hypotensive patient,

Dexametomedine use in ED (to facilitate non-invasive ventilation and as pre medication to RSI or as sedative agent to RSI), Enhancing oxygenation of the hypoxic patient (Naso-pharyngeal oxygenation, add PEEP to BVM), Approach to ventilator alarms in ED and Tricks to avoid post intubation cardiac arrest and how to prevent ventilator associated pneumonia in the Emergency department. All pearls discussed will be referenced.

Middle East Respiratory Syndrome Coronavirus (MERS-CoV) Kapımızda mı?

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Coronavirüsler ülkemizde de insanlarda dolaşımda olan HCoV-229E, HCoV-OC43, HCoV-NL63 ve HKU1-CoV alt tipleri ile çoğunlukla soğuk algınlığına sebep olan virüslerdir. Ancak SARS Coronavirüs'ün (SARS-CoV) sebep olduğu SARS (Şiddetli Akut Solunum Yetmezliği Sendromu) gibi, çok daha ciddi solunum yolu hastalıklarına da sebep olabilmektedirler. MERS-CoV Eylül 2012'de Suudi Arabistan'da Bishah kentinde bir hastada ilk defa tanımlanmıştır. SARS Coronavirüsü ile uzaktan bağlantılı olmasına rağmen, yaşanmış olan SARS tecrübesinden ötürü endişe oluşturmuştur.

Bulgu ve semptomlar 38 C üzerinde ateş, öksürük, nefes darlığı, halsizlik, kusma diare ve pnömoni tablosu şeklinde ortaya çıkmaktadır. inkübasyon süresi ortalama 5.2 gündür fakat 14 güne kadar uzayabilmektedir. Ortalama görülme yaşı 56'dır ve semptomlar orta ve şiddetli olabilmektedir.

Şüpheli vakalar; akut solunum yolu enfeksiyonu 38 C üzerinde ateş ve öksürük, pulmoner parankim hastalığı (pnömoni veya ARDS), Suudi Arabistan ve komşu ülkelerden 14 gün içinde seyahat öyküsü ve tanısı konulamayan enfeksiyon ve etyolojilerde akla gelmelidir.

Bildirilen klinik özellikler: ARDS, hemodiyaliz gerektiren böbrek yetmezliği, koagülopati ve perikardit'dir. Bir çok hastada ishal dahil olmak üzere GİS

semptomları da görülmüştür. İmmün sistemi baskılanmış; ateşi, diyaresi ve karın ağrısı olan bir hastada başlangıçta solunum yolu semptomları görülmemiş ve pnömoni durumu bir radyografi ile tesadüfen saptanmıştır: Vakalar immün sistemi baskılanmış kişilerde atipik semptomlar taşıyabilmektedir. Hastalık kendisini hafif semptomlarla da gösterebilmektedir.

Mart 2012- Nisan 2014 tarihleri arasında dünyadaki toplam vaka sayısı 345 ve ölüm sayısı 107'dir. Hastalığın lokalize olduğu yerler; Suudi Arabistan, Bahreyn, Irak, İran, Ürdün, İsrail, Kuveyt, Lübnan, Umman, Filistin, Katar, Birleşik Arap Emirlikleri, Suriye ve Yemen'dir. Tüm Avrupa vakalarının doğrudan ya da doğrudan olmayan bir şekilde orta doğu ile bağlantısı vardır. İngiltere, Fransa ve İtalya'daki bazı vakaların orta doğuya seyahat öyküsü yoktur ancak orta doğu'ya seyahat öyküsü olan kişilerle temas öyküsü vardır ve yakın temaslılar arasında kısıtlı bir bulaşma meydana gelmiştir: Hastalık kısıtlı da olsa insandan insana bulaşabilmektedir. Vakaların %79'u erkektir ve yaşları 2-94 yaş arasındadır.

Ülkemizde MERS-CoV açısından şüpheli bulunan 112 vaka için yapılan laboratuvar çalışmaları sonucunda MERS-CoV tespit edilen vaka olmamıştır.

Hastalığın kaynağı ve bulaş yolu kesin olarak bilinmemektedir.

Henüz MERS-CoV'a özel tedavi yoktur.

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Enfeksiyon Hastalıklarında Biyomarkerler

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Enfeksiyon Hastalığı: Hastalık yapma özelliğindeki mikropların veya parazitlerin vücuda girmesiyle ortaya çıkan hastalık tablosudur. Enfeksiyon, enfeksiyona neden olan mikroorganizmaların veya ürünlerinin konağa zarar verecek şekilde reaksiyonlara neden olması ve konakta klinik bulgu oluşturmaktır.

Biyomarker: Normal biyolojik süreçler, patolojik süreçler veya terapötik bir işleme karşı farmakolojik cevabın göstergesi olabilen, objektif olarak ölçülüp değerlendirilmesi yapılabilen özelliğe “biyomarker” denir. Biokimyasal belirleyicilerin enfeksiyon hastalıklarında kullanımı umut vericidir, gelecekte önemli açılımlar sağlayabilir.

İdeal biyomarker’in özellikleri şunlardır: Bize enfeksiyon tanısını koydurabilmeli, ajan patojenin kimliğini söyleyebilmeli, hastalığın ciddiyetini göstermeli, antibiyotik verip vermeyeceğimizi belirtmeli, verilen tedavinin uygun olup olmadığını göstermeli, tedavi süresini ne kadar olacağını göstermeli ve mortaliteyi tahmin etmelidir.

Sık kullanılan biyomarkerler şunlardır: Akut faz reaktanları, Lökosit sayısı, mutlak nötrofil sayısı, çomak sayısı ve oranı, eritrosit sedimentasyon hızı (ESH), fibrinojen, albumin. Serum C-reaktif protein (CRP), Hızlı antijen testi (Beta,) Anti- HBS, HBV-RNA, HIV PCR, p24 antijen (HIV)’dir.

Potansiyel biyomarkerler ise şunlardır:

Solunum yolu enfeksiyonları: H1N1 influenza type A için Serum interleukin-6 (IL-6) konsantrasyonunda (likit kromatografi) artma, RSV için; RSV F-protein, Toll-like receptor 4 (TLR4) aktivitesi seviyesinin ölçülmesi, MD-2 seviyesinin ölçülmesi, Akut bronşiolitte serum vit D düzeyinde azalma, influenza, rinovirus, ve diğer viral paojenler için Exhale NO düzeyinde artma, nasal sekresyonlarda NO metabolitleri influenza benzeri enfeksiyonlarda önerilir

SSS Enfeksiyonları: Apolipoprotein E (ApoE) immün cevapta anahtar rol oynar. Bakteriyel menenjitli hastaların BOS’unda ApoE artar. Nitrik oksit ve metabolitleri bakteriyel menenjit ve influenza ensefalitinde artar.

Sepsis: Sepsis, septik şok, ve SIRS’da plazma Nitroz oksit artar. Tam kan sayımı, C-reaktif protein, TNF α , IL-6, granulosit/makrofaj koloni stimulan faktör, ve prokalsitonin bakılabilir. PCT non enfeksiyöz durumlarda da artar. Sepsis takibinde yardımcı olabilir, ancak tanıda rolü belirsizdir. Neonatal sepsiste idrar Nox seviyesi artar.

Interleukin-18 (IL-18), makrofajlar tarafından üretilir, akut viral enfeksiyonlarda artar. Fekal kalprotektin, nötrofillerden barsağa salınır, enfeksiyöz diarede artar. 1,3- β -D-Glucan (BG), invaziv mantar enfeksiyonunda artar, hastalığın seyrini izlemede önerilir.

Risk Stratification of Emergency Department Patients with a Suspected Infection

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Enfeksiyon şüphesi olan acil klinik hastalarının ilk tedavisine, yoğun bakım biriminde veya serviste takip edilmesine karar vermek için risk değerlendirmesinin yapılması büyük bir öneme sahiptir. Enfeksiyon şüphesi olan hastaların acil kliniğe başvurusunda yapılacak olan bu değerlendirme ile hem düşük riskli hastalar erken taburcu edilerek tetkik ve tıbbi bakım giderleri düşürülebilir, hem de riskli hastalar erken tespit edilip, tedavisine erken başlanarak mortalite ve morbidite oranı azaltılabilir.

Bu amaç için kullanılan çeşitli skorlama sistemleri mevcuttur. Mortality in Emergency Department Sepsis (MEDS) Skoru enfeksiyon şüphesi olan acil servis hastalarında 28 günlük mortalite oranını tahmin etmek için kullanılmaktadır. Sepsisli hastaların heterojen olması nedeni ile SIRS ile değerlendirme yetersiz kalmaktadır. The predisposition, infection, response, organ failure (PIRO) skoru spesiflik ve klinik uygulama yetersizliği olan SIRS'ı desteklemek için önerilir.

Komorbid hastalık hikayesi olan hastalarda biyokimyasal belirteçler hem risk sınıflaması, hem de tedaviyi yönlendirmek için kullanılabilir. Acil birime başvuran enfeksiyon şüpheli hastalarda serum

prokalsitonin düzeyleri sepsis tanısı koymak için önemli bir belirteçtir. Prokalsitonin düzeyleri ile sepsisin ağırlık derecesi birbiri ile korelasyon gösterir. Prokalsitonin sepsis düşünülen hastalarda acile kabulde sepsis taraması ve mortalite tahmini için kullanılabilir. Ancak prokalsitonin ve CRP gibi belirteçlerin sensitivite ve spesifitesi düşüktür. Bu nedenle bu belirteçlerin tek başına değil, MEDS gibi skorlama sistemleri ile birlikte kullanılması uygundur. Yüksek anyon açığı (AG) ve yüksek laktat düzeyleri de enfeksiyon şüphesi olan acil birim hastalarına erken ve agresif tedavi uygulamak için risk stratifikasyonunda kullanılacak belirteçlerdir. Prognostik değerlendirme için laktat düzeyi ile birlikte MEDS skoru kullanılması, sadece MEDS skoru kullanılmasına göre daha üstündür. Yüksek laktat düzeyleri ile Ayrıca yüksek sensitif kardiyak troponin T (hs-cTnT)'nin de enfeksiyon şüphesi olan acil hastaları için risk değerlendirmede kullanılabileceği bildirilmiştir.

Sonuç olarak, enfeksiyon şüphesi olan acil servis hastalarında yüksek MEDS ve PIRO skorları ile birlikte yüksek serum prokalsitonin, CRP, laktat, AG ve düşük bikarbonat düzeyleri; erken ve agresif tedavi gerekliliğinin önemli göstergeleridir.

Antibiotics for Open Fractures

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Management of open fractures remains one of the greatest and most debated orthopedic challenges. The occurrence of infection in an open fracture is an important complication leading to significant morbidity, to include delayed union, non-union, multiple additional surgeries, or amputation. The risk of infection in an open fracture

is multifactorial and there is no universal reliable, reproducible, evidence-based protocol to approach open fractures. In this lecture we will discuss current evidence concerning the acute management of open fractures and suggest a modern treatment algorithm in the light of current literature.

Yatak Başı Ultrasonografi ile Girişimsel Uygulamalar

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Girişimsel ultrasonografi tanısal veya tedavi amaçlı ultrason rehberliğinde yapılan işlemleri tanımlamaktadır. Acil tıpta yatak başı girişimsel ultrasonografinin kullanımı her geçen gün artmaktadır. Günümüzde birçok rehber girişimlerin ultrasonografi eşliğinde yapılmasını önermektedir. Özellikle anatomik belirteçleri belirgin olmayan hastalarda (obez, dehidrate, anatomik deformite vb.) kolaylık sağlamaktadır. Vasküler girişimler (Santral/periferik ven ve arter kateterizasyonu), torasentez, perikardiyosentez, parasentez, yabancı cisim saptanması ve çıkarılması, abse saptanması ve drenajı, sinir blokları, lomber ponksiyon, endotrakeal tüp yerleştirilmesi, kırık redüksiyonu, pace-maker yerleştirilmesi, suprapubik mesane aspirasyonu ve artrosentez acil servislerde yatakbaşı girişimsel ultrasonografinin önemli kullanım alanlarındandır. İşlemler gerçek zamanlı (dinamik teknik) ya da işaretleme (statik teknik) kullanılarak yapılabilir. Girişimsel ultrasonografi kişinin anatomik yapısı ve patolojileri değerlendirilerek en uygun pozisyon ve metod seçilerek yapılmalıdır. Obesite ve subkutan hava mevcudiyetinin kullanımı kısıtlayabileceği unutulmamalıdır. Yüksek frekanslı lineer ve mikrokonveks veya sektör problemler girişimlerde en çok kullanılan problemlerdir. Her iki teknikte de hastaya uygun pozisyon verilmeli ve tüm ekipman

steril olarak kullanılmalıdır. Sterilizasyon proba steril eldiven giydirilerek ya da steril jeller kullanılarak sağlanabilir. Dinamik teknikte iğne artefaktı mutlaka gözlenmeli ve girişimsel işlem proba en yakın, vital yapıların en korunaklı olduğu yerden yapılmalıdır. Dinamik teknikte cihaz oryantasyonu sağlanmalı ve ciddi yanılmalara neden olmamak için prob işareti ile ekrandaki yön işareti mutlaka kontrol edilmelidir. Statik teknikte proba değerlendirme yapıldıktan sonra giriş yeri kalemle işaretlenir. İğnenin trase derinliği için ultrasonografi ekranında ölçüm yapılır ve girişim boyunca hastanın pozisyonu aynen korunur. Statik teknikte anatomik belirteçler yol göstericidir. Her iki teknikte de mutlaka trasvers ve longitudinal akslar değerlendirilmeli, avantaj ve dezavantajlar hesaplanarak uygun görüntü seçilmelidir. Endikasyon ve limitasyonlar işlem öncesinde mutlaka tanımlanmalıdır. Girişimsel ultrasonografi prosedürlerin hızlı (işlem süresini kısaltır) ve güvenli bir şekilde yapılmasını sağlar. Girişim sayısını azaltarak tekrarlayan girişimlere bağlı komplikasyon oranını azaltır. Bir yandan bedel etkin bir yöntem olması nedeniyle maliyeti azaltırken, bir yandan da güvenilir olması nedeniyle acil tıp profesyonellerinin malpraktis davalarından korunmasına katkıda bulunmaktadır.

Şokun Ayırıcı Tanısında Yatakbaşı Ultrasonun Kullanımı

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Şokun erken tanı ve tedavisinin mortalite üzerine olumlu etkileri birçok çalışma ile gösterilmiştir. Bu noktada erken tanı ve tedavi şokun etyolojisinin belirlenmesiyle mümkündür. Yatakbaşı ultrason kullanımı şokun nedenini saptamada araç olarak kullanılabilir. Hipotansiyon ve şokla acil servise başvuran hastalarda ultrason kullanımı artmıştır. Sayısı 15'in üzerinde olan protokollerden bazıları kullanım kolaylığı ve daha geniş tanı alanı sağlaması nedeniyle öne çıkmıştır. RUSH, ACES, FALLS vb. protokoller öne çıkmış olanlardır. Bu protokoller içinde en sık kullanılan RUSH(rapid ultrasound in shock and hypotension) protokolü olarak kısaltılmış olan şok ve hipotansiyon saptanan hastada hızlı ultrason değerlendirmesidir. Bu protokol hayati tehdit edici tanıları ön plana almakta ve hızlı tanı ve tedavi olanağı sağlamaktadır.

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DVT Acil Ultrasonu

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Derin Ven Trombozu

Derin ven trombozu yıllık insidansı 1000'de 1 olgudur. Her yıl 600.000 amerikalı pulmoner emboli geçirmektedir.

DVT bulgu ve semptomları ağrı, eritem ve ekstremitelerde şişliktir. Ancak bu bulguları taşıyan hastaların yaklaşık %11'inde DVT sonografik olarak saptanabilmektedir. DVT uygun tedavi edilmediğinde pulmoner emboli ve postflebitik sendromlara neden olabilmektedir.

Derin Ven Anatomisi

Ana femoral ven, external illiak venin inguinal ligamenden sonraki devamıdır. İnguinal ligamenin 6-8cm distalinde Derin Femoral Ven ve Femoral Ven olmak üzere ikiye ayrılır. Femoral Ven uyluk distalinde adduktor kanalı geçer, distal uyluk arka bölümünde adduktor kanaldan popliteal boşluğa çıktıktan sonra Popliteal Ven adını alır. Popliteal venin ilk derin dali Anterior Tibial Ven çiftidir. Anterior Tibial Venin hemen distalinden Peroneal ve Posterior tibial ven çiftleri çıkar. Gastroknemius ve Soleus venleri de eşlik eden arterleri olmayan kas venleridir. Alt ekstremitte yüzeyel venleri ise Vena Safena Magna ve Parvadır.

DVT Ultrasonu

DVT ultrasonu sıklıkla transfers planda venöz kompresyon ve gri-skala incelemesi ve buna eklenen renkli doppler ultrasonografisi eşlik eder. Hastaların çoğunda 9MHz'lik lineer prob uygundur. Hasta genelde sırtüstü yatar pozisyona alınır. Alt ekstremitte dizin hafif fleksiyonuyla, abduksiyon ve dış rotasyona alınır. Standart inceleme inguinal ligamanın hemen kaudalinden başlar. Transfers planda Femoral Ven adduktor kanaldaki kaudal segmentine kadar, her 2-3 cm de bir adım adım komprese edilir. Popliteal Ven de hasta yüzüstü yatar pozisyonda dize hafif fleksiyon yapılarak incelenir. Dupleks spektral doppler USG incelemesi parsiyel tıkanıklar ve kronik DVT ayırımında yardımcı olabilir. Ancak acil hekimleri için modifiye edilmiş üç nokta kompresyon ultrasonu yüksek doğruluk oranı ve hızlı değerlendirme imkanı sağlamaktadır. Bu yöntemde alt ekstremitte derin venlerinde en fazla türbülansın olduğu ve en sık DVT görülen üç alanın (1. Ana femoral ven büyük safen ven kavşağı 2. Femoral ven derin femoral ven kavşağı 3. Popliteal ven) transfers planda kompresyon USG yöntemi ile incelenmesi esasına dayanır.

Management of Paraquat Poisoning and Basic Research in the Mechanism of Paraquat Lung Injury

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Paraquat (PQ) is still widely used in China for its potential herbicidal properties. In this lecture, I will talk about what we have done in PQ poisoning via introducing a clinical research and a basic one.

In the clinical one, we enrolled 889 patients (333 males and 556 females, aged 31.18 ± 14.29 yr) with acute PQ intoxication in this study. The median severity index of paraquat poisoning (SIPP), measured at their arrival of hospital, is 7.27 (0.1, 2094 .38). All patients received the standard treatment including gastric lavage, large amounts of normal saline infusion, and the hemoperfusion treatment daily until the plasma paraquat level decreased to 200ng/ml. Furthermore, all patients were randomly assigned to the pulse glucocorticoid therapy group or the conventional therapy group. A total of 52.9% of the patients got pulse glucocorticoid therapy and the mortality was 48.82%. The differences of ages, amount of paraquat ingestion, SIPP, hemoperfusion times

between mortality and survival groups were significant. However, logistic regression analysis showed that only SIPP and hemoperfusion times were significant independent risk factors that can predict mortality. The logistic regression equation of survival rate (P) is, $\text{Ln}(P / (1-P)) = -0.002 + 0.025 (\text{SIPP}) - 0.346$ (hemoperfusion times).

It is too difficult to find an effective antidote for PQ-induced type II alveolar epithelial injury because of its complicate and uncertain mechanisms. So we did and are doing some basic researches, trying to detect some possible ways to relieve the injury. As a result, one of our recent studies indicates that globular domain of adiponectin (gAd) shows protective effect on A549 cells against PQ poisoning. Moreover, our study also shows that AMPK-mitochondrial- $\Delta\Psi$ -ATP pathway might be involved in the underlying mechanism of its protective effects. However, further studies are on demand to elucidate the exact mechanism involved.

Carbon Monoxide Toxicity

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Intoxication from Carbon Monoxide is a commonly encountered condition in the Emergency Department. In most severe cases there is little diagnostic uncertainty, however, in mild cases or cases where the history is vague, poisoning from CO may be a significant diagnostic challenge. Epidemiology of CO poisoning will be discussed, including clusters of cases coinciding with disasters and power outages, particularly in winter months. Data from studies conducted at Brown University which show that CO toxicity is easily overlooked, unless there is a universal screening paradigm in place, will be presented. These studies showed that occult CO toxicity is prevalent among patients presenting to the emergency department for any reason, and that discovery of these cases

can have consequences for uncovering hidden sources of CO in the home or workplace which could pose a significant public health hazard. The pathophysiology of CO toxicity will be discussed and data will be presented from animal studies showing the effects of CO on the cardiovascular system. Particularly an experiment where an ex-vivo heart preparation was used to delineate the effect of CO on the cardiovascular system above and beyond that from hypoxic injury will be illustrated. The effects of CO on different populations, particularly children and pregnant women will be discussed. Finally the treatment options, including controversies surrounding the use of hyperbaric oxygen therapy will be presented.

New Therapeutic Strategies: Lipid Emulsion and High Dose Insulin

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Conventional therapies often fail to improve hemodynamic status in certain drug poisoning cases, including antipsychotics, antidepressants, peripheral anesthetics and cardiovascular drugs. Even if there is a response to such traditional therapies, morbidity and mortality rates with serious poisoning owing to these drugs are high and supportive care often remains ineffective. In recent years, intravenous fat emulsion (IFE) and high-dose insulin therapy are two promising developments made and new treatment modalities can reverse some hemodynamically significant poisonings.

High-dose insulin (HDI) (10-fold greater than traditional therapy for hyperglycemia) also enhances the intracellular transport of glucose, which is particularly beneficial to a stressed myocardium. On the other hand, HDI produces vasodilation, which improves local microcirculation and aids systemic perfusion. Insulin increases both coronary blood flow and inotropy without increasing cardiac oxygen demand.

Additionally, HDI accelerates the oxidation of myocardial lactate and reversal of metabolic acidosis.

The mechanism of the action for Intravenous Lipid Emulsion (ILE) therapy is that the emulsion forms a lipid sink that traps the molecule in a lipid partition of the plasma. Based on this theory, ILE would be the most effective for molecules with lipid soluble drugs and it will preferentially attract the molecule toward the lipid sink. Additionally, under normal physiologic conditions, cardiac myocytes utilize beta-oxidation of fatty acids for cellular energy. Thus, ILE may provide direct energy substrate to the myocardium in the form of free fatty acids.

Nowadays, high-dose insulin and intravenous lipid emulsion therapy are two significant developments in clinical toxicology. Particularly, if some poisoning has no antidotes and supportive care falls ineffective, these new treatment modalities are alternative successful treatment methods.

Common Poisonings in India

Dr. T.V. RAMAKRISHNAN

Oorganophosphates

Used as insecticides have a high degree of toxicity. It is the commonest cause of suicidal death. Main effects are on the muscarinic, nicotinic receptors and the CNS. Full recovery occurs within ten days when proper treatment is quickly instituted. Fatality occurs in untreated severely intoxicated patients. With the usage of atropine for muscarinic effects, oximes for nicotinic effects and mechanical ventilation for ventilatory failure, full recovery can be attained.

Endosulfan

Chlorinated “cyclodiene” insecticide. It is used to spray cotton fields. Absorption is by oral, skin and inhalation. Refractory convulsions, coma, respiratory depression, rhabdomyolysis, renal failure, arrhythmia and electrolyte abnormalities are seen. Management includes control of convulsions, lavage, barbiturate coma under the cover of vasopressors.

Oleander

Contains cardiac glycosides. Clinically it produces nausea, vomiting, abdominal pain, dysrhythmias and hyperkalemia. General Management - ABC, cardiac monitoring – risk of arrhythmia, pacing for heart blocks. Hypokalemia increases toxicity, and hyperkalemia is life-threatening.

Paint Thinner

Aromatic hydrocarbon used in oil-based paints. Symptoms include rapid onset of CNS symptoms including euphoria, hallucinations, delusions, tinnitus,

dizziness, confusion, headache, vertigo, seizures, ataxia, stupor, and coma. Treatment is supportive.

Cow dung powder

Used to smear the floor mixed with water on festive occasion in rural areas. Symptoms include metallic taste, increased salivation, burning in stomach, excessive thirst, nausea, vomiting, hematuria, oliguria and acute renal failure. Gastric lavage with 1% ferrocyanide solution is very useful. This forms insoluble cupric ferrocyanide complexes.

Pyrethrins

Natural organic compounds normally derived from *Chrysanthemum cinerariifolium* with potent insecticidal activity. Severe pyrethroid toxicity include seizures, coma, pulmonary oedema and respiratory failure. Treatment is usually symptomatic.

Kerosene

Aliphatic hydrocarbon used as a fuel for cooking. Gastric lavage is contraindicated. It causes chemical pneumonitis.

Rodenticides

They contain warfarin responsible for bleeding diathesis. Vitamin K and fresh frozen plasma is the usual treatment for rat poisons containing anticoagulants.

Enemas and Nebulizers Abstract & Outline

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Nebulizers

- 1) Anatomy of the Rectum
- 2) Why rectum?
 - Easily introduced
 - Rapid absorption
 - Alternate route to PO or IV administration: vomiting, poor IV access
 - But varying plasma concentrations, unpredictable absorption, elimination by defecation
- 3) Absorption Pathophysiology
 - No villi: absorption surface area doubled
 - Avoids first pass metabolism
 - Extensive anastomoses present for absorption into systemic circulation
- 4) Uses: antipyretics, anti-emetics, analgesics, anti-epileptics, sedatives, secretory, antibiotics
- 5) History of the enema
- 6) APAP
 - Antipyretic plasma concentration: 10-20mg per liter
 - Analgesic plasma concentration: unknown
 - Uses in children: toxic levels 120mcg/mL, maximum level of accumulation 24.6mcg/mL
 - Uses in Adults: little data available, plasma concentrations that reduce fever not equal to pain relief doses → twice the dose needed
- 7) Other analgesic suppositories
 - Belladonna
 - Morphine
 - Ketamine
- 8) Benzodiazepines
- 9) Sodium Polystyrene Sulfonate
 - Pharmacokinetics
 - The SPS Controversy
 - Literature review and current recommendations
- 10) Antibiotics

Nebulizers

- 1) Why the Lungs?
- 2) History
- 3) Absorption Pathophysiology
 - Two thirds released back into air
 - Large particles not delivered; deposit in mouth and throat
 - Average delivery approximately 10%
- 4) Currently used nebulizers
 - Bronchodilators
 - Steroids
 - Antibiotics
 - Mucokinetics
 - Pulmonary vasodilators
- 5) Lidocaine
 - Antitussive: diminished bronchial irritation and cough
 - Nebulized before NGT: reduced pain scores, increased epistaxis
- 6) Magnesium
 - Interferes with calcium uptake, smooth muscle relaxation
 - Nebulized Magnesium vs Albuterol: systematic review and meta analysis → weak evidence of improvement in respiratory function
- 7) Opioids
 - Most studies in terminally ill
 - Decreased shortness of breath and work of breathing
 - Not effective for pain relief
 - Nebulized Fentanyl in children: randomized study in clinically suspected limb fractures
 - Conclusion: nebulized Fentanyl equivalent to IV morphine
- 8) Naloxone
 - Case reports, increasing use
- 9) Midazolam
 - No adequate studies available
 - Unclear outcomes regarding termination of seizure
- 10) Furosemide: relief of dyspnea in terminally ill patients; no improvement in asthma
- 11) Antibiotics: not ready for ED use

Palliative Care in the Emergency Department

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Palliative Care (PC) has been defined by World Health Organization (WHO) in 2006 as “PC care is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual”. Although emergency department (ED) is not considered an ideal place to provide PC, it is known that PC patients often present to ED especially with their urgent problems such as pain, nausea, vomiting, dyspnea, bleeding, anxiety, delirium, and seizures. Mainly, the perspective of PC doesn't match up with emergency medicine (EM) whose main perspective includes finding rapid and exact solutions to problems. These two different perspectives are on the basis of the possible problems of PC patients in the ED. There are some barriers that complicate providing PC as overcrowding, chaotic environments,

long wait times, physician attitudes and perceptions, knowledge of PC, the availability of hospital PC consultants/services and understanding of relevant medical legal issues in the ED. Nevertheless, ED physicians can provide necessary care to this special patient group with sufficient knowledge and skills through patient centered approach. There are some main topics that need to discuss for integrate PC into EM. Some of them are medical education, set priorities for research, clinical protocol development and evaluate the ethical and legal framework concerning end of life care and individual wishes.

In developing world, ED physicians should become more competent in PC. Despite the differences in health care systems of the countries and differences in the ED approaches depending on the hospital based PC teams, it's quite important to diagnose PC patients early in the ED due to apply symptomatic approaches properly and to provide guidance afterwards.

Acupuncture Use in the Emergency Department

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As inpatient bed access blockage and outpatient clinic access blockage become a common problem worldwide, emergency physicians are pressed to look for ways to reduce admission and referral rates without compromising patient care. Front loading of investigation and management, short stay unit and looking for more effective and fast management adjuncts are some of the methods used in my department.

I like to share the use of acupuncture, a traditional chinese medicine method, as a management adjunct for back pain patients used together with other options to reduce both admission rate and outpatient referral rate for back pain patients. I will also share the use of acupuncture as management adjunct for other common emergency department complaints.

Emergency Radiology in Pregnancy

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Emergency radiology during pregnancy has always represented a challenging decision to the emergency physician. Not only because of the effects of ionizing radiation to the mother but also because of the potential harmful effects to the unborn fetus. In order to understand these challenges, it is important to review some facts about the radiation effects. The normal human immunologic system has the ability to detect, repair or destroy cells with damaged DNA. This system can be overwhelmed by large and/or repetitive doses of radiation leading to increase risk of malignancies. However, the information available on the effects of ionizing radiation is less than perfect. Currently, there are no randomized studies evaluating the dose-effect of radiation in humans. All data comes from observational studies, phantom models and extrapolation of nuclear disasters. Utilizing the aforementioned limited data seems to be sufficient to formulate some conclusions. The background dose of radiation for a 9-month pregnancy is estimated at 0.5

to 1 mSv (depending on location and altitude) and the threshold for increased risk of fetal anomalies or pregnancy loss has been calculated at 50 mSv. The standard radiological tests produce radiation doses far below 50 mSv. The National Council on Radiation Protection and Measurements, and the American College of Obstetrician and Gynecologists have both agreed that the potential health risks to a fetus are not significantly increased from most standard medical tests. In the emergency department, the important diagnostic conundrums in the pregnant patient in which radiologic studies are likely to be used include: Abdominal pain rule-out appendicitis, renal colic and urolithiasis, gynecologic disorders (ovarian torsion, adnexal mass, hemorrhagic cysts and degenerating fibroid), pulmonary embolism and trauma. Using diagnostic imaging appropriately, having informed decisions with our patients and clearly documenting all discussions will make us good stewards of these useful resources.

Barsak Tıkanmalarında Görüntüleme

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Barsak tıkanmalarının tanınmasında direkt grafinin kesin tanısal duyarlılığı %50 civarındadır. Olguların %30'unda belirsiz, %20'sinde ise negatiftir. Direkt grafi içi sıvı dolu olmuş barsak anslarını göstermediği gibi, tıkanıklığın distalindeki kollebe segmentleri de gösteremez. Barsak tıkanıklığı düşünülen hastalarda BT'nin, direkt grafiye göre daha üstün olduğu yönler: (1) Tıkanıklığın yerini, (2) Tıkanıklık nedenini, (3) Barsak iskemisinin gelişim gelişmediği, (4) Perforasyon varlığını, (5) Kapalı loop obstrüksiyonu olup olmadığını gösterebilmesidir. Bu konular hastanın cerrahiye alınıp alınmayacağını belirleyen en önemli verilerdir. BT'nin tıkanıklığı göstermedeki duyarlılığı %95, barsak iskemisini ve tıkaçıcı lezyon tipini tanımadaki duyarlılığı ise %75-90'dır. Bu nedenle, barsak tıkanıklığı düşünülen bir hastadaki negatif direkt grafi, tanıyı dışlamamalı, hastaya BT çekilmelidir. Direkt grafide tıkanıklık bulgusu saptansa bile etiyoloji ve operasyon gereksinimini ortaya koymak için BT yine de çekilmelidir.

Direk grafi bulguları:

Hava sıvı seviyesi görünümü: Ayakta çekilen direkt grafilerde görülür. Aynı barsak ansında farklı yüksekliklerde seviye görülmesi mekanik obstrüksiyon düşündürür. Seviyeler arasında 1.5 cm yükseklik farkı olması daha da anlamlıdır. Dar tabanlı, izole ve aynı hizadaki hava sıvı seviyeleri paralitik ileus düşündürür.

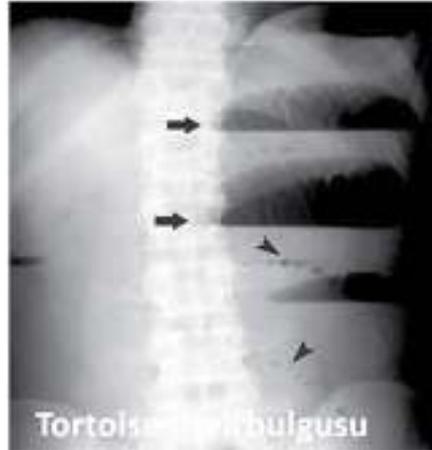
Gaz görünümü: İnce barsaklarda 3 cm'lik, kalın barsaklarda 8 cm'lik içi gaz dolu dilate ansların görülmesi barsak tıkanıklığı bulgusudur.

"Stack of Coins" bulgusu: Duedonum ve jejunum anslarında, valvula conniventes'ler

tarafından sıra sıra bölünmüş distandü ince barsak anslarıdır. Yatarak çekilen grafilerde görülebilir.



"String of Pearls" bulgusu: Valvula conniventes'lerin altında hapsolmuş hava kabarcıklarının inci tanesi şeklinde sırayla dizilmesidir.



Tortoise Shell bulgusu: İnce barsaklardaki geniş tabanlı hava sıvı seviyeleridir. Obstrüksiyonun mekanik olduğunu düşündürür.

Direkt grafide görülen barsak tıkanıklığı bulgularının tamamı BT'de de benzer şekilde görülebilir.

BT bulguları

Barsak dilatasyonu ve kollapsı: İçi sıvı dolu ince barsakların 2.5 cm'den, kalın barsakların ise 5 cm'den daha geniş olması barsak tıkanıklığı bulgusudur. Çekum'un 12 cm'den daha geniş olması ise kısa süre içinde perforasyon gelişeceğini düşündürür. Mekanik tıkanıklıklarda tıkanıklığın proksimali dilate, distalindeki barsak segmentleri ise kollebe görünür. Diatasyonun bitip, kollapsın başladığı nokta "transisyonel zon" olarak adlandırılır. Eğer transizyonel zonda volvulus, kitle, herni gibi tıkaçıcı bir lezyon görülüyorsa, mekanik tıkanıklığını sebebinin yapışıklık (brid) olduğu düşünülür. İnce ve kalın barsaklarda kollaps olmaması, tüm barsak segmentlerinin dilate olması yaygın paralitik ileusu ya da kolonik pseudoobstrüksiyonu düşündürür.

İnce barsak feçes bulgusu: Normalde ince barsaklarda feçes formasyonu görülmez. İnce barsaklarda feçes görülmesi, distaldeki mekanik tıkanıklığı düşündürür.

Whirl sign: Kapalı loop obstrüksiyonlarında, barsağın kendi etrafında dönmesi ile barsak mezosunun rulo haline gelmesi ve girdap şeklinde görülmesidir.

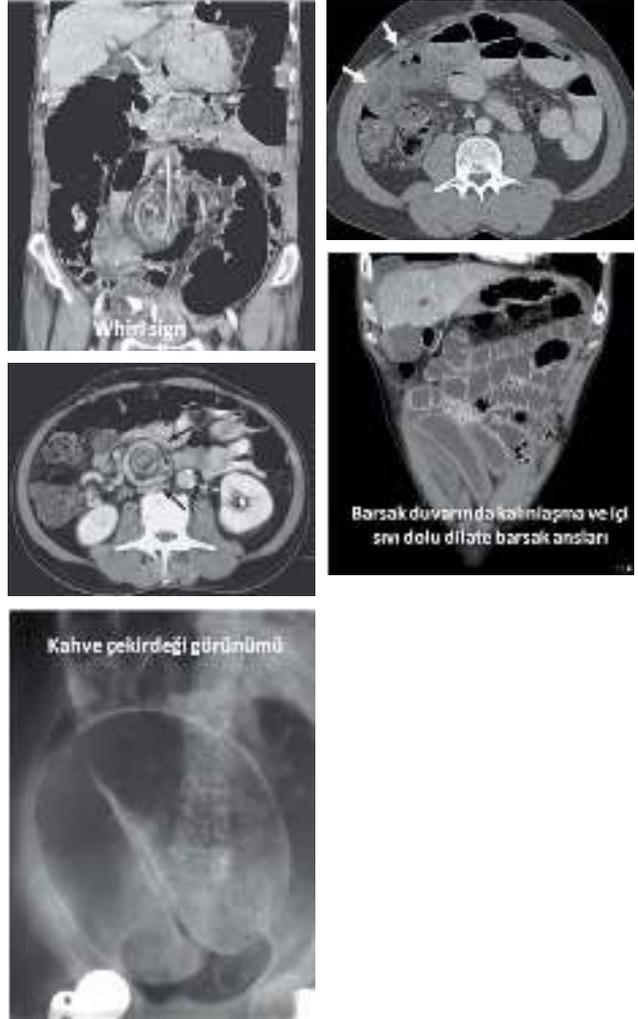
Beak sign: Transisyonel zonda, barsağın giderek kuş gagası şeklinde daralmasıdır

BT'de barsak iskemisinde bağlı bulgular: Barsak duvarında kalınlaşması, barsak duvarı ödemi (target sign), barsak duvarında ve mezenterde artmış atenüasyon, asit, barsak duvarında gaz (pnömosistis intestinalis), barsak duvarının kontrastlanmaması, SMA içinde trombüs görünümü.

Kahve Çekirdeği görünümü: Kalın barsak volvuluslarında görülen içi gaz dolu iki komşu ans ve ortasındaki yumuşak doku dansitesinin oluşturduğu görünümdür.

Ultrasonografi bulguları

USG'nin ince barsak tıkanıklarının tanısındaki sensitivitesi %88, spesifitesi %96 olarak gösterilmiştir. (Deneyimli ellerde, direkt grafiden daha üstün). USG'deki obstrüksiyon bulguları: (1) Barsak dilatasyonu, (2) Whirl sign, (3) Pişano tuşu görünümüdür.



Baş Ağrısı ile Gelen Bir Hastada Kafa Tomografisi Nasıl Okunur

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Baş ağrısı bir sinirin dağılım alanına sınırlı olmayan başın çeşitli yerlerinde ağrı olarak tanımlanır. Tüm acil başvurularının içerisinde baş ağrısı nedeni ile gelen hastaların oranı %1-2'dir (5,6). Bu hastaların da %1-4'ü patolojik bir tanı almaktadır (6,7,8).

Baş ağrıları primer ve sekonder olmak üzere iki grupta sınıflanmaktadır. Primer baş ağrısı grubunda migren, küme, gerilim ve diğer primer baş ağrı sendromları yer alır. Sekonder baş ağrısı grubunda ise travmatik (subdural, epidural, subaraknoid vs), ve travmatik olmayan baş ağrıları (sinüzitten subaraknoid kanamaya kadar uzanan birçok hastalık) yer alır.

Acil serviste baş ağrısı ile gelen hastanın değerlendirmesinde ilk adım, baş ağrısının primer veya sekonder nedeni olup olmadığını belirlemek ve endikasyonu olan hastalara görüntüleme yöntemlerinden uygun olan yöntemi istemektir. İkinci adım da hastaların acil servisten taburcu olmadan önce hızlı, güvenli ve etkin olarak semptomlarının tedavi edilmesi ve poliklinik takibinin sağlanmasıdır. Acil serviste görüntüleme amaç tedavi edilebilen nedenlerin ortaya çıkarılmasıdır. Hastanın hikayesi ve nörolojik muayenesine göre görüntüleme yapılmalıdır.

Bir kafa tomografisi yorumlanırken uygun tarama yapıp yapılmadığı, kemik yapı, ventriküller, sisternler ve beyin parankimi sistemik olarak değerlendirilmelidir.

Uygun taramada, tomografiyi değerlendiren kişinin yeterli sayıda kesit görmesi gerekir. Kesitler foramen magnumdan başlayıp kranium tepesinde sonlanmalıdır. Kesitler erişkinde posterior fossada 5 mm kalınlığında beynin kalan kısmında 8-10 mm

olmalıdır. Filmin simetrik olması filmi okuyan kişinin her iki hemisferdeki yapıları karşılaştırması açısından oldukça önemlidir. Çekilen filmin simetrik olup olmadığı sfenoid çıkıntılar iki taraflı olarak karşılaştırılarak ve aynı kesitte her iki optik lens görülerek değerlendirilir.

Kemik, kemik pencerede değerlendirilir. Kemik pencerede kafa da kırık ve beyin parankiminde olabilecek patolojiye ait ipucu görülebilir.

Ventriküllerin büyüklüğü, şekli, simetrisi ve içerisinde kan olup olmadığı değerlendirilmelidir. 3.üncü, 4.üncü ve lateral ventriküller görülmelidir.

Sisternler serebrospinal sıvının toplandığı potansiyel boşluklardır. Suprasellar, circummesencephalic, quadrigeminal ve sylvian sisternlerde kan, asimetri ve silinme varlığı değerlendirilmelidir.

Beyin parankimi, beyaz gri cevher ayırımı, simetri, hipodansite ve hiperdansite açısından değerlendirilmelidir.

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Musculoskeletal Ultrasonography

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Radyoloji dışı klinikler tarafından da kullanılmaya başlaması Kas ve iskelet sistemi ultrasonografisinin yaygınlaşmasının en büyük nedenlerindedir. İnceleme ile eş zamanlı sonuç vermesi, direkt grafide görülemeyecek bağ, tendon gibi yapıların iyi bir şekilde incelenebilmesi ve radyasyon içermemesi en başta gelen avantajlarıdır. Acil Tıp yanında Romatoloji ve Ortopedi ve Travmatoloji gibi branşlarda da yaygın klinik uygulamaları mevcuttur.

Bu sunum ile kas-iskelet sistemi ultrasonografisinin acil servis hastaları için hangi alanlarda hangi patolojilerin tespitinde kullanılabileceği ve bu konudaki inceleme ve değerlendirme stratejisinin nasıl olması gerektiği tartışıldı.

Kas-iskelet sistemi ultrasonografisinin başlıca acil servis uygulama alanları

Ligament (biceps, triceps tendon yaralanmaları vs.), tendon (aşıl tendon yaralanmaları vs.) ve kas (yırtıklar ve kontüzyonlar) yaralanmaları, doku içinde yabancı cisim tespiti ve çıkarılması, yumuşak dokular içine apse ve selulit ayrımının yapılması, eklem effüzyonları ve kemik kırıklarıdır.

Ultrasonografinin tüm alanlarında olduğu gibi kas-iskelet sistemi uygulamalarında en büyük kısıtlılığı uygulayıcı bağımlı oluşudur. Bunun en büyük sebebi uygulayıcıların yeteli deneyime sahip olmayışlarıdır. İncelemenin tutarlı ve güvenilir olmasında en büyük etken eğitimin uygun şekile sağlanması ve yeterli kadar uygulama yapılmasıdır.

İnmede Magnetik Rezonans Görüntüleme

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İnme belirli bir vasküler alanda, iskemik veya kanamaya ikincil gelişen fokal nörolojik kayıptır. Dünya Sağlık Örgütü (WHO) ise inmeyi “ani başlangıçlı olan ve 24 saatten uzun süren fokal veya global serebral işlev kaybı” olarak tanımlamaktadır.

Her onbeş ölümün, birisinden sorumlu olan inme; gelişmiş ülkelerde, kalp hastalığı ve kanserden sonra morbidite ve mortalitenin en sık üçüncü nedenidir. Nörolojik hastalıklar içinde ise birinci sıradadır.

İnme heterojen bir hastalıklar grubudur. Temelde serebral iskemik ve kanama olarak ikiye ayrılır. İskemik inme en sık inme nedeni olup, inmelerin %80’ini oluşturur.

Gerek iskemik inmeli gerekse hemorajik inmeli hastaların tedavisindeki terapötik çaresizlik nedeniyle son yıllarda hem inmenin patofizyolojisini anlayabilmek hem de tedavi seçenekleri oluşturulmasına (özellikle iskemik inmede onaylanmış tek tedavi metodu olan trombolizisin zaman penceresinin genişletilmesi) yardımcı olmak amacıyla ileri multimodal görüntüleme teknikleri geliştirilmiştir.

İnmeli bir hastada ideal görüntüleme yöntemi geri dönüşümsüz iskemik beyin hasarının boyutu ve yerini saptayabilmeli, lezyonun zamanını, kurtarılabilir ama tehlikede olan dokunun varlığını tesbit edebilmeli, damar tıkanıklığı olup olmadığını ve damar tıkanıklığı olan yerin lokalizasyonunu yapabilmeli, intrakraniyel bir kanama olup olmadığını gösterebilmelidir. Bu bilgiler ışığında iskemik inme düşünülen bir hastada görüntüleme hedefleri;

1. Parankim: Erken iskemik bulguların değerlendirilmesi, iskemik alanın ortasında geri dönüşsüz bir şekilde hasar görmüş beyin parankimi yani enfarkt çekirdeğinin saptanması, hemoraji ve diğer nedenlerin dışlanması (Diffüzyon MRG-**DWI**, Apparent Difüzyon Koefisyansı-**ADC**, Gradient EKO T*- **GRE**, T2 Fluid Attenuated Inversion Recovery-**FLAIR**)
2. Damarlar: Ekstrakraniyel dolaşımın (karotis ve vertebral arterler) ve intrakraniyel dolaşımın değerlendirilmesi. Kontrastsız Manyetik Rezonans Anjiyografi Time of Flight- **TOF MRA**
3. Penumbra: Geri dönüşsüz hücre ölümünün gerçekleştiği merkez çevresindeki henüz ölmemiş ancak fizyolojik fonksiyonları durmuş geri döndürülebilir bölgenin tesbiti. Perfüzyon MRG-**PWI**. Perfüzyon MRG ile kan akımının yavaşladığı hipoperfüze olan alan hesaplanabilir. Perfüzyon hacmi ile difüzyon hacmi arasındaki fark (perfüzyon/difüzyon uyumsuzluğu) iskemik penumbrayı gösterir.
Erken dönemde akut iskemik inme tedavisinin temel amacı potansiyel olarak kurtarılacak iskemik beyin dokusunu kurtarabilmektir. Bu da iskemik penumbranın perfüzyon/difüzyon uyumsuzluğu içeren MR ile görüntülenmesiyle mümkün görünmektedir

Management of Crush Injuries

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Crush yaralanmalar; kalıcı sakatlık ya da ölüme neden olabilir. Komplikasyonlarla karşılaşmamak için erken tanı ve agresif tedavi gereklidir. Crush yaralanma, elektrik çarpması, yanık, kompartman sendromu ve kas hasarına yol açan diğer patolojiler dahil rabdomiyolize yol açan pek çok bilinen mekanizma vardır. Deprem gibi doğal afetlerden etkilenen kurbanlarda % 20, doğal yada insan kaynaklı afetler sonrası çöken yapılardan kurtarılan kişilerde ise % 40 oranında crush yaralanma olduğu rapor edilmiştir. Crush yaralanmalara yaygın olarak; araç kazaları, endüstriyel - madencilik alanında ve tarımsal faaliyetler sırasında ekstremitelerin hareketli makine parçaları arasına sıkışmasından kaynaklanabilir. Klinisyenler uzamış nöbetler, ağır egzersiz veya uzun süreli hareketsiz olan kişilerde, kolşisin ve statinler gibi ilaçlara bağlı reaksiyonlarda rabdomiyoliz semptomlarına karşı uyanık olmalıdır. Bu tür yaralanmalarda travmatik rabdomiyoliz insidansı çok düşük olmasına rağmen tedavi edilmediği takdirde ölümcül seyredebilir.

Travmatik rabdomiyoliz, kas kitlesinin sıkışması sonucu kas liflerinin direkt olarak yaralanmasıyla oluşur. Dokunun sıkışmasıyla kan akımı azalarak sonunda hücre ölümüne yol açan iskemi ortaya çıkar. Yaralanma zamanı ve hücre ölümü, ezici güçler nedeniyle değişkenlik gösterebilir. İskelet kası genellikle kalıcı hasar olmadan en fazla 2 saat süreyle iskemiye tolere edebilir. İki - dört saat aralığında bir miktar geri dönüşümlü hücre hasarı ortaya çıkar. Altı saat sonrasında ise geri dönüşü olmayan doku nekrozu görülür. Ek olarak iskemik hücre hasarı; hücre zarında yetmezlik ile hücre içi sodyum ve kalsiyum kanallarının açılmasına neden olur.

Hastane öncesi en önemli tedavi hedefi, sıkıştırıcı kuvvetlerin kaldırılması olmalıdır. Başlangıç tedavisi hastane içi - dışı intravenöz hidrasyonun sağlanmasıdır. Sonraki tedavi ise end-organ perfüzyonunun restore edilmesi ve hacim genişlemesi ile böbrek yetmezliğini önlemeye yönelik olmalıdır. Elektrolit anormalliklerinin yakın takibi, tedavisi yapılmalıdır. Kompartman sendromu şüphesi varsa bu izlenmeli ve endikasyon olursa fasyotomi ile tedavi edilmelidir.

Hot Joints

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Önemli Tespitler

- Kızanlık nadirdir ve eğer varsa septik artrit veya gut öncelikle akla gelmelidir
- Eklem üzerinde hafif palpasyonla nokta hassasiyet varsa bir periartriküler yumuşak doku iltihabı olan bursit ve kas hasarı düşünülür
- Hareketin pasif ve aktif aralıklarının belirgin azalması septik artrite dikkat çeker
- Hastanın yaşa dâşyebi eşlik eden hastalıklarını tanı için yardımcıdır

Tanı

- Sinoviyal sıvı analizi
- Tanı için en yararlı teşhis yöntemidir.
 - Gram boyama
 - Lökosit sayısı ve kristaller için yayma
 - Kültür (gram negatif ve pozitif, gonokok ve anaeropları içermelidir)

Klinik Yaklaşım

- Tanıda ilk basamak tek eklem ve çoklu eklem (poliartriküler) ayrıntısının yapılması ve eklem ağrısının geçici olup olmadığının tespitidir
- Akut ağrılı, sıcak eklemlerde en önemli tanı ve ayırtıcı tanı bakteriyel septik artritdir
- Akut travmatik olmayan monoartrit içinse
 - gonokokkal yada non gonokokkal septik artrit
 - Kristale bağlı gut veya psödogut ayrıntısının yapılması gerekir

• Serum Laboratuvar analizi:

- Serum eritrosit sedimentasyon hızı ve C reaktif protein seviyesi akut inflamatuvar ve reaktif artritte yükselir (gonokokkal, non gonokokkal, kristale bağlı, romatoid ve Lyme artriti) ancak doğrudan tanılamada yardımcı değildir
- WBC erişkinlerde gonokokkal olmayan bakteriyel artrit tanısı için % 60 duyarlılığa sahiptir
- İlan kültürü olası septik artritte antibiyotik uygulanmadan önce alınmalıdır (etkeni izole etmede % 20 duyarlılığa sahiptir)

Ayırtıcı Tanı

- İnfeksiyon:
 - Septik Artrit
 - Akut gonore
 - Lyme hastalığı
- Romatoid artrit
- Kristal artropatiler- gut ve psödogut
- Reaktif artrit (Reiter's sendromu)
- Travma
- Palindromik romatizma
- Psoriatik artropati
- Bursit /Sillülit

- Laboratuvar çalışmalarını hasta takibinde yardımcıdır
- Diğer olası tetkikler
 - Lyme titresi
 - Romatoid faktör
 - Antinükleer antikor
 - Anti nötrofil sitoplazmik antikorlar
 - HLA-B27 doku tiplene
 - Lupus antikoagulan
 - Tekrarlayan sinoviyal sıvı analizleri

Görüntüleme

- Direk grafi
 - Trauma varsa çekimelidir
 - Septik artritte değeri tartışmalıdır (kondro kalsinozis)
 - Gut ta genelde normaldir (eroziv değişiklikler ve tofus)
- Bilgisayarlı Tomografi
 - Kıkırdak ve kemik anormalliklerini tanılar

- Sıcak ve şiş bir eklem klinik yaklaşım her zaman diğer ayırıcı tanılarıyla birlikte özellikle septik artriti hedef almalıdır
- Bu yaklaşımın odağında septik artrit vardır ve % 11 mortalitesi vardır
- Gecikmiş ve yetersiz tedavi ciddi eklem hasarı ve fonksiyon kaybı ile sonuçlanacaktır

- MRI
 - Cerrahi girişim gerektiren osteomyelit gibi durumlar
- USG
 - Aspirasyonda önemli

Septik Artrit

- Septik artrit özellikle RA ve gutla sıklıkla birlikte dir
- Bir çalışmada WBC 10.000 üzerindeyse ve ESR 30 mm/h üzerindeyse septik artrit olasılığı yükseldiği görülmüştür
- 43 yetişkin hastanın katıldığı 10 yıllık bir çalışmada ateş %40, katılık %21 görülmüştür

Septik Artrit

- Septik artrit
 - Eklem ağrısı(%85)
 - Şişlik (% 78)
 - Ateş (%57)
- Bu bakteriyel enfeksiyon ve iltihabi yanıt bir eklemi günler içinde yok edebilir
- Tutulan eklemdede şiddetli ağrı az ya da çok effüzyon aktif pasif hareketlerde kısıtlılık kayda değer bulgulardır

Septik Artrit

- Hareket kısıtlılığının eşlik ettiği akut şişmiş ve gergin eklem aksi kanıtlanana kadar nongonokokseptik artrittir
- Eklem sıvısında WBC 50.000 hücre ve üzeri duyarlılık %64
- Eritrosit sedimentasyon hızının duyarlılığı ESR 30mm/h üzeri olması % 96 olup ancak özgün değildir

Septik Artrit

- Genel popülasyon da 100.000 de 2-10 arasında görülür
- Genç çocuklar ve 55 yaş üstü erişkinlerde bimodal pik ile görülür
- Yokum süreci
 - Bakteri toksinleri
 - İnflamatuar kasıd
 - Sinoviyal proliferasyon
 - Neovaskularizasyon
 - Enzimatik selüler ve sitokinlerle kartilaj degradasyonunu iperir

Septik Artrit

- Hasta, septik artrit tanısı, sinoviyal sıvı kültürü çıkana kadar analjetik ve parenteral antibiyotik tedavisi için yatırılmalıdır
- Antibiyotik metisiline de dirençli stafilokok ve streptokoklarıvuran vankomisin ve 3 kuşak sefalosporin içermelidir
- Eklem aspirasyonunda enfeksiyon pozitif ise
 - Eklem irrigasyonu için ortopedi
 - Hastanın yaşı, etkilenen eklem, eşlik eden hastalık ve septik kaynağın türüne uygun antibiyotik için enfeksiyon konsültasyonu düşünülmelidir

Gonokokkal Septik Artrit

- Gonokokkal artrit ergenlerde ve yetişkinlerde septik artrit'in en sık sebebidir
- Tipik olarak gezici artrit ve tenosinovitin bir yada daha fazla eklemden ağrı ve şişikten önce bir kuluçka dönemini kapsar
- Vezikül ve püstül görülebilir
- Cinsel ilişki öyküsü yönlendiricidir
- Eklem hasarı gonokokkal artrite göre daha azdır
- Gonokokkal septik artrit nongonokokkal septik artrit tedavisi ile aynı prensiplere dayanır

Gut - Psödogut

- Kristale bağlı artrit Gut(ürik asit) ve Psödogut (kalsiyum pirofosfat) orta ve ileri yaş yetişkinlerin hastalığıdır
- 40 yaş üstü erkeklerde iltihabi eklem hastalıklarının en sık görülenidir
- Ayak başparmağı yada diz ekleminde gelişen bir mono artritir
- Genel olarak eklem sıcak ve kızamaktır
- Kadınlarda daha ileri yaşta ve poliartikülerdir

Lyme Artriti

- Hastalığın temeli bir sipiroket olan Borrelia Burgdorferi infeksiyonu olan kene aracılı Lyme hastalığı ve artritidir
- İnfeksiyonundan haftalar hatta yıllar sonra ortaya çıkabilir
- Semptomlar monoartiküler ve oligoartiküler asimetrik eklem tutulumudur
- Eritema migrans Lyme hastalığının patognomik erupsiyonudur
- Lyme artritinde büyük eklemler daha sık tutulur (özellikle diz)

Gut - Psödogut

- Eklem ağrısı saatler içinde gelişir
- Bir travma ciddi hastalık ve tıbbi durumda tetiklenebilir
- Kristale bağlı artrit tanısı eklem aspirasyonu ve polarize mikroskopta kristalin tanımlanması ile konur
- Ürik asit kristalleri gut da dikey iğne biçiminde ve mavil
- psödogut da kristaller ise eşkenar dörtgen şeklinde ve sarıdır
- Kristaller sinoviyal sıvı içinde, toğastillerin içinde ve iltihabi dokuda yer alır

Lyme Artriti

- Lyme artritinin tanısı endemik bölgeye yakın bir zamanda yapılan ziyaret yada o bölgede yaşama öyküsünden şüphelenilerek konulur.
- Geyik kenisi vücutta 72 saatten fazla yapışmışsa enfeksiyon riski yaklaşık %25'tir.
- Geyik kenisi ısırdıktan 72 saat içinde verilen tek doz 200mg doksisiklin Lyme hastalığını önleyebilmektedir

Gut - Psödogut

- Serum ürik asit seviyeleri gut atağında %30 yüksek olsa da tanıda yardımcı değildir
- Tanı konulduğunda indometazin gibi bir NSAİ ilaç iyi tercih
- Kolşisin akut gut ve psödogut tanılı hastalarda renal ve hepatic fonksiyonlar normal ise alternatif bir ajandır
- Oral kolşisin tedavisi etkin yanıt görülene kadar tipik olarak 0,6 miligram/h
- Ağrı yönetiminde renal yetmezlikte narkotik analjezi devreye girmelidir

Romatoid Artrit

- Tipik olarak eklemlerin simetrik tutulduğu distal interfalangial eklemlerin az etkilendiği poliartiküler ilerleyici bir poliartritir
- Kadınlar erkeklerden 3-4 kat daha fazla etkilenir
- Akut presentasyonda eklem şiş sıcak hassastır
- Hastalar uzamış hareketsizlik dönemi sonrası eklem katılığı tarifler

- Sıcak eklem inflamasyon göstergesidir
- Bir sıcak eklem varsa başta hastalığın öyküsü ve fizik muayenesi ile başlayan süreç dikkatli bir ayıncı tanı ve tedavi süreçlerini izler
- Genel olarak artrit'in erken uyarı işaretleri
 - Eklem ağrısı
 - Eklem sertliği
 - Eklem şişliği
 - Eklem sıcaklığı

Reaktif Artrit

- Reaktif artrit eski adıyla Reiter sendromu klamidya, üroplazm ve enterik enfeksiyöz bir etkenin neden olduğu İnfeksiyon dan 2-6 hafta sonra gelişir
- Akut asimetrik gelişen oligoartritle karakterizedir
- Klasik triadı olan artrit, üretrit ve konjunktivitın aynı anda bulunması gerekmez

Travmatik Hemartroz

- Travmatik hemartroz, ligaman hasarı veya eklem içi kırıkla yüksek bir ilişki gösterir
- Travma sonrası effüzyon eklem hareket açıklığını kısıtlar ve ağrıdır
- Effüzyonun aspirasyonu hastayı rahatlatacaktır
- Tedavi sabitleme buz uygulaması elevasyon
- Olası kırık ve ligaman hasarı ayrıca değerlendirilmelidir

Reaktif Artrit

- Reaktif artritte etkilenen eklemler tipik olarak alt ekstremitelerde özellikle topuk bölgesidir
- Sırt ve kalça ağrısı %70 oranında görülür sinoviyal sıvı aspirasyonu iltihabi bir profil gösterir
- Ağrı kontrolünde NSAİ ilaçlar öne çıkar antibiyotikler yararlıdır

Palindromik Romatizma

- Ataklar arasında normal seyreden, atak durumunda ise etkilenen eklem ve tendonlarda ağrı sert, şişmiş, sıcaklık artışı olan enflamasyon bir artritdir
- Etkilenen eklemlerde hiperemi ve diltte nodül olabilir
- Spesifik bir tanı testi yoktur
- Tanı ataklar sırasında fizik muayeneye dayanır
- Atak sırasında dinlenme önerilir
- NSAİ ilaçlar ve diğer antiromatizmal ilaçlardan fayda görülür

Akut Romatizmal Ateş

- A grubu streptokokkal faranjit infeksiyonu sonrası hiperimmün kompleks cevabı ile tetiklenen sistemik bir hastalıktır
- En sık 5-15 yaş arasındaki çocuklarda görülür. Boğaz enfeksiyonundan yaklaşık olarak 2-3 hafta sonra bulgular ortaya çıkar
- eklemlerde (diz, ayak ve el bileği) şişlik, ağrı, sıcaklık artışı ve hafif kızarıklık
- ARA ile ilişkili artrit, tipik olarak asimetrik gezeici, büyük eklemlerin tutulduğu bir poliartritir

Psoriatik artropati.

- Sıklıkla distal eklemleri tutan seronegatif bir oligoartritir
- Psoriazisli hastaların % 5inde psoriatik artrit görülür
- Hastaların çoğunda kas iskelet sistemi rahatsızlıkları sınırdır
- Kemiğin içine yansıyan tendon ve ligaman inflamasyonu vardır
- Akut başlangıçlı durumlar 1/3 oranındadır
- Tedavi NSAİ ve diğer antiromatizmal ilaçlardır

Akut Romatizmal Ateş

- Sinoviyal sıvı doğal ve steril WBC 10.000 ile 100.000, protein düzeyleri 4 gr/dL, kristal olmaması ve negatif kültür ile tanınır
- Tedavi Benzatin penisilin veya 10 günlük oral penisilin
- Uzun dönem profilaksi rekürrensi önler
- Yüksek doz aspirin 50 -100mg/kg/gün 4 dozda 2-4 hafta artritli iyileştirmektedir

Bursit-sellülit

- Bursit çoğunlukla dirsek ve diz çevresinde olmak üzere vücuttaki 150 den fazla bursayı etkileyen iltihabi bir olaydır
- Tekrarlayan travmalar nedeniyle oluşabileceği gibi gut, psödogut veya romatoid artrit nedeni ile oluşabilir
- Halı yıkayıcısı yada ev kadını dizi (prepateller bursit öğrenci dirseği bursiti (olekranon bursiti) gibi isimlendirmeleri de vardır
- Etkilenen bursanın palpasyonu kolaydır hassasiyet ve ırtım yoktur

Bursit-sellülit

- Bursit septik bursit olduğunda ağrı, hassasiyet etkilenmiş bursanın eritemi ve sıcaklık artışı ile karakterizedir
- En sık etkilenen yer prepateller bursa %50-55 olekranon bursiti %40-45
- Hastaların %50 sinde ateş görülür etrafındaki derinin sellülit kanıtı olabilir
- Çoğu otör septik bursitin aspirasyonunu önerir

Önemli Tespitler

- Tipik olarak septik artritli bir hasta son derece ağrılı şiş ve sıcak bir eklem tutulumu ile başvurur
 - Hastanın hareketleri kusurlu ve eklem üzerine baskıyı vermede son derece isteksiz ve gönülsüzdür.
- Kaç eklem katılıyor?
 - Septik artrit ve gut genellikle monoartrit
 - Reactive artrit ve romatoid artrit poliartritir

Bursit-sellülit

- Bursa sıvısı kültürü enfeksiyon kanıtı için kesin yöntemdir
 - Yaygın pürülen bursit
 - Yaygın sellülit
 - Eklem tutulumundan şüphelenilmesi
 - İmmün sistem baskılanmış yada
 - Kır oral antibiyotikçe yetersiz hastalarda IV antibiyotik için hospitalizasyon düşünülmelidir

Önemli Tespitler

- Hangi eklemler tutulur?
 - Herhangi bir eklem septik artritte tutulabilir ama erişkinde en çok diz, çocuklarda ise kafa en çok tutulur
 - Gut da % 70 ayak baş parmağı tutulumu olsa da bunun yanında ayak bileği, diz, el bileği, dirsek ve elde küçük eklem tutulumları da olabilir
 - Yine gut da 60 yaş üzeri hastalarda atipik presentasyonlara dikkat edilmelidir

Artrit oluşumunun genel mekanizması

- Artritlerde eklem kıkırdığının yıkımından, genel olarak
 - polimorf lökositlerdeki hidrolitik enzimlerin yetersiz, inflamasyon ortamında bulunan kollagenaz ve stromelin
 - inflamatuvar hücrelerden salınan interlekin 1, interlekin 15, TNF-alfa ve gama interferon gibi maddeler sorumludur
- Bütün bu süreçlerde inflamatuvar ve reaktif döngüler eklem kapsülünü ve ve yüzeylerini etkiler

Önemli Tespitler

- Semptomlara göre
 - Septik artritli hastalarda genel olarak halsizlik, ateş, titreme görülür
 - Bu semptomların varlığı inflamatuvar artrit olan bir hasta da septik artrit açısından ayrıca değerlidir
 - Gastroenterit ve genitouriner enfeksiyon reaktif artrit(Reiter sendromu) olasılığını güçlendirir

- Birçok mekanizma akut eklem şikayetlerini tetikler
 - Eklem kıkırdığının dejenerasyonu (osteoartrit)
 - İmmün komplekslerin birlikteliği(RA, romatizmal ateş, gonokokkal artrit)
 - Kristallerin başlatıcı(gut, psödogut)
 - Seronegatif artritler(ankilozan spondilit, reaktif artrit, HLA-B27 duyarlılığı ile post enfeksiyöz)
 - Bakteriyel tutulum(gonokokkal, non gonokokkal olmayan septik artritler, Lyme artrit)

Önemli Tespitler

- Lyme hastalığı ile ilişkili olan Eritema Migrans olanı endemik kene teması öyküsü, ateş, halsizlik, eklem ağrısı, kas ağrısı, baş ağrısı ile kendini gösterir
- İnsan ve hayvan ısırtığı ile başlayan eklem semptomları septik artritli akla gelmelidir
- Herhangi bir travma öyküsü var mı? (Hemoartrit)
- Eklemde bir fonksiyon kaybı var mı? inflamatuvar eklem hastalıklarında öni fonksiyon kaybı septik artrit düşünülmemelidir

Commonly Missed Fractures in the Emergency Department

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Acute musculoskeletal injuries are one of the most common emergency presentations that constitute a significant proportion of workload in the emergency department. Failure to diagnose a fracture is also an inevitable medico-legal problem. Studies about malpractice claims revealed that the missed fractures are among the most common claims for the Emergency Department Physicians.

From the medical aspect, missed fracture may result in pain and discomfort in short term. However long-term outcomes like functional limitation due to fracture non-union, joint stiffness and the need for later, more complex surgery are generally more catastrophic. Failure to detect an abnormality on an X-ray is the most common error, but failure to take an

X-ray due to inadequate examination or appreciation of an injury, or ordering the wrong views also occur frequently.

Tips to decrease the risk: Maintain a high index of suspicion for a fracture in non-weight bearing patients and those with high-risk mechanisms of injury. Always perform an accurate examination and localize the site of the injury. Understand injury mechanisms and patterns and actively look for associated injuries. Have a low threshold for obtaining additional views and do not accept inadequate X-rays. Develop a systematic approach to assessing X-rays. Request CT or MRI scans for high-risk areas when a patient appears to have a fracture clinically, but the X-ray looks normal. Do not hesitate to consult.

From Hippocrates to FOAM: A History of Medical Education

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If you want to know how we practiced medicine 5 years ago, read a textbook. If you want to know how we practiced medicine 2 years ago, read a journal article. If you want to know how we practice medicine now, go to a good conference. But if you want to know how we will practice medicine in the future, listen in the hallways and use FOAM – Free Open Access Meducation. We have entered an era when self-education is king, and the tools for self-education are available on the web – blogs, podcasts, tweets, and personal exchanges – at no charge. Self-directed asynchronous learning acknowledges that adults learn best by being self-directed, problem-orientated and by relating new knowledge to past experiences. Learn

how to take responsibility for your own learning and develop the skills you will need for life-long learning beyond the walls of the lecture hall.

New drugs and devices

every year the US Food and Drug Administration approves dozens of new drugs for use in the United States, and other countries frequently follow suit. But only occasionally is a drug an improvement over what is already available, and even more rarely is it something that changes the practice of emergency physicians. The last few years have been no exception, but there is a handful of drugs that may help you improve care and outcomes for your patients.

Left Ventricular Assist Devices

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Akdeniz University School of Medicine, Antalya, Turkey

Mechanical circulatory assistance and heart transplantation are two established treatment methods for end-stage heart failure. The demand for Left ventricular assist devices (LVAD) is increasing due to the increasing number of patients with end-stage heart failure and limited number of donor hearts available for transplantation.

These devices are shown to increase survival beyond medical management. Emergency Physicians encounter patients with LVADs more often nowadays in the EDs. In this lecture we will review the indications and contraindications of LVADS. We will also address how to approach device related problems in the ED.

Chest Compression Devices in Resuscitation

Nalan Metin AKSU, MD

Hacettepe University, School of Medicine, Ankara, Turkey

Cardiopulmonary resuscitation (CPR) involves rhythmical pushing on the chest of a cardiac arrest victim to simulate the pump action of the heart. The quality of chest compressions, as defined by the continuity, rate and depth of compression, may be associated with survival; these characteristics of CPR have been emphasised in the American Heart Association (AHA) guidelines for CPR. Machines have been developed to take over this chest pumping action. The theory is that these machines should be able to provide a more effective pumping action than is seen in humans because the machines do not pause or get tired, and they provide consistent pressure and timing of each chest compression.. Different mechanisms include load-distributing bands (LDBs), pistons and pneumatic vests. LDB-CPR involves a wide band of material attached to a short backboard, which is placed around the patient's thorax. The circumference of the band is mechanically and rhythmically shortened and lengthened. The change in circumference of

the band simulates compressions delivered in standard manual CPR. Piston devices use compressed gas to drive a piston placed over the lower sternum of the patient. A pneumatic vest is similar to an oversized blood pressure cuff placed circumferentially around the patient's thorax. The two main devices in clinical use are the AutoPulse (Zoll, Chelmsford, Massachusetts, USA) load-distributing band and the Lund University Cardiac Arrest System (LUCAS) Chest Compression System (Physio-Control/Jolife AB). There is insufficient evidence to recommend for using CPR devices (Class IIb, LOE B, according to the 2010 ACLS) Randomised controlled studies comparing compressions delivered by mechanical chest compression devices versus manual chest compressions during CPR could be showed very limited data. If mechanical devices are being used, the rescuer have to give his attention to minimising the delay to chest compressions and defibrillation related to the device.

Simulation in EM Education

Stephan RINNERT, MD

SUNY Downstate / Kings County Hospital, Brooklyn, NY, USA

The presentation will examine the expanding role of simulation in the education of EM residents and faculty members. It will furthermore highlight the importance of simulation in the reduction of human, medical, and or system errors. There will be an emphasis on interdisciplinary simulation

models and debriefing strategies. A discussion of cost, human resources, and other factors in simulation will demonstrate the need for solid research in simulation. Finally, examples of simulation scenarios will solidify the understanding of simulation as a necessary learning tool in today's ED education.

The best Smartphone Applications in the Market

Center EKEN, MD

Akdeniz University, School of Medicine, Antalya, Turkey

By the revolution of digital age, technological instruments have been invaded in every part of medical science. Not only patient care but also medical training and researches are all being implemented by the technological infrastructure. Smartphones have been widely used across the world not only for communication but as computerized

tools. Medical application designed by smartphones are now an important part of patient care that facilitate reaching the medical information and used for medical training such ultrasound applications and procedural videos. This presentation is about the medical applications, used with smartphones, related to emergency medicine.

How to Assess and Evaluate EM Residents?

Cem OKTAY, MD

Akdeniz University School of Medicine, Antalya, Turkey

Emergency medicine is the medical specialty dedicated to the diagnosis and treatment of unforeseen illness or injury. Emergency physicians provide care and make treatment decisions based on real time evaluation of patients' history, physical findings and many diagnostic studies. Emergency physicians possess a wide range of skills to treat injuries and illnesses and perform many interventions in patients of all ages.

Six core competencies were defined to be assessed by the residency training programs. All EM residents must be competent in patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice.

Accurate assessment of these competencies is paramount to the educational process. Multiple methods of assessment are available to the educator. These

span the spectrum from knowledge-based testing to complex interactive measures of skills and knowledge application in simulated settings.

Commonly used assessment methods are Written Examinations (MCQ), Standardized Oral Examinations, Procedure or Case Logs, Objective Structured Clinical Examinations (OSCE), Simulations and Models, Portfolios, Standardized Patient Examinations (SP), and Global Rating of Performance.

However, according to the residency training requirements in Turkey, assessment of residents are almost limited to a few methods: evaluation of case logs, subjective periodical evaluation of the program director, graduation thesis, and unstructured oral exam.

Through this presentation, different methods of formative and summative assessment will be discussed and exemplified.

Toksikoloji

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Çukurova University, School of Medicine, Adana, Turkey

Toksikoloji toksinlerin yaşayan organizmalara etkilerini inceler. Toksikolojinin babası Paracelsus'un da dediğı gibi bir maddeyi toksin yapan miktardır. Tedavi amaçlı kullanılan her ilaç, toksik olabilir. Keyif verici olarak tüketilen alkol, opiyatlar, amfetaminler ölümcül olabilir. Toksinlerin kaynakları yaşayan organizmalar yani bitkiler (mantarlar), bakteriler (clostridium botulinum), böcekler (örümcekler), sürüngenler (yılan), balıklar (puffer fish), kimyasal olarak sentezlenmiş vepesit, herbisit, akarisit, kitle imha amaçlı gazlar gibi bileşikler olabilir. Sistemik toksisite dışında temasla, lokal toksisite ile doku hasarı yaratan deterjanlar, kostikler, alkali ve asitler de hasarlanmalara yolaçarlar. Karbonmonoksit, metan gibi gazlar solunum yolu ile, gıdalarda ya da boyakalemleri ile oyuncaklar da bulunabilen kurşun, cıva gibi ağır metaller gastrointestinal yolla zehirlenmeye yolaçabilir. Bu geniş yelpazeli zehirlenme olguları acil servislerin rutin misafirleridir. Hastalar zehirlenme, ilaç içme gibi yakınmalarla başvursalar da, bilinç değişiklikleri, karınağrısı, kusmaya da nefes darlığı gibi nonspesifik şikayetler ile bulmacayı çözerek tanıyı koymak acil hekimine kalabilir. Özellikle Kuzey Amerika'da klinik ve medikal toksikoloji eğitimlerinin verildiğı programlar

acil tıp uzmanlarının bu yan dallarda profesyonelleşmesini sağlamaktadır. Zehir danışma merkezleri bünyesinde yürütülen bu programlara eğitim almak üzere başka ülkelerden de başvurular kabul edilmektedir. İki yıl süren klinik, laboratuvar ve telefonla danışma merkezlerinde aktif çalışarak tamamlanan bu eğitimler toksikologlara toksisite fizyopatogenezi, toksinde kontaminasyonu, tedavisi ve korunmaları da dahil geniş bir bilgi birikimi ve aktarımı sağlamaktadır. Söz konusu programların yürütüldüğü ülkelerde hasta ve toksisite istatistikleri oldukça gerçekçi tutulabildiğı gibi koruyucu çalışmalar da etkin yapılabilmektedir. Hastalar toksikoloji merkezlerinde tedavi edilmektedir. Ülkemizde ise toksikoloji hastaları tabiri caizse "kimin elinde kalırsa orada" tedavi edilegelmektedir. Bunlar genellikle dahiliye klinik ve yoğun bakımlarıdır. Yanı sıra Reanimasyon üniteleri olan merkezlerde toksikoloji hastalarına bakım ve tedavi verebilmektedir. Acil Tıp Uzmanlık alanının kurulması toksikoloji hastalarının başvuru sonrasında tanı ve tedavilerinin devamı için bir kapı daha açarak, uzmanlık alanının gelişmesi ve kritik hasta bakımına verilen önem ile de toksikolojinin Acil Tıp Uzmanlığının bir alt ihtisası olması yolu açılmıştır.

**Oral
Presentations**

Airway Management

Abstract:0764

CAN EARLY TRANSFUSION CANCEL THE INTUBATION?

Nilufer Aydın, Bülent Taşkın, İsmail Kaftancı, Kerem Ali Kabaroğlu, Ali Çelik, Çiğdem Özpolat, Musa Adanç

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Introduction: Even airway protection is the most important task and decision in the field of emergency medicine, patients with new onset of ecchymotic swelling on neck and shortness of breath; whom use anticoagulants, should be managed in a cold-blooded attitude. Considering closed monitoring and transfusion therapies prior to securing the airway with intubating, will be life, time and money saving. We present a patient with dyspnea and ecchymotic neck that uses anticoagulants.

Case: A 59 year old female presented to emergency room with neck swelling and shortness of breath with the history of anticoagulant use. Vital signs were as follows blood pressure: 121/82 mmHg, heart rate: 111/min, respiratory rate: 16/min, saturation: 96%. On physical examination, she had a ecchymotic swelling on the midline of neck without a shift of trachea or subcutaneous air. Respiratory and cardiovascular system examinations were normal. We obtained blood testes. As we couldn't consider the deeper plans of neck, only edematous appearance of subcutaneous tissue with bed-side USG, she was sent to cervical CT angiography. Blood results revealed as INR: 21:45, aPTT: 90.70, pt: 121.1, Hb 7.1mg/dl, PLT: 469/mm³. CT scan showed subcutaneous hemorrhage without airway comprmise. She was transfused with 4 unit FFP and 3 units of ES. Intravenous 10 mg vitamin K was administered. After the transfusion therapy; blood tests resulted as INR: 1.22 aPTT: 23.50 pt: 14.5. During close monitoring, the hematoma didn't upsize. The following examinations showed no compromise to trachea/airway. She was discharged after an observation of 6 hours, advicing discontinuing the anticoagulants.

Conclusion: Anticoagulant use can lead to petechiae, ecchymosis, hematomas, epistaxis and intracranial hemorrhage like complications. Some may be life-threatening and emergent intervention may be needed. Treatment decision should be made according to INR level and severity of lesion. Due to the localization of our patients lesion; she was close monitored to the risk of airway collapse. Rapid upsizing of hematoma could made an indication for emergent intubation. Early transfusion therapy stopped the not only the upsizing of hematoma but also her intubation procedure. By the way she was discharged to home, instead of being intubated and hospitalized in intensive care unit.

Keywords: Hematoma, airway, intubation



Figure 1. Warfarin complication

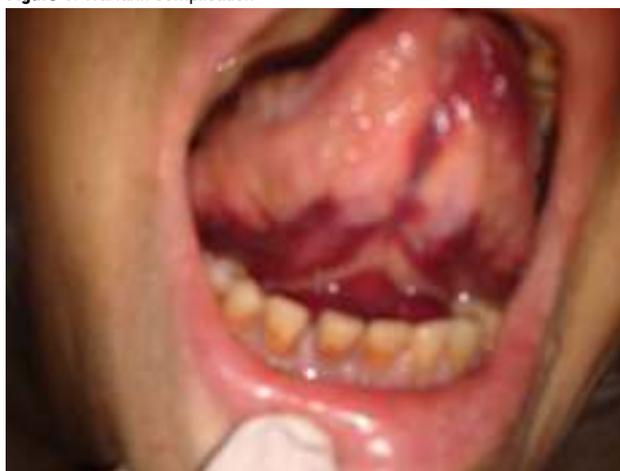


Figure 2. warfarin complication-2

Abstract:0001

COMPARISON OF THE C-MAC VIDEO LARYNGOSCOPE TO THE MACINTOSH LARYNGOSCOPE FOR INTUBATION OF BLUNT TRAUMA PATIENTS IN THE ED

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Objective: The aim of the present study was to compare the performance of the C-MAC video laryngoscope to the Macintosh laryngoscope for intubation of blunt trauma patients in the ED. The primary outcome measure was successful intubation. Secondary outcome measures were first attempt successful intubation, Cormack-lehane grade and to reveal the reasons of unsuccessful intubation with each device.

Materials and Methods: This was a prospective randomized cross sectional study. During a one year period, 140 intubations were performed either the C-MAC or Macintosh laryngoscope. Of these, 140 patients, 75 were intubated with Macintosh laryngoscope and 65 were intubated with C-MAC. 58.7 % of intubations with Macintosh laryngoscope and 72.3% intubations with C-MAC were successful at the first attempt. There was no statistically significant difference between the devices in terms of successful intubation at first attempt. The reason of failed

intubation with Macintosh laryngoscope were inability to visualize the glottic opening in 16 (21%) Cases, inability to direct the ET tube in 8 (10.7%), inability to advance the ET tube between the vocal cords in 6 (8%) Cases, esophageal intubation in 7 (9.3%) Cases, inability to intubate due to secretions in 11 (14.7%) Cases. The reason of failed intubation with C-MAC were inability to visualize the glottic opening in 2 (3.1%) Cases, inability to direct the ET tube in 6 (9.2%), inability to advance the ET tube between the vocal cords in 2 (3.1%) Cases, esophageal intubation in 0 (6%) Cases and inability to intubate due to secretions in 6 (9.2%) Cases. There were statistically significant difference between Macintosh laryngoscope and C-MAC in terms of visualizing the glottic opening and esophageal intubation in favor of C-MAC. The duration of intubation was not statistically significant between the devices.

Conclusion: According to the results of this study, The duration of intubation was not affected by either device but C-MAC offered a better view of the vocal cords than direct laryngoscopy.

Keywords: airway management, videolaryngoscope

Abstract:0105

ANAPHYLAXIS, SUCCESSFUL CARDIOPULMONARY RESUSCITATION OUT OF HOSPITAL

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Summary: Introduction Anaphylaxis is a serious allergic reaction that is rapid in onset and may cause death. Coronary artery spasm may occur with subsequent myocardial infarction, dysrhythmia, or cardiac arrest. Those with underlying coronary disease are at greater risk of cardiac effects from anaphylaxis. The coronary spasm is related to the presence of histamine-releasing cells in the heart. Cardiopulmonary resuscitation (CPR) is an emergency procedure for manually preserving brain function until further measures to restore spontaneous blood circulation and breathing in a person who is in cardiac arrest. It is indicated in those who are unresponsive with no breathing or abnormal breathing, for example, agonal respirations.

Case: Outline This is a Case report of a 56 years old female with anaphylactic shock after a successful cardiopulmonary resuscitation (CPR). After the call our team was sent to the patient's household. The patient was on the floor, unconscious. She was cyanotic, with very weak respiratory effort and decrease respiratory rate. As per patient's husband present at the scene, the patient has history of COPD. She took Ibuprofen (tablet 400 mg). Her condition was deteriorating. She was not breathing, and the pulse was not palpable. Cardiac monitor was showing asystole. CPR was started iv line was placed. After 2 series of compression the patient was intubated. CPR was continued and after 15 minutes the pulse was palpable and the patient was transferred to hospital- Clinical Center for further investigation and treatment. During the transport her GCS was improving but patient was still unconscious. During hospitalization underwent a complete diagnostic and she was treated with H2 blockers, low molecular weight heparin, bronchodilators and, xanthine therapy. She was discharged after 7 days of hospitalization.

Conclusion: The sooner CPR is started the better is the outcome. In the first 3 minutes the chance of return of spontaneous circulation is 75%. After 4 minutes is 40%. After 5 minutes the chance of return of spontaneous circulation is minimal.

Keywords: Anaphylaxis, successful cardiopulmonary resuscitation of hospital

Cardiovascular Emergencies

Abstract:0675

DOES USING HEART SCORE IN THE EMERGENCY DEPARTMENT SHORTEN THE DURATION OF EMERGENCY DEPARTMENT VISIT IN PATIENTS WITH CHEST PAIN?

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Introduction: Chest pain is one of the most common cause of emergency department visit. Chest pain; can be caused by serious reasons such as acute coronary syndrome, pulmonary embolism, aortic dissection. But chest pain can be also caused by gastroesophageal reflux or muscle pain. But the main problem experienced in the emergency department is to early detect low-risk patients as well as low-risk patients. For this purpose, risk scores such as TIMI and GRACE are used in the emergency department. But these scores are not developed for the low risk patients that can be early discharged from the emergency department. HEART score developed for this purpose and suitable for emergency services. It is easy to calculate, detects high-risk patients, as well as the low-risk patients, reliable and validated scoring system.

With the use of HEART risk score low-risk patient can be early discharged from the emergency department and this will lower the medical expenses and help reduce the emergency crowding.

Materials-Methods: A prospective observational study was designed. Data collected between 01/05/2014 and 31/05/2014 from all emergency department patients with chest pain. Average length of emergency department visit, healthcare costs, HEART and TIMI scores were calculated.

Results: 242 patients presenting with chest pain admitted to the emergency department, 138 patients met study criteria and were included in the study. From the 138 patients 81 of them were admitted for observation. Of these patients, 38 patients HEART score is calculated as low-risk. Only six patients with moderate risk score has been discharged from the ED without observation. According to the statistical analysis performed per patient average length of stay in the emergency department with the implementation of the HEART score will drop from 245 minutes to 127 minutes. With the use of HEART score the medical expenses will drop approximately 5TL for each patient with chest pain. Statistical analysis using t-test showed the difference was significant (95% CI, p<0.01).

Conclusion: HEART score use in the emergency department patients may lower the length of stay in the emergency department and reduce the medical expenses. In our research we find that using HEART score as a decision making tool can cause approximately 5 TL cost reduction and patients can stay 118 minutes less in the emergency department. Therefore, in the evaluation of patients with chest pain in the emergency department we strongly suggest the use of HEART score.

Keywords: HEART Risk Score, Chest Pain, Emergency Department

Abstract:0765

DILTIAZEM-INDUCED REVERSIBLE COMPLETE ATRIOVENTRICULAR BLOCK IN AN ATRIOVENTRICULAR NODAL REENTRY TACHYCARDIA

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Background: Diltiazem is widely used in the treatment of supraventricular tachycardias. Dysrhythmia and heart blocks are important adverse effects of this drug. (1, 2) We represent a Case of atrioventricular (AV) block in a chronic kidney disease patient with narrow QRS complex tachycardia after using intravenous diltiazem.

Case: 29 year old woman presented to emergency room with palpitations that started 45 minutes before, without chest pain and dyspnea. Her vital signs were as follows: blood pressure: 110/78 mm/Hg, heart rate: 180/min, temperature: 36.8 C, oxygen saturation: 98%. Her medical history was consist of chronic kidney disease with once a day in a week dialysis. Her examination revealed tachycardia, minimal bibasillar crackles and bilateral pretibial edema. Her electrocardiogram (ecg) showed 155/min narrow QRS complex tachycardia with retrograde p waves and it was compatible with atrioventricular nodal reentry tachycardia. 0.25 mg/kg diltiazem intravenous bolus was administered to terminate this tachyarrhythmia. Her post medication ecg showed third degree AV block and she had no relevant hypotension. Laboratory data was not significant (potassium: 4.5mmol/Lt, calcium: 8mg/dl, bicarbonate: 22mmol/l, bun: 122mg/dl and creatinine: 5.4 mg/dl). At the 14th minute, arrhythmia spontaneously resolved and sinus rhythm maintained. After an observation period for about 6 hours, she was discharged from hospital.

Conclusion: Not only overdose but also standard dose diltiazem administration can lead to a variety of conduction abnormalities; including sinus bradycardia, junctional rhythmias and different degrees of AV blocks. Even single dose slow intravenous push diltiazem can cause transient AV block on especially chronic renal failure patients. In our country it is hard to handle adenosine, thus some rare adverse effects of diltiazem is frequent. So we suggest that adenosine must be achieved and used more often in emergency room especially in high risk patients, like chronic renal failure; whom has tendency for the development of AV block.

Keywords: Diltiazem, Tachycardia, A-V block

Abstract:0949

RETROSPECTIVE ANALYSIS OF PATIENTS ADMITTED TO THE EMERGENCY DEPARTMENT WITH CHEST PAIN

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Introduction: Chest pain is a frequently encountered problem in emergency departments. It is one of the leading cause for applying to the emergency department in Turkey and United States. In differential diagnosis of chest pain, life threatening situations such as acute coronary syndrome, tension pneumothorax, cardiac tamponade, esophageal rupture, aortic dissection

and pulmonary embolism should be considered. In this study we aimed to investigate the diagnosis of patients presenting with chest pain and clinical processes, in emergency department of Bakırköy Dr. Sadi Konuk Training and Research Hospital, in one year period.

Material and Method: In this study 9475 patients who presented in one-year period to the emergency department with chest pain were examined retrospectively. From the hospital records; age, gender, hospital admission time, triage category, consultations, hospitalization, coronary angiography results, chest X-ray, thorax tomography, cardiac enzymes, the initial and final diagnoses of patients represented with chest pain were reached. For statistical evaluation of the data "SPSS 16.0 for Windows" program was used.

Results: Between 1 January to 31 December 2012, 245625 patients represented to our emergency department and 9,475 of these patients (3.9%) represented with complaint of chest pain. 56.1% of the patients were male and the mean age was 48.91 ± 18.386 . 90.9% of patients complained of chest pain only, while the remaining 9.1% of patients had additional complaints. The patients who have additional complaints to chest pain found to diagnose more as myocardial infarction comparing to patients who have only chest pain. The mean age of patients with chest pain accompanying dyspnea is 55.29 ± 19.993 while the mean age of patients with only chest pain is $48.65 \pm 18,300$ and the difference was statistically significant. Consultation requested for 17% of patients presenting with chest pain and the cardiology was the most requested department with 91.1% of patients. The origin of chest pain was found to be musculoskeletal in 34,5% of patients, cardiovascular in 17.7% of patients, respiratory in 17.5% of patients, gastrointestinal in 4.7% of patients, psychogenic in 3.1%, unspecified in 20.4% and other causes in 2.1% of patients. Among 1678 patients with cardiovascular induced chest pain, 806 patients (48%) were diagnosed as ACS and 42.2% of them was found to be STEMI, 44.4% was NSTEMI and 13.4% was USAP. A coronary angiography was done to 549 of 806 patients diagnosed with ACS (68.1%). The coronary angiography results were pathological in 509 of 549 patients (92.7%). Among 340 patients diagnosed as STEMI, CAG was done to 254 patients and only 5 patients had normal results. Among 358 patients diagnosed as NSTEMI, CAG was done to 212 patients and only 15 patients had normal results. Among 108 patients diagnosed as USAP, CAG was done to 83 patients and 20 patients had normal results.

Conclusions: The complaint of chest pain constitutes an important part of emergency admissions. Chest pain accompanied by additional complaints is a fact that increases the probability of myocardial infarction. Patients admitted during the night time are in increased risk for myocardial infarction. Life-threatening disease should always be considered at first in differential diagnosis of patients presenting with chest pain, we should not forget that an early diagnosis and treatment is crucial.

Keywords: Emergency department; chest pain; etiology; acute coronary syndrome

Abstract:00730P

RESISTENT VF: IS IT TIME TO RECALL LIDOCAINE?

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Introduction: Ventricular fibrillation is one of the most common arrhythmias encountered in the setting of cardiac arrest. Management of ventricular fibrillation becomes very challenging when it is refractory to standard defibrillation and amiodarone as per ACLS guidelines.(1, 2) Lidocaine has significant anti-arrhythmic properties but has gone out of practice due to lack of compelling evidence for its use.(3, 4)

Case Report: We present the Case of a 54 year old male with recent history of coronary angiography and stenting. He presented to triage complaining that he thought he was having a heart attack. He subsequently had a seizure in triage. He was immediately brought to the resuscitation room, where he was found to have no pulse. The initial rhythm on the cardiac monitor was ventricular fibrillation. He was treated as per ACLS guidelines with biphasic defibrillation, chest compressions, adrenaline and amiodarone (300 mg followed by 150mg) for 26 minutes without return of spontaneous circulation. After 26 minutes of CPR, 10 ml of 1% Lidocaine was administered resulting in return of spontaneous circulation within minutes. He was taken to the Cath lab and was noted to have re-stenosed his recent LAD stent. He is still in ICU and has been weaned off mechanical ventilation.

Discussion: There is lack of compelling evidence for the use of lidocaine in ventricular fibrillation.(4) Amiodarone has been shown to have better effects compared to lidocaine.(5) A recent trial conducted showed that Lidocaine was superior to amiodarone in children presenting with ventricular fibrillation.(6) Our Case is an advocate for the institution of lidocaine as a third drug in ACLS regime for ventricular fibrillation which is refractory to the standard biphasic defibrillation followed by amiodarone.

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Keywords: Lidocaine, Ventricular Fibrillation, Refractory

Abstract:01660P

ONLY COMPLAINT IS BELCHING - AN UNUSUAL PRESENTATION OF POSTERIOR MYOCARDIAL INFARCTION

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An acute coronary syndrome occurs when a sudden blockage in a coronary artery greatly reduces or cuts off the blood supply to an area of the myocardium. Symptoms of acute coronary syndrome can present with the typical specific symptoms, which are easy to recognize, or vague symptoms like angina pectoris, chills, nausea, dizziness, and mild chest pain. We report here an unusual presentation of acute coronary syndrome. A 54 years old male presented to the emergency department, with a two hour history of belching episodes as the chief and the only complaint. Our patient did not present with the typical specific symptoms of myocardial ischaemia, which are easy to recognize, but he presented with an atypical symptom which can easily be missed.

A 54 years old male, presented to the emergency department with a history of belching episodes following a sensation of gas in the stomach for two hour duration. Patient took PPI thinking with his complaints about dyspepsia and reflux.. Belching episodes was not associated with chest pain. The belching was not related to eating meal. He had no other risk factors relating to a gastric problem such as drugs, relation to meals or stressful events.He has a coronary by-pass history 9 years ago. He had used medication of aspirin, ACE inhibitor, diuretic.he has no other disease history.The general physical examination was normal, including pulse and blood pressure. ECG was taken and ECG was consistent with posterior myocardial infarction. Investigations done, including complete blood count, electrolytes, creatinin, liver function tests, lipids and glucose were normal. patients was consulted to the cardiology department. Coronary angiography was performed to the patient. Coronary angiography showed 60% narrowing at the left anterior descending, both branches of the circumflex artery and 100% blockage of the right coronary artery and its branch, the posterior descending artery.

Our patient did not present with the typical specific symptoms of myocardial ischaemia, which are easy to recognize, but he presented with an atypical symptom which can easily be missed. Belching, chills and fatigue do not sound like symptoms of heart attack to most patients; as a result many sufferers do not seek medical attention or they delay it, which can result in damage to the heart muscle and even death. The relative infrequency or lack of specificity of this symptom reduces its value in diagnosing ischaemic heart disease. A good history taking helped in the diagnosis and early intervention for this patients. While a number of associated symptoms, particularly belching, do have a higher predictive value, our report reinforces the need for a good history taking and earlier objective electrocardiographic information to prevent cardiac muscle damage and even death.

Keywords: acute coronary syndrome, belching, posterior myocardial infarction
posterior myocardial infarction

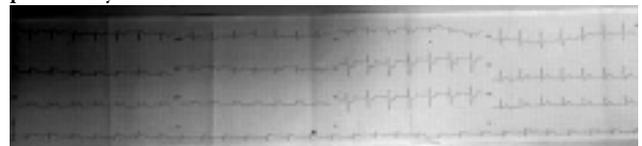


Figure 1. A patient's eeg who admitted to emergency service with belching episodes.

Abstract:0316

VENOUS AIR EMBOLISM WHICH CREATED BY MEDICAL TECHNIQUES IN THE EMERGENCY DEPARTMENT CAN BE CAUSE OF NONSPECIFIC CHEST PAIN

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Venous air embolism a subset of gas embolism, is an entity with the potential for severe morbidity and mortality. It is a predominantly iatrogenic complication that occurs when atmospheric gas is introduced into the systemic venous system. Venous air embolism has been associated with central venous catheterization, penetrating and blunt chest trauma, high-pressure mechanical ventilation, thoracocentesis, hemodialysis and several other invasive vascular procedures. In this Case we describe another reason of air embolism; it was developed after taking contrast thorax computed tomography. A 33 year old male patient was admitted to the emergency department with nonspecific chest pain. In his history, he has no illness. On his admission, his vital signs were normal except tachycardia (108/min). His peripheral oxygen saturation was 99% in room air. His Electrocardiogram was showed that sinus tachycardia. Also his physical examination was normal. His laboratory exams were normal except D-dimer. In the same season, the patient was taken respectively non-contrast and contrast thorax computed tomography to the rule out for pneumothorax and pulmonary embolism. Both of thorax computed tomographies were interpreted as normal and he discharged from hospital diagnosis with acute respiratory tract infection. 24 hours later he was admitted to the emergency department again with ongoing chest pain and fever. On his second admission, he had high fever (38C) and other vital signs were normal. His electrocardiogram was non diagnostic, again. When re-evaluated his previously non-contrast and contrast thorax computed tomographies, there was air in right cardiac spaces on contrast thorax computed tomography but not in non-contrast one. During contrast substance injection, air was injected into the venous system and this air embolism was reached to the right cardiac area (Figure 1). Because of this he was considered venous air embolism and was consulted by cardiology and cardiovascular surgery. Evaluation of cardiology consultant and his echocardiography was normal. At the end of 24 hours non-contrast thorax computed tomography are attracted to the patient, again. There was decreased air image in right cardiac spaces at the end of 24 hours (Figure 2). The patient was hospitalized and started 100% O₂ therapy, place in the left lateral decubitus position (Durant maneuver) and Trendelenburg position. In hospital he was no need intensive care, hyperbaric oxygen therapy and vasoactive drug therapy. After three day in hospitalization he had no symptoms and no fever. He discharged totally heal. In this Case we wanted to mention a reason of another cause venous air embolism which may develop after the injection of substance. As a result, when patient who has in history of injection is presenting with nonspecific chest pain in the emergency department, venous air embolism should be kept in mind as a differential diagnosis.

Keywords: chest pain, venous air embolism, emergency department

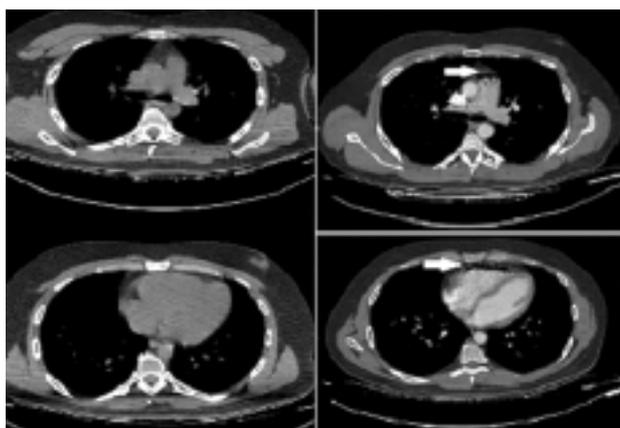


Figure 1. There was air in right cardiac spaces (pulmonary artery (C) and right ventricle (D) on contrast thorax computed tomography but not in non-contrast one (A, B).

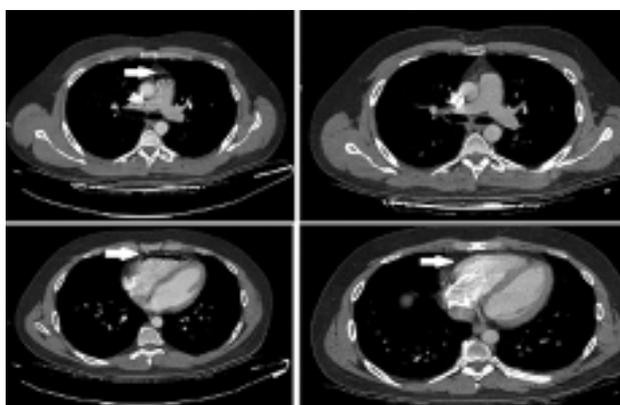


Figure 2. There was decreased air image in right cardiac spaces at the end of 24 hours

Abstract:0402

RIGHT SIDED ECG USAGE IN ACUTE PULMONARY EMBOLISM

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Background: Acute acute pulmonary embolism (APE) is the most serious clinical presentation of venous thromboembolism (VTE). VTE is considered to be provoked in the presence of a temporary or reversible risk factor (such as surgery, trauma, immobilization, pregnancy, oral contraceptive use or hormone replacement therapy) within the last 6 weeks to 3 months before diagnosis. Dyspnoea, pleuritic chest pain, signs of deep vein thrombosis (unilateral extremity swelling), cough, substernal chest pain, fever, haemoptysis, syncope and unilateral leg pain are common symptoms. In most patients, APE is suspected on the basis of dyspnoea, chest pain, pre-syncope or syncope, and/or haemoptysis. Arterial hypotension and shock are rare but important clinical presentations, since they indicate central APE and/or a severely reduced haemodynamic reserve. Electrocardiographic changes indicative of right ventricle strain, such as inversion of T waves in leads V1–V4, a QR pattern in V1, S1Q3T3 pattern, and

incomplete or complete right bundle-branch block, may be helpful. These electrocardiographic changes are usually found in more severe Cases of PE; in milder Cases, the only anomaly may be sinus tachycardia, present in 40% of patients. We aimed to draw attention to the benefits of the right sided ECG usage in patients with suspected acute pulmonary embolism.

Cases: A total of 4 patients (2 male and 2 female) between the ages of 31 to 79 years were admitted to the emergency department with chest pain and shortness of breath at different times. Although different ECG findings were detected in the standard ECGs with left chest leads, T-wave inversion were detected in V3R and V4R of all patients' right sided ECGs with right chest leads. All of the patients' D-dimer tests were positive. They had right ventricular overload with ECO, and were diagnosed as pulmonary embolism by Thorax CT.

Conclusion: T-wave inversion in V3R and V4R of all patients' right sided ECG is important to show that right ventricle overload and ischemia had occurred. Usage of right sided ECG should be considered with standard ECG for patients suspected acute pulmonary embolism.

Keywords: acute pulmonary embolism, ECG, right sided ECG

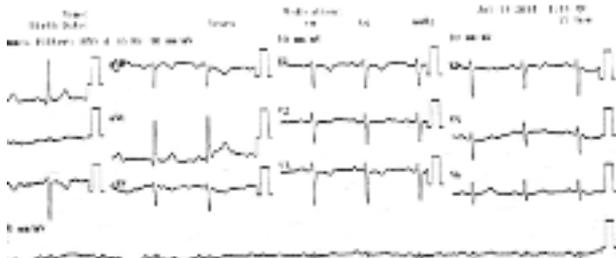


Figure 1. Left sided ECG of one patient

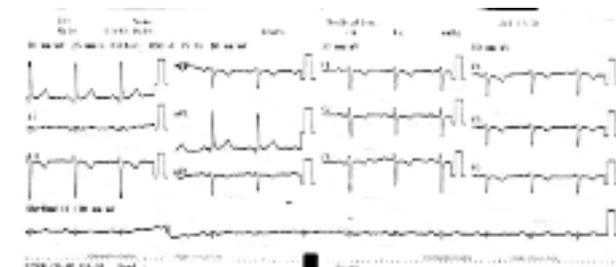


Figure 2. Right sided ECG of the same patient shown in figure

Abstract:0969

PREDICTIVE VALUE OF SIGNAL PEPTIDE-CUB-EGF DOMAIN-CONTAINING PROTEIN 1 AND TOTAL OXIDATIVE STATUS IN A RAT ISCHEMIA AND REPERFUSION MODEL

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Aim: To assess the predictive value of signal peptide-CUB-EGF domain-containing protein 1 (SCUBE-1) and total oxidative status (TOS) on rats using a peripheral ischemia and reperfusion model.

Methods: Wistar rats were randomized into three groups of eight each: group 1, control; group 2, ischemia; group 3, reperfusion. A standardized peripheral ischemia model was created by clamping the right femoral artery with a simple femoral incision. Rats in groups 2 and 3 were exposed to peripheral ischemia for 8 hours, followed by 60 min of reperfusion. Intracardiac blood samples were obtained 8 h after ischemia in group 2, within 1 hour of reperfusion in group 2 and in group 3.

Results: Although mean SCUBE-1 levels were slightly elevated in the ischemia group, no significant differences were found between ischemia and the control groups with respect to mean SCUBE-1 levels (8.18 ± 1.58 and 10.56 ± 4.62 , respectively; $p=0.189$). In the ischemia group mean serum TOS levels were significantly higher versus control rats ($p<0.001$).

A statistically significant difference was found between reperfusion and control groups ($p<0.001$) with respect to mean serum SCUBE-1 levels. The mean serum SCUBE-1 levels were markedly higher in reperfusion group compared with controls (33.32 ± 14.64 and 10.18 ± 3.07 , respectively). Furthermore, in the ischemia group mean serum TOS levels were significantly higher versus control rats ($p<0.05$).

There was no significant difference in mean TOS levels between the ischemia and reperfusion groups ($p=0.239$). However, SCUBE-1 levels were markedly higher in the reperfusion group compared to ischemia group (10.56 ± 4.62 and 33.32 ± 14.64 respectively; $p<0.001$).

Conclusions: Our preliminary study showed that SCUBE-1, a new platelet endothelial adhesion molecule may provide an early indication of acute peripheral arterial occlusion followed by reperfusion in a rat ischemia-reperfusion model. Future controlled clinical trials are needed to evaluate and extend these data.

Keywords: SCUBE-1, total oxidative status, peripheral ischemia, reperfusion

Critical Care in Emergency Medicine

Abstract:0533

COMPARISON OF TRIS-HYDROXYMETHYL AMINOMETHANE (THAM) AND SODIUM BICARBONATE (NAHCO₃) ON MORTALITY IN METABOLIC ACIDOSIS CAUSED BY METHANOL TOXICITY IN A RAT MODEL

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Background and Purpose: Methanol intoxication is a health problem in developing countries since metabolic acidosis is serious complication of it. It is anticipated to correct acidosis rapidly. We aimed to compare the effects Tham and NaHCO₃ therapy in rats with metabolic acidosis, created by intragastric ingestion of methanol.

Methods: 21 male rat was used following anesthesia. A Carotis was cannulated, esophagus penetrated with intracath, baseline blood gas sample was taken, and methanol was injected

into the esophagus through the cannula. At the 30 minute of injection, blood gas samples were taken. Rats developed acidosis were randomly assigned to 3 groups:

Group A: Treated by infusion of Tham,

Group B: Treated by infusion of NaHCO₃

Group C: No therapy.

At 30 and 90 minutes of therapy, blood samples were drawn again. At the 120 minute, the study was over and mortality rates were investigated.

Results: Four rats in group B, and 6 in C dead before the study was over. All were alive in Group C, results were statistically significant. When Group A and C were compared, there was no statistically significant difference in terms of body temperature, blood pressure and heart rate, PaO₂, Na⁺, K⁺ and base deficit values.

For pH values of group A and B, there was no statistically significant difference at 30th and 60th minutes (Mann-Whitney U, $p < 0.05$). However, there was a meaningful difference between their baseline pH values (Mann-Whitney U, $p:0.01$). While the average baseline pH value of Group C was 7.35 ± 0.08 , it was 7.28 ± 0.01 in Group A. When compared the lifetimes of rats in Group A and B, there was statistically significant difference ($p < 0.05$) (Group A was better), however no difference was detected between Group B and C ($p > 0.05$).

Conclusions: We perceived that rats in group lived longer compared to NaHCO₃ and control groups.

Keywords: metabolic acidosis, methanol, tris-hydroxymethyl aminomethane, sodium bicarbonate



Figure 1. Tham

Abstract:0805

WARFARIN DUE TO ALVEOLAR HEMORRHAGE

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Objective: Warfarin is commonly used to anticoagulate patients for a variety of indications (deep venous thrombosis, preventing stroke in atrial fibrillation). The anticoagulant effect of warfarin is mediated through inhibition of the vitamin K-dependent gamma-carboxylation of coagulation factors II, VII, IX, and X. Warfarin have some serious adverse effects, and bleeding is one of the most serious and frequent of them. In this Case we will report a life threatening bleeding complication of warfarin.

Case: A 71 year old man admitted to emergency department with hematuria for two days and hemoptysis for 2-3 hours. It was learned that he had hypertension, diabetes mellitus, ischemic CVD, CHF and atrial fibrillation. He was using warfarin for prophylaxis. His vital signs were as follows: blood pressure, 194/89 mm Hg; pulse rate, 62 beats/min (irregular); temperature, 36.8°C, and SpO₂ 87 %. The patient was tachypneic, and lung examination showed bilateral crackles and bilateral lung sounds was coarsening. Laboratory values revealed a hemoglobin value of 6,9 mg/dL and white blood cell count of 9.07 10³/UL, platelet count was 224,000/mm³. His prothrombin time was 98 seconds; international normalized ratio (INR), 9. Arterial blood gas values, with oxygen, showed a pH of 7.1, PCO₂ of 39mmHg, and PO₂ of 244 mmHg urea 224 mg/dl, creatinin 5,65 mg/dl. A chest radiograph there was diffuse alveolar infiltrates and at chest computed tomographic scan there was diffuse ground glass opacities and infiltrations. The patient was diagnosed as having diffuse alveolar hemorrhage because of warfarin complication. Oxygen therapy, vitamin K, fresh-frozen plasma (FFP) and erythrocyte suspension was started in the emergency department. After that he was admitted to ICU for supportive treatment. After 1 week he was discharged from hospital with cardiology control.

Conclusion: Bleeding complications related to the use of warfarin is frequently seen and these patients are admitted to emergency department firstly. Some of these complication are life threatening and emergency physicians should know these complication and managed the patients carefully.

Keywords: Warfarin adverse effects, emergency department, alveolar hemorrhage

Abstract:00650P

ADMISSION CHARACTERISTICS AND OUTCOMES OF EMERGENCY DEPARTMENT PATIENTS WITH RHABDOMYOLYSIS

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Background: Rhabdomyolysis is a potentially life-threatening syndrome that can develop from a variety of causes. The main objectives of this study were (1) to characterize the most common etiologies of rhabdomyolysis and (2) to determine the incidence of rhabdomyolysis-induced acute kidney injury (AKI),

the requirement for renal replacement therapy (RRT) and 28-day mortality in this sample.

Methods: This retrospective, single-center, and cross-sectional study was conducted in the ED of university hospital between January 1, 2013, and December 31, 2013. We analyzed the clinical spectrum and evaluated the complications and outcomes for each patient.

Results: Forty-three eligible Cases were enrolled in the study. The mean age was 52.0±21.9 years (range 16 to 92), and 81.4% were men. The two most common causes of rhabdomyolysis in this sample were trauma and infections (n=16; 37.2% and n=12; 27.9%, respectively). AKI occurred in 23 patients (53.4%), 13 of whom (30.2%) required RRT. All-cause 28-day mortality rate was 44.2% (n=19). The nonsurvival group had significantly increased peak creatinine level, increased phosphate level, and prolonged aPTT (P <.001, P =.003, and P =.001, respectively).

Conclusion: A substantial proportion of patients with rhabdomyolysis developed the complications of AKI and required RRT. Early recognition and aggressive fluid replacement should be considered for patients with rhabdomyolysis.

Keywords: Rhabdomyolysis, acute kidney injury, adult; emergency department

Abstract:00790P

SUCCESSFUL USE OF HFOV(HIGH FREQUENCY OSCILLATION VENTILATION) IN H1N1 ARDS (ADULT RESPIRATORY DISTRESS SYNDROME) IN 2009-2010 PANDEMIC

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Objective: Successful use of HFOV(High Frequency Oscillation Ventilation) in H1N1 ARDS (Adult Respiratory Distress Syndrome) in 2009-2010 pandemic

Literature: Refractory hypoxemia in H1N1 ARDS is associated with high mortality (15-40%). This requires high ventilator settings with nonconventional modes of ventilation, and extracorporeal membrane oxygenation in 5-10% Cases.

Use of HFOV has shown a non-significant trend towards improved oxygenation in severe ARDS when conventional ventilation fails Early initiation of antiviral and antibiotic therapy along with proper supportive therapy helps in better outcome.

Materials & Methods: We describe a Case of ARDS secondary to infection with influenza A (H1N1) virus.

A 36 year old male patient with h/o fever and breathlessness was admitted to ICU in severe sepsis with ARDS,TLC of 13,000-16,000/cu.mm, platelet count 75000/, deranged liver and kidney functions. Bacterial cultures of blood, urine and BAL, Blood for Malaria parasite and dengue serology were negative. H1N1 antigen was positive.

Oseltamivir 75 mg, intravenous antibiotic, mechanical ventilation and Infusion dopamine was started. Pt continued to remain febrile, required FiO₂ 0.7-0.8 and PEEP 15 cm H₂O to maintain oxygenation (PaO₂ 60-70). On fifth day of ICU, based on the above findings HFOV was started with FiO₂ 0.7, frequency 5.0, amplitude 86 and mean airway pressure 25. After two hours PaO₂ increased to 120 and steadily improved further.

Next 48 hours, FiO₂ decreased to 0.5, dopamine was stopped and liver and kidney function started showing improvement.

HFOV continued for three days and thereafter pt. was weaned off to SIMV support. Pt. was discharged from ICU to step down unit on day fifteen of his admission.

Conclusion: HFOV can be used successfully in H1N1 ARDS
Article; J Crit Care. 2010 Sep;25(3):436-44.

J Clin Apher. 2010;25(6):350-3.

Indian J Pediatr. 2009 Sep;76(9):921-7.

Keywords: H1N1 virus, ARDS, ventilation

Abstract:0870

REVERSAL OF WARFARIN OVERDOSE WITH FRESH FROZEN PLASMA VERSUS PROTHROMBIN COMPLEX IN THE EMERGENCY DEPARTMENT

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Akdeniz University School of Medicine Department of Emergency Medicine

Introduction: The aim of the present study was to compare the anticoagulation reversal with fresh frozen plasma (FFP) or prothrombin complex (PCC)(in patients with warfarin overdose in the emergency department.

Materials and Methods: This retrospective cohort study was performed in a tertiary care emergency department of a university hospital between January 2013 to July 2014. We included adult patients on warfarin therapy with an international normalization ratio ≥1.5. Demographic properties of the patients, time to international normalized ratio reversal, bleeding site, presence of active bleeding, hospital admission were collected. Transfusion of FFP or PCC other than warfarin overdose or patients receiving both FFP and PCC were excluded from the study. Patients were categorized into three groups according to their pretransfusion INR as 2.01–5, 5.01–9, > 9.01. ΔINR was calculated to measure the improvement in INR for per unit of transfused FFP or for one vial PCC. ΔINR was calculated as follows: (PretransfusionINR value -Posttransfusion INR value)/number of transfused FFP units or PCC vials (1).

Results: A total of 104 patients were included in the study. 53 (51%) of 104 patients received FFP and 51 (49%) of 104 patients received PCC. 44 % (n=46) of the study population was male. There was no active bleeding in 26 (25%) patients, 33 (32%) patients had bleeding from gastrointestinal track, 15 (14%) patients had bleeding from respiratory track, 11 (10.6%) patients had bleeding from urinary track, 11 (10.6%) patients had soft tissue bleeding or hematoma formation and 5 (4.8%) patients had intracranial bleeding. The reason to use warfarin treatment was: atrial fibrillation in 36 patients, prosthetic valve replacement in 17 patients, DVT in 10 patients, pulmonary embolism in 13 patients,stroke in 9 patients and the indication was not known or missing in 15 patients.

The mean INR level at presentation (INR 1) to ED was 7.8±2.2 and INR level after FFP or PCC infusion (INR 2) was 1.9±0.5. INR1 levels were not statistically significant between the groups but INR2 levels were statistically significant between FFP and PCC groups in favor of PCC(p<0.001). Time to reversal of anticoagulation between FFP and PCC was not statistically significant.

Discussion: According the results of this study, time to reverse the anticoagulant effect were similar between FFP and PCC. But lower levels of INR values were detected with the use of PCC. In this study, 30 patients in the FFP group and 23 patients in the PCC group were discharged from the ED, raising the concern of inappropriate indication to transfuse FFP or PCC in the ED. In the study

of Hickey et al. a 4-factor prothrombin complex concentrate was compared with FFP and according the results of their study, PCC can reverse the anticoagulation faster than FFP and with fewer adverse events. The reason for faster anticoagulation effect may be secondary to ingredients of different PCCs in their and our studies. As the PCC in their study was a 4-factor PCC, the PCC used in our study does not include Protein C or S. In our study, we calculated the time between venous sampling of INR1 and INR2. It might be appropriate to calculate the time frame between the beginning of infusion and venous sampling of INR2.

Keywords: Fresh Frozen Plasma, International Normalization Ratio, Prothrombin Complex Concentrate

Emergency Department Administration

Abstract:0927

COMPARISON OF MODIFIED EARLY WARNING SCORE WITH RAPID EMERGENCY MEDICINE SCORE IN-HOSPITAL MORTALITY AND HOSPITAL ADMISSION

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Introduction: The emergency department is the crucial interface between the emergency medical services and the hospital. As reflected in the year-on-year increases in patient numbers, however, emergency departments are increasingly being selected as the route of primary access to the healthcare system.

Emergency medical admissions constitute a substantial proportion of the workload of the emergency department. Mortality among these patients is significant and may be determined by the quality of care provided. A risk stratification score for emergency medical admissions is therefore required to allow estimates of mortality to be routinely adjusted for Case mix.

The Rapid Acute Physiology Score (RAPS) was developed from the Acute Physiology and Chronic Health Evaluation II (APACHE II) to predict in hospital mortality, using only those variables in APACHE II that are likely to be regularly recorded in emergency medical admissions: heart rate, blood pressure, respiratory rate, and Glasgow Coma Score (GCS). A recent modification of RAPS, the Rapid Emergency Medicine Score (REMS), has added oxygen saturation and age to these four variables (Table 1). Comparison of REMS and RAPS suggested that REMS is superior to RAPS in predicting in hospital mortality. MEWS has the similar parameters with RAPS. The different parameters of MEWS are systolic pressure in stead of median pressure and avpu score in stead of Glaskow Coma Score (Table 2).

We aim to compare efficacy of Modified Early Warning Score (MEWS) and Rapid Emergency Medicine Score (REMS) on in hospital mortality and as predictor of ICU admission and hospitalisation.

Method: This was a retrospective, single center, observational study of adult medical patients admitted to emergency department at december 2011 - may 2012. Patients were selected with systematic sampling from the medical records. Patients with incomplete documentation and referred to another hospital for ICU were also

excluded. The primary outcome of study was the admission of the patient to intensive care unit (ICU) and in hospital mortality.

Result: Total patients were 632 (49,2 % male, 50,8 % female). The mean age was $47,85 \pm 19,29$. Median value of MEWS and REMS were 0 (0-10) and 3 (0-25) for all selected patients (Table 3). Median MEWS and REMS value of the patients who died in hospital were 3 (0-10) and 11 (4-25) respectively. REMS (Area Under The Curve (AUC): 0,918) was superior to MEWS (AUC:0,877) in terms of predicting hospital mortality of patient presenting to ED (Image 1). Additionally REMS (AUC:0,792) was found to have better predictive value than MEWS (AUC:0,634) in ICU admission (Image 2).

Conclusion: The efficiency of REMS was found to be superior to MEWS as a predictor of intensive care unit admission and in hospital mortality. Although MEWS can use easier than REMS. Both scores are help to physicians for identify the subset of patients at increased risk for inhospital mortality.

Keywords: Mortality, Admission, MEWS, REMS

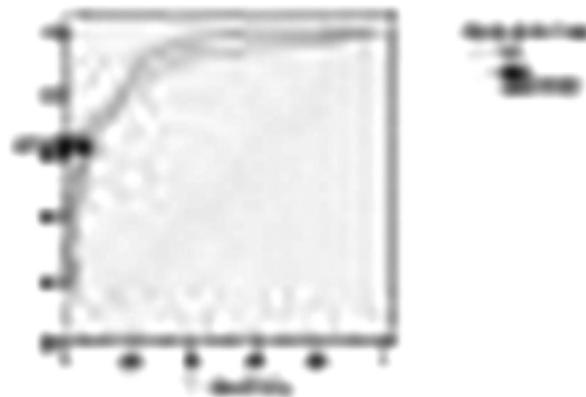


Figure 1. ROC Curves of REMS and MEWS in Mortality

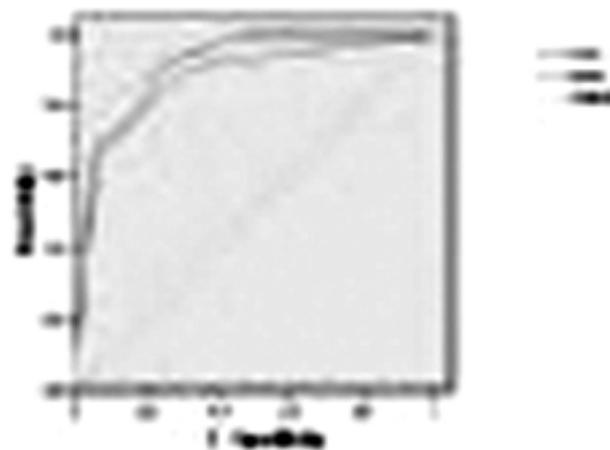


Figure 2. ROC Curves of REMS and MEWS in ICU Admission

Table 1. Rapid Emergency Medicine Score

	0	1	2	3	4	5	6
Age	<45		45-54	55-64		65-74	>74
Heart Rate (BPM)	70-109		55-69	40-54	<40		
			110-139	140-179	>179		
Respiratory Rate (BPM)	12-24	10-11	6-9	35-49	<6		
		25-34			>49		
Mean Arterial Pressure (mm Hg)	70-109		50-69	130-159	<49		
			110-129		>159		
Glascow Coma Scale	>13	11-13	8-10	5-7	<5		
sPO2	>89	86-89		75-85	<75		

Table 2. Modified Early Warning Score

	3	2	1	0	1	2	3
Systolic Blood Pressure (mmHg)	<70	71-80	81-100	101-199		>= 200	
Heart Rate (BPM)		<40	41-50	51-100	101-110	111-129	>=130
Respiratory Rate (BPM)		<9		9-14	15-20	21-29	>=30
Temperature (C)		<35		35-38.4		>=38.5	
AVPU				Alert	Reacting to Voice	Reacting to Pain	Unresponsive

Table 3. General Characteristics Of The Patients

Characteristics	Descriptive Statistics
Gender ‡	
Male	311 (49,2)
Female	321 (50,8)
Way of Arrival ‡	
Ambulance	36 (5,69)
Other	596 (94,3)
Systolic Blood Pressure mmHg*	140 (0-249)
Diastolic Blood Pressure mmHg*	80 (0-158)
Pulse Rate*	24 (0-195)
Temperature †	35,99 ±3,28
sPO2*	95 (0-100)
GCS*	15 (3-15)
MEWS*	0 (0-10)
REMS*	3 (0-25)
Hospitalised ‡	87 (13,76)
ICU ‡	16 (2,53)
In Hospital Mortality ‡	33 (5,22)

‡ Presented as n (%) * Presented as median (min-max)
 † Presented as mean ± SD, GCS, Glasgow Coma Scale
 MEWS, Modified Early Warning Score
 REMS, Rapid Emergency Medicine Score

Abstract:00860P

COST ANALYSIS OF A BAŞKENT UNIVERSITY HOSPITAL'S ADULT EMERGENCY SERVICE FOR THE YEAR 2013

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Introduction: Emergency departments and their services are vital components of human life. Emergency services are generally perceived as a part of health and human rights around the world. Despite this fact, many discussions about health services and private emergency services come to the fore mostly, as a consequence of competition politics. These discussions focus on the subject of stated services' profitability. The aim of this study is to make a fiscal analysis of the Emergency Services Department of Başkent University Ankara Hospital for the year 2013.

Methods: In accordance with the aim of the study, a general analysis for the year 2013 and a private analysis for all months of the year 2013 are made. Revenues, expenditures, number of employees, number of patients and demographical characteristics of patients are taken as the main indicators of this analysis. Besides, a comparison of other studies which have similar characteristics with the subject of this study is realized.

Results: When profit-loss balance of the year 2013 is investigated, it's seen that the total revenues are 1002701 Turkish Liras, as to the total expenditures are 2474888 Turkish Liras. According to this, emergency services' total expenditure exceeds its total revenues 146% approximately.

Discussion: The basic result obtained from our emergency services' balance sheets is that our emergency service is making a loss. But by emergency health services' nature, this loss should be subsidized by hospital and state

Keywords: Emergency, cost, finance

Emergency Imaging

Abstract:0285

INTER-OBSERVER AGREEMENT ON DIFFUSION WEIGHTED MAGNETIC RESONANCE IMAGING INTERPRETATION FOR DIAGNOSIS OF ACUTE ISCHEMIC STROKE AMONG EMERGENCY PHYSICIANS

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Objectives: Diffusion-weighted magnetic resonance imaging (DW-MRI) is a highly sensitive tool for the detection of early ischemic stroke and is excellent at detecting small and early infarcts. Nevertheless, conflict may arise and judgments may differ among different interpreters. Inter-observer variability shows the systematic difference among different observers and expressed as the kappa (κ) coefficient. In this study we aimed to determinate the inter-observer variability among emergency physicians in the use of DW-MRI for the diagnoses of acute ischemic strokes.

Methods: Cranial DW-MRI images of 50 patients are interpreted in this retrospective observational cross-sectional study. Patients who were submitted to DW-MRI imaging for suspected

acute ischemic stroke were included to the study, unless the scans were ordered by any of the reviewers or they were absent in the system. The scans were blindly and randomly interpreted by four emergency physicians. Inter-observer agreement between reviewers was evaluated using Fleiss' κ statistics.

Results: The mean kappa value for high signal on diffusion-weighted images (DWI) and for reduction on apparent diffusion coefficient (ADC) were substantial ($k=0.67$) and moderate ($k=0.60$) respectively. The correlation for detection of the presence of ischemia and location was substantial ($k: 0.67$). There were 18 false-positive and 4 false-negative evaluations of DWI, 15 false positive and 8 false-negative evaluations of ADC.

Conclusions: DW-MRI seemed to be reliable in screening for ischemic stroke when interpreted by emergency physicians in the emergency department. The levels of stroke identification and variability show that emergency physicians may have an acceptable level of agreement.

Keywords: Inter-observer Agreement, Diffusion Weighted Magnetic Resonance Imaging Ischemic Stroke, Emergency Department

Table 1. The interpretation of kappa value ranges

<i>kappa</i>	<i>Interpretation (Level of agreement)</i>
< 0	Poor
0.01 – 0.20	Slight
0.21 – 0.40	Fair
0.41 – 0.60	Moderate
0.61 – 0.80	Substantial
0.81 – 1.00	Almost perfect

Emergency Medicine Education/Academics

Abstract:0623

EVALUATING THE IMPACT OF EMERGENCY MEDICINE CLERKSHIP ON ADVANCED CARDIAC LIFE SUPPORT ON MEDICAL INTERNS

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Introduction: Since 2006, a 8 weeks rotation has been allocated to emergency medicine education for all medical interns during their last year of medical internship at Ankara University School of Medicine. As a life-saving intervention, cardiopulmonary resuscitation(CPR) has always been of major importance in medical training. The aim of the study was to determine the effect of emergency medicine course on advanced cardiac life support (ACLS) knowledge level of students of last year of medical school.

Materials and Methods: This study was a prospective pre- and post-educational research which was carried out in Ankara University, School of Medicine, Ankara, Turkey. It was conducted to examine the effect of emergency medicine course on interns. During their clerkship, students were asked to complete a questionnaire at the end of the first month, then to re-answer the same questions after a theoretic instruction at the end of the rotation. The theoretical lecture was given by an emergency physician

certified ACLS instructor. The emergency medicine residents and specialists who were also the authors of the present study prepared the knowledge questions. Based on emergency textbook and 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care, multiple choice questions were prepared concerning different topics such as fatal dysrhythmias, oxygenation, ventilation, pharmacology of drugs in CPR. A total of 20 questions were prepared, each correct answer was attributed five points and the total added up to 100.

Data analysis: SPSS software was used for statistical evaluation of the data. Mann-Whitney test was used for statistical analysis. P value of less than 0.05 was considered significant.

Results: There was a total of 40 students who undergo the first test, at the end of the clerkship, 3 students did not present to the exam. The median score for students was 65 at the end of the first month. After the theoretic lecture, the median score increased to 85. The difference between participant's first month score and second month score was accounted and it was statistically significant ($p<0.001$).

Discussion: The study was planned to determine how emergency medicine rotation practical and theoretical training affect undergraduate students. The findings of our study revealed that practical knowledge learned on field is not sufficient, low score of pre-instruction tests may result from inadequate training. The management of acutely ill patient requires more practical experiences, which is one of the most important goals of medical education. Implementation of educational interventions helped interns have more correct answers. The rate of the correct answers increased with theoretical instruction, this shows that educational methods improve the level of knowledge.

Conclusion: Investigations have proposed that the combination of theoretical and practical education is an appropriate measure for increasing knowledge level. It looks like that emergency medicine rotation seems to provide an opportunity to reinforce learning of medical emergencies.

Keywords: Emergency medicine education, Questionnaire, Cardiac life support

Abstract:0751

PHYSICIAN ASSISTANTS' EDUCATION IN EMERGENCY SERVICE

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Introduction: Medical education is a long-term process and its curriculum consists of different and heavy sections. Due to different perception levels of physician assistant, upgrade need of medical education has been brought up. By the time problem-based, patient-centered, community-oriented training programs has emerged besides traditional education. In this paper, we want to explain new medical education approach to physician assistants' education.

Discussion: Technological advances have led to improvements in medical education. Thus, emergency medical education got through a new period. The physician assistants are adjusted to the emergency health care system easier and faster. Since educational environment and physician assistants' perception have an inevitable effect on physician assistant learning behavior and their final academic success, it is necessary to improve the educational

environments of medical schools. Ultimately, in order to facilitate physician assistants' learning and to help them accomplish their educational goals, the results of educational environment evaluations must be put into practice.

Conclusion: Today developments in technology leads learning even teaching. Using technology also increases motivation of the physician assistants' in emergency service. Thereby learning becomes more permanent. Moreover, using model, plastic model and computer assisted simulator technologies instead of traditional methods is preferred as a part of respect to privacy in emergency medical care education.

Keywords: Education, Physician, Assistant, Emergency Service

Abstract:0897

FIVE DAY SIMULATED BOOT CAMP HELPS PREPARE MEDICAL STUDENTS FOR TRANSITION TO INTERNSHIP EMERGENCY MEDICINE ROTATION

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Medical simulation based training offers a risk free clinical environment and also promote learner investment in active participation and allow for structured feedback for individual performance improvement. Patient safety, malpractice and increased mortality rates caused by human errors increases the importance of medical simulation sessions for both undergraduate and postgraduate training programs.

Boot camp courses in medical simulation centers are widely organized by the universities. In Turkey our university is pioneering this kind of educational program. Center of Advanced Simulation and Education (Case) is a multidisciplinary medical simulation center under the supervision of university. Case offers three types of simulation based experiential learning via standardized patients, virtual reality task trainers and high fidelity manikins in real hospital environment.

For internship program of ED, we organized boot camp course lasting 5 day. Before this boot camp course 21 intern trained in the center for basic skills management on task trainers including airway management, alternative supraglottic airway devices, foley and nasogastric tube placement, cardiac compression and defibrillation. Also Basic Life Support/ Advanced Life Support courses are organized. 6 interns attended to the ED boot camp course e-learning material of program was send them before they come to the center.

During boot camp period we created major emergency conditions that they will encounter in real clinical environment. Debriefings are performed after each simulation session. At the end of the session debriefings are performed by watching the recorded videos of the participants.

The aim of this boot camp course: To provide the student with the opportunity to gain experience in assessing a wide range of clinical problems seen in a teaching hospital ED;

Program content:

1. Day; Altered Mental Status Management
2. Day; Multiple Trauma Management
Focused Assessment with Sonography for Trauma
3. Day; Chest Pain Management, Dyspnea Management

4. Day; Abdominal Pain Management

5. Day; Busy Day in Emergency Department

First 3 days we used high fidelity simulators during simulation sessions. Instructors role played as patient relatives to increase the stress factor of the situation. And all the interventions can be performed on simulators (Nasogastric, Foley catheterization, intravenous access, drug administration, defibrillation, etc.)

Last 2 days standardized patients created by real actors and instructors and high fidelity simulators were used together for to improve communication skills and crisis resource management training.

For crisis resource management training, breaking bad news to agitated patient relatives were added to the scenarios at busy ED. At the end of the each simulation session by watching the recorded videos and performed debriefings. According to their technical and non-technical skills participants were evaluated.

Our feedbacks of interns about the boot camp course were highly pleasant. Internship Boot Camp is a unique learning environment that is recalled by participants as the most helpful, of all components of their medical school education, in preparation for internship.

As conclusion to improve patient safety and to increase knowledge acquisition and skills improvement of the healthcare providers, integration medical simulation based training into the curriculum of ED training programs has vital importance.

Keywords: Simulation, emergency medicine, internship

Abstract:00690P

EDUCATIONAL PROGRAM IN CARDIOPULMONARY RESUSCITATION(PERC), 18 YEARS OF HISTORY IN TEACHING CPR IN CEARÁ, BRAZIL

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Introduction: Cardio vascular diseases(CVD) are the leading cause of death worldwide. Although it is known that survival rates for cardiac arrest victims is low (not exceeding 10% according to most studies), it is also true that CPR increase the victim's likelihood of survival, regardless of whether it is done by lay or professional. Thus, basic level CPR should be public domain. According to the Brazilian Ministry of Health, CVD accounted for approximately 29% of total deaths in 2009. Unfortunately, population lack adequate training to act effectively in these situations. A study in Campinas showed that the main reasons for the lay not to perform heart massage is due to not knowing what to do or because they are afraid of infectious diseases. As for healthcare professionals, although most of them were trained at least once during their formation, studies have shown that with passing time, practice declines and thus prevents adequate resuscitation. Under Brazilian law, the duty for first-aid training and update is vague. Given this context, in 1996 PERC was created with the main objective of disseminating CPR and first aid knowledge among general population nonprofit.

Objectives: This study aims to describe PERC's methodology of CPR teaching and some of the benefits brought to Brazil by it's creation.

Materials and Methods: PERC was created in 1996 as a university extension project linked to the Department of Clinical Medicine, Faculty of Medicine of the Federal University of Ceará – UFC. Since its inception, PERC was supported by the faculty, as well as doctors who recognized the deficiency on this subject.

At first, the program structured itself: seeking to enable its members, 15 medicine students selected by test and interview, in accordance with CPR international guidelines, supported by local doctors; purchasing material for promoting courses; and establishing internal regulation, in which the update on emergency protocols is a central topic. After that, PERC started conducting their teaching activities in accordance with the target audience. Mostly, they are organized as a one-hour lecture and three-hour practice stations with smaller groups. In order to keep improving teaching quality, standardized pre-tests and post-tests were implemented, so the learning acquired through training can be evaluated.

Results: For 18 years PERC, through its members, conducted various classes, courses, symposia and congresses which trained directly approximately 8000 people, including academics, health professionals and lay people. In 2013 only, over 200 lay people were trained. PERC also attended various conferences showing its work in Brazil, spreading its ideas and inspiring the creation of similar groups across the country.

Conclusions: During these 18 years, PERC directly trained a significant number of people, though it is difficult to measure the total benefit brought by both unrestrained diffusion of knowledge and the emergence of new groups that mirror it.

Keywords: resuscitation, education, CPR, methodology

Cardiorespiratory Emergencies Manual



PERC's manual release event. in detail: Project mentors signing books

Events with lay people



A: director of FIFA Local Organizing Committee making his speech before BLS lecture. **B:** Weiber Xavier, one of PERC's mentors, talking about first aid to private pilot of Catuleve aeroclub **C:** PERC former member demonstrating CPR to construction workers(in partnership with SAMU) **D:** PERC member lecturing high school kids about BLS

I CPR internacional symposium



Doctor David Brown during lecture in PERC's latest symposium

Table 1. Recent work with lay people	
BLS and first aid training for construction workers	2014
BLS and first aid training for private pilots	2014
BLS training for workers of FIFA world Cup (televised)	2013
BLS public demonstration in touristic attraction of Fortaleza (televised)	2013
BLS training for high school students of local schools	2013
List of latest most remarkable works of PERC with lay people and its realization year	

Table 2. PERC's recent work with University Academics	
BLS training for medicine first semester students	2014
ACLS training for medicine eighth semester students	2014
First Aid mini course for Pharmacy students	2014
Release of a book about cardiorespiratory emergency for graduation	2014
First Aid mini course for medicine students of university's countryside unit	2013
PERC's latest remarkable work within the University	

Table 3. PERC	
BLS training for nurses in 4Saberés postgraduate course	2014
BLS and ACLS training for emergency workers in Hospital Monte Klinikum	2014
BLS training for nurses of Hospital Fernandes Távora	2014
BLS and ACLS training for new residents of the University Hospital	2013
International Symposium in CPR	2011
PERC's latest remarkable work with health professionals	

Abstract:01200P

ASSESSING PROFESSIONALISM, COMMUNICATION, AND COLLABORATION AMONG EMERGENCY PHYSICIANS BY IMPLEMENTING A 360-DEGREE EVALUATION

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Objective: To design, implement, and evaluate a 360-Degree process to assess emergency physicians trainee in the Kingdom of Bahrain.

Method: The study was undertaken in Bahrain Defense Force Hospital which is a military teaching hospital in the Kingdom of Bahrain. Thirty emergency physicians (who represent the total population of the emergency physicians in our hospital) were assessed in this study. Each emergency physicians was evaluated with 3 groups of raters, 4 Medical colleague emergency physicians, 4 medical colleague who are considered referral physicians from different departments, and 4 Coworkers from the emergency department.

Results: A total of 30 emergency physicians 16 males and 14 females who represent the total number of the emergency physicians in our hospital were assessed. The total mean response rates were 71.2%. Factor analysis showed that the data on the questionnaire decomposed into three factors which counted for 72.6% of the total variance: professionalism, collaboration and communication. Reliability analysis indicated that the instrument full scale had high internal consistency (Cronbach's α 0.98). The generalizability coefficients (Ep2) were 0.71 for the surveys.

Conclusions: Based on the present results, the current instruments and procedures have high reliability, validity, and feasibility in assessing emergency physicians trainee in the emergency room.

Keywords: MSF system, emergency, validity, generalizability

Abstract:00720P

THE PRELIMINARY REPORT OF ADVANCED LIFE SUPPORT PROVIDER AND INSTRUCTOR TRAINING PROGRAMMES IN TURKEY

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Introduction: Our aim is to report the preliminary results of Advanced Life Support (ALS) Education and Training Programmes, for both providers and instructors, in Turkey.

Materials-Method: In Turkey, a certified education and training programme on ALS, for healthcare professionals (primarily pre-hospital emergency medical system (EMS) practitioners) has been designed by the Turkish Ministry of Health. In order to conduct the programme throughout Turkey, three Provincial Health Directorates have been chosen; Ankara, Istanbul and Izmir. We are reporting the results of the programmes conducted by Ankara. These education and training programmes provide both certification on ALS and also updating the knowledge periodically. The education materials are based on and updated according to the European Resuscitation Council (ERC) and American Heart Association (AHA) resuscitation guidelines (1,2). Seventeen education centers were identified to be trained by these three directorates to organize these programmes and activated in 2005.

Results: In 2005-2012, 494 physician (including general practitioners and specialists on anesthesiology, cardiology and emergency medicine) and 761 non-physician healthcare personnel completed the programme successfully. In 2009-2012, these programmes were also conducted in 8 different cities, which were identified as education centers; 255 of the candidates completed the programme successfully. 214 candidates were trained to become instructors and began to organize these programmes in regions under their responsibility; leading to a number of 652 healthcare personnel certified on ALS. In five years, 1907 healthcare professional became certified ALS providers, and 214 of them became certified ALS instructors.

Conclusion: The primary target of education and training programmes in Turkey are the pre-hospital EMS practitioners. However, this programme addresses all healthcare professionals. Our aim is to expand these programmes in order to provide efficient teamwork by standardised knowledge and skills on ALS, by increasing the number of certified ALS providers and instructors.

Keywords: Advanced life support, emergency education, training programmes

Emergency Nursing

Abstract:0585

THE EFFECTIVENESS OF THE ASSESSMENT OF THE DEHYDRATION STATUS IN CHILDREN WITH ACUTE DIARRHEA BY THE EXPERIENCED PEDIATRIC EMERGENCY NURSES: A PROSPECTIVE STUDY IN A SINGLE PEDIATRIC EMERGENCY DEPARTMENT

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Objective: To compare the effectiveness of the World Health Organization (WHO) dehydration scale performed by experienced pediatric nurse and pediatric emergency physician in children with acute diarrhea relative to the criterion standard of percent weight change with rehydration.

Methods: We prospectively enrolled a non-consecutive cohort of children ≤ 18 years of age with an acute episode of diarrhea. Patient weight, clinical scale variables and, the assessments of dehydration status by nurses and physician were recorded in the emergency department and upon hospital discharge. The two nurses took a joint decision. If they didn't approached a

consensus, the third nurse was referred. When the physician (clinical director) and the nurses evaluate the patients, they were unaware to each other. The percent weight change from presentation to discharge was used to calculate the degree of dehydration, with a weight change of $\geq 5\%$ considered significant dehydration. Receiver operating characteristics (ROC) curves were constructed for each of the parameters. Sensitivity and specificity were calculated based on the best cut-points of the ROC curve.

Results: We enrolled 50 patients and 25 patients had complete data for analysis. Of these, 24% had significant dehydration based on our criterion standard. The area under the ROC curve (AUC) of WHO scales performed by nurses and physician were 0.627 and 0.701 respectively ($p > 0.05$). We determined the sensitivity as 83.3% and the specificity as 57.9% in the diagnostic performance of nurses.

Conclusion: The diagnostic performances of WHO dehydration scale performed by the experienced pediatric nurse and the pediatric emergency physician were similar in children with acute diarrhea.

Keywords: WHO Dehydration scale, the pediatric emergency nurse, acute diarrhea

Abstract:0914

THE RELATIONSHIP BETWEEN PATIENT DEPENDENCE LEVELS AND FALL RISK CLASSIFICATION OF EMERGENCY DEPARTMENT PATIENTS

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Introduction: Patients of Emergency unit requires continuous care and follow-up by nurses due to suddenly changes of their characteristics and circumstances in short time. Emergency nurses assures both control of changed clinical status and the following of dependency levels and assessment of fall risks. This study was planned to bring a new approach to patient safety according to result of relationship between fall risk classifications and patient dependency levels and focused to raise the awareness to threatening situations in emergency department.

Material-Method: This research was retrospective study and carried out with the examination of carts of patients in emergency department of Ege University, between the dates of January-April, 2014. 1982 patients' carts were examined according to statistical systematic sampling method. The data were collected by using Patient Identification Form, Itaki Fall Risk Classification and Rush Medicus Patient Classification Scale. The data obtained were assessed by SPSS Programme.

Results and Discussion: The study included 1982 patients' carts. There were 50,5 % female, 49,5% male of patients. The most of the applications were 18 - 44 years of age. The hypertension was the first disease in terms of comorbidity. The study was determined that 69% independent patients according to Rush Medicus Patient Classification Scale and 38.4% patients were high risk group according to Itaki scale. The relation between fall risk classifications and patient dependency levels were analyzed and correlation coefficient was found positively correlated and moderate-high correlation, $R = 0.62$, $p = 0.000$. The coefficient of determination was $R^2 = 0.388$, its mean to 38,8% the variation level of dependency in patients depend on risk of falling. Level

of dependency and risk of falling were found the highest with chronic heart failure and it was statistically significant ($p = 0.00$).

As a result of the study, it was determined, the relation between dependency levels of patients and risk of falling scales was significant and positive correlated. The result mean is, even though a low level of dependence score, emergency nurses should consider the risk of falling score. In our opinion, the evaluation both of them simultaneously would provide patient safety and quality of emergency nursing care.

Keywords: Patient Dependence Levels, Fall Risk Classification, emergency nursing

Emergency Ultrasound

Abstract:0328

COMPARISON OF THE EFFECTIVENESS OF POINT-OF-CARE ULTRASONOGRAPHY WITH DIRECT RADIOGRAPHY IN DETERMINING THE DIAGNOSIS AND PROPERTIES OF METACARPAL FRACTURES

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Background: Metacarpal fractures (MF) form about 40% of all hand fractures. The x-ray radiography is often used for determining the diagnosis and type of fracture. Lately, point-of-care ultrasound (POCUS) usage is becoming increasingly common in the diagnosis of bone fractures due to not containing ionizing radiation, being portable and allowing better evaluation of soft tissues. In this study, it was aimed to compare the efficacy of POCUS with direct radiography in determining the diagnosis and properties of metacarpal fractures (type, location and angulation of fracture, joint range extension, whether multiple or not, associated soft tissue injury).

Material-Methods: Patients between 5 and 55 years old admitted to the emergency department with low-energy upper extremity trauma, and who were considered metacarp fracture after physical examination were included to the study. Firstly emergency physicians who participated in the study were divided into two groups named as POCUS and direct radiography groups. POCUS group was given 30 minutes didactic and 30 minutes practical POCUS training to evaluate MF. Radiography group was given one-hour standard radiography training to assess metacarpal fractures. Physical examination of the patients were assessed by both two physicians belonging to each groups and findings such as point of tenderness, swelling, ecchymosis, crepitation, deformity, joint range of motion, and neurovascular injury were determined. Then the metacarpals of patient was evaluated by a physician from the POCUS group with using a 7.5 MHz linear probe of standard ultrasound device (Esaote / Firenze / ITALIA) on the surface of the anterior and posterior longitudinal and transverse planes. Posteroanterior and lateral radiographs of the same patient was evaluated by an emergency physician belonging to direct radiography group who was blinded to the POCUS result, and the presence and characteristics (location and type of fracture, angulation, step off, the presence of adjacent bone

fractures, extension to epiphyseal line or joint space) of the MF was determined. The results obtained were compared statistically.

Results: Total 66 patients considered metacarpal fractures were included to the study. Fracture was determined in 36 (55%) patients with direct radiography and in 37 (56%) patients with POCUS. Most of them were linear fracture. When compared with radiography, sensitivity of fracture detection with POCUS was 92%, specificity: 87%, positive predictive value: 89%, negative predictive value: 90% (95% CI, 80-98%). Sensitivity of detecting localization of the fracture with POCUS was 92%, specificity: 87%, positive predictive value: 89%, negative predictive value: 89% (95% CI, 80-98%). Of the patients with fracture, 69% have angulation and 24% have step off determined with POCUS, while 67% have angulation and 23% have step off determined with radiography. Intramuscular hematoma was detected with POCUS in 10 (16%) patients.

Conclusion: In our study, it was found that POCUS can be used successfully for determining the diagnosis and properties of metacarpal fractures. Because of learning and implementation ease, high sensitivity and specificity values for detecting MF, allowing to evaluate bone tissue with soft tissue and joint space, being non-invasive method, POCUS should be considered as an alternative method for MF instead of direct radiography in emergency departments.

Keywords: metacarpal, fracture, ultrasound

Table 1. Presence of metacarpal fracture and fracture type according to POCUS and direct radiography

	No fracture n (%)	Fissure style fracture n (%)	Linear fracture n (%)	Comminuted fracture n (%)	Total n
POCUS	29 (44%)	9 (14%)	21 (32%)	7 (10%)	66
Direct radiography	30 (46%)	8 (12%)	20 (30%)	8 (12%)	66

Table 2. Comparison of the properties of metacarpal fractures determined with POCUS and direct radiography

	POCUS n (%)	Direct radiography n (%)
Metacarpal fracture	37 (56%)	36 (55%)
Angulation	20 (69%)	20 (67%)
Step off	7(24%)	7 (23%)
Extension to epiphyseal line or joint space	0	0

Abstract:0450

DETERMINING THE DIAGNOSTIC ROLE OF BEDSIDE THORAX ULTRASONOGRAPHY IN PATIENTS WITH PULMONARY EMBOLISM SUSPICION IN EMERGENCY SERVICE

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Objectives: Pulmonary embolism is a highly mortal and frequently missed medical emergency. There are several diagnostic methods for pulmonary embolism such as Ventilation and

perfusion scintigraphy, Pulmonary angiography, and Computed tomography. But some conditions like pregnancy, renal failure and hemodynamic instability limits the use of these methods. So diagnosing pulmonary embolism remains a major problem. Previous studies suggest that bedside thoracic ultrasonography provides a safe and rapid diagnostic adjunct for evaluation of patients with pulmonary embolism suspicion. The aim of this study was to determine the diagnostic role of bedside thorax ultrasonography in patients with pulmonary embolism suspicion in emergency service.

Materials and Methods: This prospective observational study was performed at the emergency department of Kocaeli University Faculty of Medicine Research and Training Hospital. From April 2013 to July 2014, 100 adult patients with suspected pulmonary embolism were evaluated with bedside thorax ultrasonography for searching images of some artifacts. These artifacts are A lines, B lines, pleural effusion, sinusoidal pattern, consolidation, wedge sign and shred sign. We excluded patients on whom the computed tomography is contraindicated because of the reasons such as pregnancy, contrast allergy and renal failure.

Before the study was conducted, all of the resident doctors were trained about thorax ultrasonography. We applied computed tomography of thorax to all of the patients and compared the results with bedside thorax ultrasonography findings.

Results: Pulmonary embolism was detected in 38(38%) of 100 patients. Mean age of the patients was 65.2 (%95CI: 62.1-68.4) and 44 of them were female. There was no statistically significant difference between the patient groups with and without pulmonary embolism in terms of complaints, vital signs and physical examination findings. D-Dimer and wells score were different between the groups as expected. D-Dimer median was 1.58 (IQR:1.06-3.1) for the group without pulmonary embolism and 7.75 (IQR: 4.68-12.4) for the group with pulmonary embolism. The average Wells Score was 3.87 (%95CI: 3.36-4.38) for the group without pulmonary embolism and 5.42 (%95CI: 4.51-6.33) for the group with pulmonary embolism. There was statistically significant difference bedside thorax ultrasonography findings between the groups in terms of B lines, shred sign, wedge sign and sinusoidal pattern (P:0.005, P=0.032, P<0.001 ve P=0.036). There was no statistically significant difference in terms of A lines, effusion and consolidation (P:0.184, P=0.234,ve P=0.132).

B lines, Shred sign, and sinusoidal pattern have weak negative correlation with thorax tomography (r=-0.297, -0.215 ve - 0.209) and wedge sign has a moderate positive correlation (r=0.523).

Sensitivity, specificity, positive and negative predictive values of the signs on thorax ultrasonography were low alone.

With logistic regression analysis B line and wedge sign are found to be effective on diagnosis of pulmonary embolism (P=0.033, OR: 1.96 %95CI:0.41-8.40).

Conclusion: Thorax ultrasonography has a limited value on diagnosing pulmonary embolism even though its usage increases gradually on assessment of critically ill patients.

Keywords: thorax, ultrasonography, pulmonary, embolism

Abstract:0489

DIAGNOSTIC SENSITIVITY AND SPESIFICITY OF EMERGENCY PHYSICIAN PERFORMED ULTRASONOGRAPHIC EXAMINATION FOR DISTAL FOREARM FRACTURES

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Introduction/ Objective: Musculoskeletal sonography is getting more popular to diagnosis of several fractures due to high diagnostic sensitivity and other advantages of the sonographic examination. However in adult population, diagnostic sensitivity and spesificity of sonographic examination of distal forearm fractures have not been studied extensively. We aim to determine the diagnostic sensitivity and spesificity of emergency physician performed ultrasonographic examination for distal forearm fractures.

Materials-Methods: In this prospective cross-sectional study, 17 years and older patients presenting with distal forearm trauma suggesting fracture to the emergency department enrolled into study. First, emergency physicians had been performed sonographic examination with liner probe, after that standart anteroposterior and lateral direct graphy ordered. In patients with sonographic evidence of fracture who had normal x-rays but had a high clinical suspicion for fracture, CT was performed. X-Ray and CT images are interpreted by an orthopedist by blinded fashion. The decision of orthopedist is accepted as gold standart. For statistical analysis SPSS 15.0, Windows and Vassarstats used.

Results: A Ninety three ultrasonographic examination performed in 90 patients. In 59 of these patients radius fracture, in 19 ulna fracture diagnosed with gold standart. While US diagnosed all of the radius fractures, it also resulted false positive in 4 Cases. US missed 2 ulna fractures, and in 4 Cases US had false positive results. Diagnostic sensitivity of sonographic examination for distal radius and ulna fractures were found as %100 and %89.5 respectively. Diagnostic sensitivity of x-ray for the distal radius and ulna fractures were found to be as %93.2 and %94.7 respectively.

Conclusion: Diagnostic sensitivity of sonographic examination for distal radius fractures is higher than X-Ray. To diagnose distal forearm fractures, emergency physicians should be use bedside US examination.

Keywords: Emergency Room, Emergency Department Physicians, bedside ultrasonography, distal forearm fractures.



Figure 1. Radius fractures with radiography of skipped ultrasonography, radiography and CT image

Abstract:0729

INTERNAL JUGULAR VEIN /COMMON CAROTID ARTERY RATIO FOR DETECTING CENTRAL VENOUS PRESSURE

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Purpose: The aim of this study was to identify a non invasive, quick, ultrasound guided method for estimating central venous pressure by comparing measurements of internal jugular vein and carotid artery

Materials-Methods: Patients with central venous catheter, hospitalized in Kırıkkale University Faculty of Medicine Intensive Care Unit and Emergency department during 6 months period enrolled the study. A portable ultrasound machine was used to obtain cross-sectional areas internal jugular vein and carotid artery of patients placed in the supine and 45° lying positions to identify the effect of measurement conditions on CVP. CVP measured in traditional methods by ICU physicians, at the same time ultrasound measurements obtained by blinded emergency medicine physician. The patients were categorized into 3 groups according to CVP, group 1: CVP ≤8 (n=19), group 2: CVP 8-20 (n=14), group 3: CVP ≥20 (n=7). Vasculer area measurements applied for supin and 45° lying positions were recorded ratio 1 and ratio 2 respectively and the significant differences between the two values were evaluated. One way ANOVA followed by Tukey and Benferroni multiple comparison tests was used to determine the significance of the differences between groups. ANOVA and Student's t test were used to investigate the significance of differences observed between group pairs.

Results: In the evaluations of the ratio 1 the mean value was determined as 2,26 for group 1 (min-max 1,53-2,99), 3,18 for group 2 (min-max 2,30-4,05), 2,87 for group 3 (min-max 2,32-3,44) and no statistically significant differences were detected. When ratio 2 evaluated among the groups, the mean value was determined as 1,18 for group 1 (min-max 0,72-1,64), 2,64 for group 2 (min-max 1,73-3,55), 3,00 for group 3 (min-max 0,97-5,03). In the evaluation of ratio 2, it is observed that group 1 has a lower value than group 2 (p=0,20) and group 3 (p=0,021). No significant differences were observed between groups 2 and 3.

Conclusion: The measurements performed with non invasive method by ultrasound at a position of 45 degrees yielded that the ratio of IJV area to carotid artery is significant in terms of exhibiting the CVP values and no gradual increments proportional to the increase in CVP were detected for the values above the normal range.

Keywords: CVP, ultrasound, non invasive methods,

Abstract:0902

IMPORTANCE OF JUGULAR VEIN ULTRASONOGRAPHY TO EVALUATE OF THE VOLUME STATUS WITH CHRONIC HEMODIALYSIS PATIENTS

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Introduction: Inferior vena cava (IVC) and the internal jugular vein (IJV) ultrasonography are used as a tool of the assessment for volume status. Correlated with central venous pressure jugular vein has been shown in several studies. In this study, we aimed to investigate the relationship chronic hemodialysis patients with dialysis-dependent changes in IVC diameter and volume changes in IJV.

Materials and Methods: This study was conducted with fifty-four male and female patients undergoing dialysis over the age of 18. Pre-hemodialysis and after hemodialysis sonographic corrected internal jugular vein and the longitudinal length (CIVJ LL) with IJV collapse index values, IJV expiratory and inspiratory anteroposterior, transverse and field measurements, IVC expiratory measurements with M Mode expiratory, inspiratory values were measured. Data analysis was performed using SPSS for Windows 11.5 software.

Results: The after dialysis measurement compared to the pre-dialysis measurement, no statistically significant changes in CIVJ LL, the median collapse index of the IJV and the IVC expiratory level (respectively; $p = 0.188$, $p = 0.333$, $p = 0.132$).

However, after dialysis and pre-dialysis CIVJ LL, IJV collapse index and statistically significant between IVC expiratory measurements revealed the same directional correlation (respectively; $r = 0.504$, $p < 0.001$; $r = 0.275$, $p = 0.044$; $r = 0.431$, $p = 0.001$).

Conclusion: Jugular vein ultrasonography, which can be applied at the bedside, is easily learned and non-invasive techniques. According to our data in this study CIVJ LL, IVC collapse index and measurement of expiratory of IJV correlated with the hypervolemia. However, a limited number of results we obtained in our study may not be sufficient to show clearly hypervolemia or hypovolemia. Therefore, need to studies to be conducted in a much larger group of patients.

Keywords: jugular vein ultrasonography, volume status, hemodialysis patients

Abstract:01230P

CHECKING THE BLUE PROTOCOL FOR ACUTE RESPIRATORY FAILURE IN THE EMERGENCY DEPARTMENT

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Introduction: D. Lichtenstein developed the BLUE protocol. This was published in 2008 in Chest. Thanks to this protocol and with lung ultrasound we can make a rapid diagnosis in patients with acute respiratory failure who present in an intensive care setting. In this protocol we use artefacts as A lines and B lines and pleural effusion to make a diagnosis. Simple examination of the veins of the legs is included to make the diagnosis of pulmonary embolism possible. We wanted to check this protocol in an emergency department setting for a final diagnosis of: COPD/

asthma, pulmonary edema, pneumonia, pneumothorax and pulmonary embolism.

Methods and materials: We included 32 patients with acute respiratory failure presenting at the emergency department from may 2014 till July 2014. According to the BLUE protocol, every patient had one of five diagnoses. (COPD/asthma, pulmonary edema, pneumonia, pneumothorax and pulmonary embolism) After dismissal, the diagnosis mentioned in the hospital letter was compared with this initial diagnosis.

Results: Table 1-11 patients were categorised as COPD/asthma: only 4 had a correct diagnosis. 3 patients had pulmonary embolism but no DVT was found. 4 patients had dyspnea because of other causes: urosepsis, dehydration, bronchitis, atrial fibrillation. 11 patients were categorised as pulmonary edema: 10 of them had a correct diagnosis. 1 patient had interstitial lung disease. 7 patients were categorised as pneumonia: 5 of them had a correct diagnosis. 2 of them had a malignant pleural effusion. 3 patients were categorised as pneumothorax: based on absence of lung sliding, there was no lungpoint because of total collapse of the lung.

Conclusion: Lungultrasound seems to be a sensitive and specific tool for diagnosing pulmonary edema. Lung ultrasound is not specific enough for diagnosing COPD/asthma or pneumonia. To make a diagnosis of pulmonary embolism possible, lungultrasound depends on the diagnosis of DVT and is therefore not sensitive enough. To make a diagnosis of pneumothorax specific enough, lungultrasound depends on the presence of a lungpoint, which was not present in our three patients because of total collapse of the lung. In the emergency department it is dangerous to rely only on the results of non specific diagnostic tests, because this could lead to a complete wrong initial approach for life threatening events like acute respiratory failure.

Keywords: BLUE protocol, emergency department, lungultrasound

A lines



Figure 1. A lines, if present at both sides of the thorax, without pleural effusion, matching with COPD/asthma

B lines

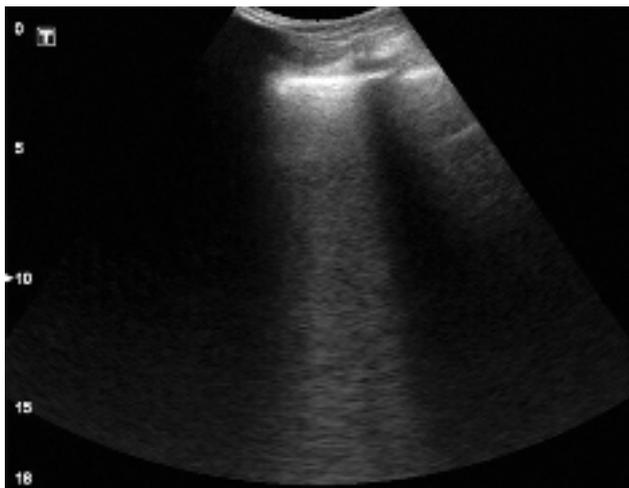


Figure 2. B lines, if present at both sides of the thorax, matching with pulmonary edema

Table 1. Diagnosis in emergency department was made with lungultrasound and compared with the diagnosis after dismissal

	BLUE protocol lungultrasound	Diagnosis at discharge
COPD/astma	11	4
Pulmonary edema	11	10
Pneumonia	7	5
Pneumothorax	3	3
Pulmonary embolism	0	3
Malignant pleural effusion		2
Interstitial lung disease		1
Urosepsis		1
Dehydration		1
Bronchitis		1
Atrial fibrillation		1

ENT and Ophthalmology

Abstract:0789

TITLE: PERI-OPERATIVE COMPLICATIONS OF COCHLEAR IMPLANT SURGERY IN CHILDREN; A RETROSPECTIVE ANALYSIS

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Introduction: Cochlear implant (CI) is a commonly performed surgery for hearing loss in pre-school and school children. Recently, more CI surgeries are being performed in small children including infants. It has been found that children with CI performed before 2 years of age have improved language and speech outcome, intelligence and better quality of life. Moreover, CI surgeries at early childhood are not associated with increased surgical risk and complications. However, data on anesthesia management and anesthesia related complications are sparse. We retrospectively reviewed the data of in our institute from January, 2007 to December, 2012.

Patients and Methods: Medical records and anesthesia charts of all the patients, who had undergone cochlear implant under general anesthesia between this period were reviewed. Idiopathic cause was the most common etiology found. Other common causes were birth asphyxia, history of prematurity, history of meningitis, ototoxicity, Toxoplasma-Rubella-Chicken Pox (TORCH) and other syndromes. Information related to the demographic profile, preoperative evaluation, anesthetic techniques and perioperative complications were collected and analyzed. All the patients received syrup promethazine as premedication on the morning of surgery. All the patients received general anesthesia with endotracheal intubation with administration of non-depolarizing muscle relaxant. Combination of fentanyl and morphine along with intravenous paracetamol was most commonly used analgesic technique.

Results: One hundred and ninety patients had undergone cochlear implant surgery for pre lingual (175) and post lingual (15) deafness. Mean age at implantation was 3.44 years and mean weight was 16.3 kg. General endotracheal anesthesia with inhalational agents was used in all the Cases. Difficult intubation was encountered in 3 patients. Anesthesia related complications were laryngospasm at extubation (4.73%), emergence agitation (2.63%) and postoperative nausea and vomiting (1.05%). Major surgical complications were CSF leak without meningitis (3.15%), device migration/failure (1.05%) and flap infection (1.57%).

Conclusion: Cochlear implant under general anesthesia in small children is safe and anesthesia related complications were similar to general pediatric population. Surgical complications although more frequent were predominantly minor and self-limiting.

Keywords: Children, Cochlear Implant, Perioperative Complications

Abstract:01330P

COMPARISON OF THE THERAPEUTIC EFFICACY OF INTRAVENOUS DIMENHYDRINATE AND INTRAVENOUS PIRACETAM IN PATIENTS WITH VERTIGO: A RANDOMIZED CLINICAL TRIAL

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Background: The present study aimed to compare the therapeutic efficacy of dimenhydrinate and piracetam in patients with vertigo.

Methods: A blinded, parallel group, superiority, randomized clinical trial was carried out on patients who presented to the ED with vertigo. Healthy adult patients presenting to the ED with undifferentiated vertigo were included to the study. The efficacy of intravenous dimenhydrinate (100 mg) and intravenous piracetam (2000 mg) for reducing the intensity of vertigo was compared in two randomized treatment groups using a ten-point numeric rating scale (NRS). The determination of NRS scores was performed at presentation and at the 30th minute of presentation, after the study drug was implemented, both in immobile and ambulatory positions. The primary outcome variable was reduction in vertigo intensity documented on the NRS at the 30th minute after medication administration, analysed by intention to treat.

Results: A total of 94 patients were included in the randomization (n=47 in both groups). The baseline NRS scores were 7.55 ± 2.00 in the dimenhydrinate group and 8.19 ± 1.79 in the piracetam group. The changes from baseline for dimenhydrinate and piracetam were 2.92 ± 3.11 and 3.75 ± 3.40 (difference -0.83 (95% confidence interval (CI) -2.23 to 0.57) in the immobile position and were 2.04 ± 3.07 and 2.72 ± 2.91 (difference -0.68 (95% CI -2.03 to 0.67)) in the ambulatory position. Rescue medication need was similar in both treatment groups ($p=0.330$) and only one adverse reaction was reported.

Conclusions: We found no evidence of a difference between dimenhydrinate and piracetam in relieving the symptoms of vertigo. (Clinical Trials Registration ID:NCT01890538)

Keywords: vertigo, dimenhydrinate, piracetam, emergency department

Environmental Emergencies

Abstract:0439

POSSIBLE OCCULT CARBON MONOXIDE POISONING IN AUTO SERVICE OPERATING STAFF

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Background: Carbon monoxide is formed by incomplete burning especially such as natural gas, coal, liquid petroleum gas and wood, hydrocarbon-based fuels. Carbon monoxide is colorless, odorless, and poisonous gas. It causes acute and chronic many effects. It is intended to determine in a non-invasive manner with serial measurements exposing to chronic illnesses except for acute poisoning among the auto care service workers.

Methods: From 6 service, total of 99 people were included in the study. It was tested COHb data a total of four times with an interval of two hours on purpose starting 08:00 o'clock. Employees age, working hours, smoking, and type of home heating were questioned. A control group for 100 Cases was occupied considering working group, age, working hours, smoking, and type of home heating. In the control group the measurement was done at the morning times. The measurements was done with Masimo Rad-57 CO-oximeter.

Results: In the test among the workers the highest average 7.040 ± 3.32 with COHb value was found to be the third measurement in day. Medium value of control group was founded as 1.61 ± 1.43 . It was significantly each measured value of the statistical relationship between one another of working group. It was found statistical difference between values of working and control groups.

Conclusion: We determined that staying risk under the influence of CO is high in the auto repairers establishments. It is not very clear that effects chronic or prolonged exposing in low amounts CO gas. However, some studies warns against coronary artery disease and neurologic complications. So it is necessary to take special care to working group under the influence of CO. We concluded that it should be made a more detailed study about chronic CO poisoning. Also in workplaces exposing under the influence of CO gas it should be taken necessary workplace safety measures to reduce the effect of the gas.

Keywords: Carbon monoxide, auto service operating staff, type of home heating, occult poisoning, chronic poisoning

International Emergency Medicine

Abstract:0050A

THE MANAGEMENT OF PREGNANCY-RELATED NAUSEA AND VOMITING IN THE EMERGENCY DEPARTMENT: ARE WE COMPLYING WITH LOCAL GUIDELINES?

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Introduction: Nausea and vomiting in pregnancy is very common. The priorities for the emergency physician are to replace electrolytes, prevent dehydration, control symptoms and to differentiate those manageable in the community from those requiring hospital admission. This project's aim was to audit the management of such patients against a local protocol.

Methods: Using stringent inclusion criteria and coding data, 91 Case notes were identified from a pool of 166 patients presenting to the ED with nausea and vomiting in pregnancy. Demographic and attendance data was collected using a pre-designed proforma. Investigation and management of the patients was then audited using the department's local guideline.

Results: The re-attendance rate amongst our population is 27.8%. The median maternal age was 24 years with a gestational median of 9 weeks. 64% of women were of New Zealand European ethnicity. 68% of women had a full set of documented vitals with respiratory rate being most commonly omitted. 96.7% of patients had bloods sent but only 61.4% of Cases adhered to the guideline. 86.8% of patients had a documented urinalysis result with 74.2% having a MSU requested. 97.8% received fluids with 100% compliance rate and a mean waiting time of 71.8 minutes (from arrival to administration). 95.6% received anti-emetics with 60% guideline-compliance rate and a mean waiting time of 75.8 minutes.

Conclusions: Our department complies with the guideline in the majority of Cases. However, there needs to be greater awareness of the guideline and adherence to it in future Cases. Given the high re-attendance rate, it is imperative to counsel the patient on when to re-present with ongoing symptoms. We support the trend towards having a lower admission threshold for those with greater degrees of ketonuria. We need to prescribe and administer treatment quicker to alleviate symptoms and reduce maternal and foetal morbidity.

Keywords: hyperemesis gravidarum, pregnancy, audit

Neurologic Emergencies

Abstract:0358

A RARE CAUSE OF STROKE - CEREBELLAR ISCHEMIA AFTER SUDDEN ROTATIONAL NECK MOTION

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Ankara

Introduction: Cerebral and cerebellar ischemia after sudden rotational head and neck motion is known in the medical literature but this is a very rare condition and this is a rare cause of stroke. It can be related mainly to chiropractic motions, but may also occur after a simple fall, sudden neck motion, hyperextension or spontaneous head turning. Pathogenetic mechanisms to explain the brain ischemia after neck motion consist of hemodynamic interruption of blood flow, arterial spasm, and anatomic damage to the vessels. In the medical literature vertebrobasilar distribution was involved in the great majority of the Cases; only a few patients with a carotid territory stroke and signs of carotid dissection after rotational insult to the neck have been described. Now we will present a rare Case with cerebellar ischemia after sudden movement of the neck.

Case: 32 years old male patient, admitted to emergency department acute dizziness, nausea, vomiting, severe headache, vertigo started after sudden and excessive neck motion. The patient was a healthy male with no preceding history of hypertension, diabetes or any chronic illness. He was a non-smoker and a nonalcoholic. On admission his vital signs were; blood pressures 180/110, pulse rates was 84/min, temperature was 36.9 C, respiratory rate was 16 breaths/min Examination of the patient revealed a normal cardiovascular, chest and abdomen examination. Neurological examination revealed vertical nystagmus, slurred speech, a right-sided Horner's syndrome, decreased sensation to pain and temperature on the right side of the face and left limbs, marked dysmetria of the right limbs. Motor examination was normal. Sensory examination revealed a crossed hemianaesthesia (on the left limbs) with involvement of face. Deep tendon reflexes were not pathological. Investigations of the patient revealed normal haemogram, renal function tests, coagulogram. ECG did not reveal any abnormality. A computed tomography (CT) scan of the brain performed. There was no pathological image in tomography. Then MRI scan of the brain performed to the patient. It revealed an acute infarct area showing diffusion restriction at the level of the right cerebellar hemisphere and right vermis. (FIGURE 1) Neck-brain CT angiography was performed to make the distinction of vertebral artery dissection. No evidence of dissection and aneurysm was seen but there was no filling of V4 segment of the vertebral or basilar artery. The patient were hospitalized in the neurology department. After six days the patient was discharged with no residual neurological deficit.

Conclusion: Summary in young patients, sudden dizziness, vomiting started after neck or head movement is often inseparable from simple vertigo and meniere's episode. The separation of the cerebellar ischemia from simple vertigo is vital. Because cerebellar ischemia associated with significant mortality and morbidity if not treated. Therefore brain CT and MRI scan

should be performed patients with refractory and treatment-resistant vertigo, nausea, vomiting, dizziness.

Keywords: Stroke, Cerebellar Ischemia, Rotational Neck Motion

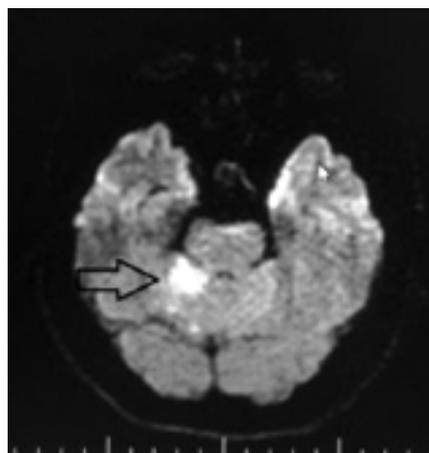


Figure 1. diffusion restriction in MRI - ischemia area shown by arrow in the cerebellum

Abstract:0427

THROMBELASTOGRAPHY: CAN IT PREDICT INTRACEREBRAL BLEEDING AFTER TPA TREATMENT?

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Introduction: Thrombelastography (TEG) is a method used to measure the efficiency of blood coagulation. It provides information on clot formation time, clot formation speed and elasticity. For the purpose of this study, first, the patients that presented to the emergency department for ischemic stroke and underwent thrombolytic treatment were evaluated for coagulation by rotational thrombelastography (ROTEM). The study then proceeds with examining the relationship of the parameters obtained with clinical condition and intracerebral hemorrhage after tPA treatment.

Methodology: This study involves 29 patients with ischemic stroke, who presented to the emergency department between June 11, 2013 and March 1, 2014 and underwent rtPA treatment. Blood samples were taken from the patients before thrombolytic treatment started. By ROTEM® and INTEM and EXTEM analysis, the parameters of CT (clotting time=sec), CFT (clot formation time=sec) and MCF (maximum clot firmness=mm) were tested. The demographic information of patients, NIHSS scores at the time of admission and 24 hours after the admission, brain tomography, mRS values after 3 months and mortality status were recorded. Furthermore, the patients' TEG parameters at the time of admission were compared with the parameters of a normal group.

Findings: In patients with acute ischemic stroke, intemCT ($p < 0.05$), extemCT ($p = 0.01$) and extemCFT were low ($p < 0.05$) and extemMCF was high ($p < 0.05$). Furthermore, intemCT was

low ($p < 0.05$) in patients who underwent rtPA and developed intracerebral hemorrhage symptomatically in 36 hours.

Conclusion: Thrombelastography shows that patients with ischemic stroke are hypercoagulable. In patients with low intemCT, because thrombolytic treatment poses the risk of symptomatic intracranial hemorrhage, interventional treatment should be considered the primary option. There is a need for further studies in this field.

Keywords: Thromboelastography, Stroke, intracerebral hemorrhage, tPA

Table 1. TEG

	Symptomatic Hemorrhage		
	Yes (n=4)	No (n=25)	p
Intem CTa	100.25 ± 55.33 121.50 (112.00 – 121.50)	167.52 ± 43.98 167.00 (139.00 – 187.50) 0.010 *	0.010 *
Intem CFTb	110.75 ± 52.62 92.50 (50.00 – 92.50)	139.52 ± 249.86 69.00 (63.00 – 98.00)	0.604 ns
Intem MCFb	57.50 ± 17.842 49.00 (31.00 – 49.00)	58.00 ± 13.57 63.00 (53.00 – 69.00)	0.784 ns
Extem CTb	94.00 ± 20.76 87.50 (48.00 – 87.50)	103.36 ± 45.97 93.00 (80.50 – 116.50)	0.927 ns
Extem CFTb	88.50 ± 32.39 87.00 (48.00 – 87.00)	130.00 ± 162.29 71.00 (66.00 – 95.00)	0.976 ns
Extem MCFb	63.75 ± 20.54 53.50 (35.00 – 53.50)	58.72 ± 16.11 64.00 (52.50 – 71.50)	0.341 ns

The comparison Intracerebral bleeding after rtPA treatment and Intrinsic and extrinsic CF, CFT and MCF parameters a) Independent Samples T Test b) Mann-Whitney U Test

Abstract:0478

RESEARCHING TOTAL ANTI-OXIDANT CAPACITY, TOTAL OXIDANT CAPACITY LEVELS, OXIDATIVE STRES INDEX AND MODIFIED ISCHEMIC ALBUMIN VALUES OF ACUTE ISCHEMIC STROKE PATIENTS IN EMERGENCY DEPARTMENT

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Objective: Stroke, which is a preventable disease, is a common and important neurological disorder in community. Pathophysiological processes of the brain tissue's damage in stroke have been investigated in many studies. Recently, specifically focused on free radicals caused by tissue oxidation. In this study we aimed to determine the imbalance of oxidant and antioxidant capacity and oxidative stress in acute phase of stroke. Consequently we aimed to find out any markers which are predictable in diagnosis and treatment of stroke.

Materials-Methods: This study included 60 patients who attended to the Antalya Education and Research Hospital Emergency Medicine Clinic between June 2013-December 2013 and diagnosed acute ischemic stroke (AIS). As a control group 40 healthy volunteers received to study who did not use vitamin preparations and with no history of chronic disease. We examined albumin, Ischemic Modified Albumin (IMA) and IMA / albumin

ratio (IMAR) Total Antioxidant Status (TAS), Total Oxidant Status (TOS), oxidative stress index (OSI) in both groups blood samples.

Results: IMA, IMAR, TOS, OSI levels was significantly higher ($p=0,045$, $p < 0.001$, $p < 0.001$, $p < 0.001$) and albumin was significantly lower ($p < 0.001$) in patients with AIS than control group. There was no statistically significant difference in the TAS levels between the two groups. ($p=0.739$) (table 1)

All AIS patients included to study had computerized tomography scan. Infarction was detected at 31 of 60 AIS patients on tomography scan. 29 AIS patient's cranial tomography scan has been reported normal. All AIS patients also had magnetic resonance imaging (MRI) and diffusion limitation was detected at the all AIS patients in diffusion MRI. As we compared in AIS patients who had infarction in tomography scan and who had reported with normal CT, there was no statistically difference in the albumin, IMA, IMAR, TAS, TOS and OSI levels between two groups. (table 2)

Conclusion: This study showed that, the oxidant-antioxidant balance in AIS broken in favor of the oxidants. oxidant parameters of IMA, IMAR, TOS, OSI values might be used in the early diagnosis of brain ischemia.

Oxidant and antioxidant balance is disturbed much earlier than the reflection of ischemia in CT images. IMA, IMAR, TAS, TOS and OSI might be used early diagnosis in the acute phase of the brain ischemia with patients normal CT imaging.

Keywords: Stroke, oxidative stres, OSI, IMA

Table 1. Comparison of oxidant and antioxidant levels between AIS patients and healthy adults

	AIS Mean ± SS	healthy adults Mean ± SS	p
Albumin	3.830±0.452	4.515±0.454	<0.001
IMA	0.451±0.0117	0.447±0.0103	0.045
IMAR	0.119±0.015	0.099±0.010	<0.001
TAS	1.946±0.338	1.967±0.292	0.739
TOS	16.573±12.140	4.016±2.076	<0.001
OSI	8.844±6.585	2.096±1.130	<0.001

Table 2. Comparing of oxidant and antioxidant levels in the AIS patients according to the CT scan

	acute enfarct Mean ± SS	normal CT Mean ± SS	p
Albumin	3,839±0.431	3,821±0.481	0.879
IMA	0.454±0.013	0.449±0.010	0.136
IMAR	0.119±0.013	0.119±0.017	0.990
TAS	1.933±0.383	1.959±0.289	0.767
TOS	15.732±11.691	17.470±12.747	0.585
OSi	8.582±6.645	9.126±6.627	0.752

Abstract:0526

OXIDATIVE STRESS IN ACUTE HAEMORRHAGIC STROKE PATIENTSIsmail Atik¹, Nalan Kozacı²¹Department of Emergency Medicine, Umraniye Training and Research Hospital, Istanbul, Turkey²Department of Emergency Medicine, Antalya Training and Research Hospital, Antalya, Turkey

Objective: Acute hemorrhagic stroke is a common neurological disease leading to death or disability. haemorrhagic stroke is a public health problem and constitute 10-15% of all strokes. Oxidative stress is described as an instability between production of free radicals from cells and antioxidant defence of the body. In the current study, we investigated the status of oxidant stress in the acute phase of haemorrhagic stroke.

Materials-Methods: 26 patients who were applied to Antalya Education and Research Hospital between 1 June 2013 and 31 December 2013 and diagnosed acute haemorrhagic stroke (AHS) were included to study. Previously we chose 40 volunteers who don't have any chronic disorder and who don't use vitamin preparations as control group. We took blood sample from both group and evaluated the levels of albumin, ischemic modified albumin (IMA), ratio of modified ischemic albumin/albumin (IMAR), total antioxidant status (TAS), total oxidant status (TOS) and oxidative stress index (OSI).

Results: IMAR, TOS, OSI levels was significantly higher ($p<0.001$, $p<0.001$, $p<0.001$) and albumin was significantly lower ($p<0.001$) in patients with AHS than control group. There was no statistically significant difference in the IMA and TAS levels between the two groups ($p=0.071$, $p=0.542$). (Table 1)

Conclusion: This study showed that, the oxidant-antioxidant balance in AHS broken in favor of the oxidants.

The increase in the serum levels of TOS, OSI and IMAR may show that oxidative stress increase pathophysiological processes of the brain tissue's damage in haemorrhagic stroke. This supports the fact that oxidative stress may play a significant role in the pathogenesis of the intracerebral hemorrhage. oxidant parameters of TOS, OSI, IMAR values can be used in the early diagnosis of AHS patients.

Keywords: hemorrhagic stroke, oxidative stress, OSI, IMA

Table 1. Comparison of oxidant and antioxidant levels between AHS patients and healthy adults

	AHS patients Mean ± SS	Control group Mean ± SS	P
Albumin	3.927±0.572	4.515±0.454	<0.001
IMA	0.452±0.0102	0.447±0.0103	0.071
IMAR	0.117±0.020	0.099±0.010	<0.001
TAS	1.922±0.288	1.967±0.292	0.542
TOS	16.705±9.404	4.016±2.076	<0.001
OSI	9.101±5.829	2.096±1.130	<0.001

Abstract:0597

RED CELL DISTRIBUTION WIDTH AND NEUROLOGICAL SCORING SYSTEMS IN ACUTE STROKE PATIENTSHasan Kara¹, Selim Değirmenci¹, Seyit Ali Kayış², Murat Akıncı¹, Ayşegül Bayır¹, Ahmet Ak¹, Ali Doğru¹, Fikret Akyürek³¹Department of Emergency Medicine, Selçuk University, Faculty of Medicine, Konya, Turkey²Department of Animal Science, Selçuk University, Faculty of Agriculture, Konya, Turkey³Department of Biochemistry, Selçuk University, Faculty of Medicine, Konya, Turkey

Objective: The red blood cell distribution width (RDW) is a measure of the variation of red blood cell volume. It is a parameter that is easily and inexpensively determined by automated flow cytometry as part of a complete blood count. The normal values of RDW range between 11.5% and 14.5%. High RDW levels are associated with a poor prognosis in certain disorders such as acute myocardial infarction, stroke, and peripheral artery disease. Severity of acute ischemic stroke may be quantified with scoring systems such as the Glasgow Coma Scale (GCS), Canadian Neurological Scale (CNS), and National Institutes of Health Stroke Scale (NIHSS). The purpose of the present study was to evaluate the association between RDW and the GCS, CNS, and NIHSS scores in patients who had acute ischemic stroke.

Methods: This prospective observational cohort study included 88 patients who had acute ischemic stroke and who presented within 24 hours after onset of symptoms, and a control group of 40 patients who were evaluated in the Emergency Department for disorders other than acute ischemic stroke. All subjects had RDW determined, and patients who had stroke had scoring with the GCS, CNS, and NIHSS scores. The GCS, CNS, and NIHSS scores of the patients were rated as mild, moderate, or severe and compared with RDW.

Results: Stroke patients had significantly higher median RDW than control subjects. The median RDW values were significantly greater in patients who had more severe than milder strokes rated with all 3 scoring systems (GCS, CNS, and NIHSS). The median RDW values were significant greater for patients who had moderate than mild stroke rated by GCS and CNS and for patients who had severe than mild stroke rated by NIHSS. The area under the receiver operating characteristic curve was 0.760 (95% confidence interval, 0.676-0.844). Separation of stroke patient and control groups was optimal with RDW 14% (sensitivity, 71.6%; specificity, 67.5%; accuracy, 70.3%).

Conclusions: The RDW is inexpensive and commonly measured test. In stroke patients who have symptoms < 24 hours, the RDW may be useful in predicting the severity and functional outcomes of the stroke. More studies are required to evaluate the association between ischemic stroke and hematologic parameters, assess the pathophysiology, and confirm the validity of the present results.

Keywords: hematology, cerebrovascular accident, prognosis, stroke severity

Abstract:0712**A RETROSPECTIVE ANALYSIS OF PATIENTS OF NEURORADIOLOGICAL RESULTS ADMITTED TO THE EMERGENCY DEPARTMENT WITH HEADACHE**

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Introduction: Headaches often encountered in emergency departments is a major health problem. Primarily, the most important thing in the emergency services is to be able to distinguish primary and secondary headaches. Neuroimaging is the gold standart during this diagnostic process. In this study, we aim to analyze the neuroimaging results, clinical course and diagnosis of patients presenting with headache in one-year period.

Materials and Methods: In this retrospective study, between 1st January- 31st December 2012, 1229 patients, presenting with headache complaints with brain CT scan were admitted to the emergency service.

Results: Between 1st January – 31st December 2012, in Bakırköy Dr. Sadi Konuk TRH, there were 245625 patients admissions and 9246 of these patients (3.8%) were admitted for the complaints of headache. 1229 of these admissions (0.5%) were the patiens whom have been scanned for the complaints of headache.

The pathological findings were identified in 3.2% of 1,229 patients with CT scan. In this study, 137 (11.1%) of 1229 patients were scanned for diffusion MRI. Patients with and without focal neurological deficit were detected for pathological findings in their brain CT scans and the differences were found statistically significant ($p < 0.001$). When patients under and over the age of 50 compared in terms of ischemic infarction in brain CT scan, the differences were found statistically significant ($p < 0.001$). 21.7% of the patients over age of 50 with HT, 10.3% with vertigo, 8.3% with, 3.9% with migraine were established as final diagnosis. 6.5% of patients under 50 years of age with hypertension, 7.4% with vertigo, 0.5% with ischemic infarction, 12.2% with migraine were established as final diagnosis. When patients under and over the age of 50 compared in terms of HT as final diagnosis, the differences were found statistically significant. When patients under and over the age of 50 compared in terms of ischemic infarction as final diagnosis, the differences were found statistically significant. When patients under and over the age of 50 compared in terms of migraine as final diagnosis, the differences were found statistically significant ($p < 0.001$). When patients under and over the age of 50 compared in terms of focal neurological deficit presence, the differences were found statistically significant. When patients under and over the age of 50 compared in terms of detecting pathological findings, the differences were found statistically significant. When CT and diffusion MRI compared in terms of detecting intracranial pathology, the differences were found statistically significant.

Conclusion: Patients who present with complaints of headache constitute an important part of intensity in emergency services. The detection of causes of secondary headache, which is the important reason for morbidity, is of vital importance even if primary headache appears on patients whom apply to emergency service with headache complaints. The causes of migraine and other primary headaches were seen while patients under the age

of 50 were being evaluated in terms of headache. HT and ischemic infarction should be considered as a differential diagnosis in terms of headache especially in patients over the age of 50. Brain CT is the first neuroradiological method to investigate the causes of secondary headache. It should be considered that brain MRI is superior than brain CT in terms of showing parenchymal lesions.

Keywords: emergency services, headache, neuroradiology

Abstract:0953**ACUTE ISCHEMIC STROKE**Mustafa Avcı¹, Nalan Kozacı², Mustafa Kesaplı², Mehmet Akcimen², İkbâl Sasmaz², İsmail Atik³, Arif Onur Eden¹, Burcu Genc Yavuz¹¹Erzincan University Mengucekazi Training and Research Hospital, Erzincan, Turkey²Antalya Training and Research Hospital, Antalya, Turkey³Umraniye Training and Research Hospital, Istanbul, Turkey

Background: The deaths because of strokes are in the third order in lots of countries even though developing treatment modalities. Disabilities because of strokes cause economic deficiencies. To identify and avoid the risc factors of strokes which are showed with epidemiological studies became important. The aims of our study are to identify the demografic facilities, symptoms, clinical stuations, laboratory end radiological studies in detail of patients who are diagnosed as acute ischemic stroke and transient ischemic attack in emergency department and admitted in neurology department and also the provide these helping results of these study to the phicians in the emergency department.

Material and Metods: The studey was made in Antalya Education and Research Hospital in six months between 20th September 2012 - 20th March 2013 by adding the patients who had applied to emergency department and admitted to neurological department. The patient files in automation system were scanned and the epikrizes of patients who were admitted the neurological department from emergency department were examined.

Findings: 326 patients who were admitted the neurology department from emergency department were admitted to the study in Antalya Education and Research Hospital between 20th September 2012- 20th March 2013. 83% of patients were diagnosed as acute ischemic stroke and 18% of them were diagnosed as transient ischemic attach. 47.4% of patients (n=248) were females, 52.6% of them (n=275) were males. Tke mean age in transient ischemic attach was 67.36 ± 13.85 , in acute ischemic attach was 71.08 ± 12.03 . 62.6% of all patients had disease of hypertension, 30% diabetes mellitus, 27% atrial fibrillation and 5.5% hyperlipidemia. 22% of patiens low level of vitamin B12. 10.7% of the patients were be treating with acetylsalicylic acid regularly, 5% of them were using oral anti-coagulant(warfarin), 26.6 % of patient who were diagnosed acute ischemic stroke previously, 0.74% (n=2) of them had transient ischemic attach. 22% (n=13) of the patients who were diagnosed TIA had TIA previously. There were unilateral or bilateral plaques in doppler ultrasonographic examination of carotis arteries in 83.3% of the AIS patients and 62.7% TIA patients. There were unilateral or bilateral plaques in doppler ultrasonographic examination of vertebral arteries in 7.9% (n=19) of the AIS patients. 1.5% of AIS patients entered our hospital in first 4.5 hours and nobody entered our hospital in TIA. 10% of patient in AIS were observen on critical care unit. 5% (n=24) of all patients were died.

Results: Hypertension, diabetes mellitus, hyperlipidemia and atrial fibrillation loom large in formation of AIS. The population to become conscious about AIS and TIA, and to be train enter a hospital as soon as possible.

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Keywords: Acute Ischemic Stroke, Atrial Fibrillation, Vitamin B12

Abstract:00970P

CAN COMPLETE BLOOD COUNT DIAGNOSIS SUBARACHNOID HAEMORRHAGE IN PATIENTS WITH HEADACHE?

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Objective: We aim to determine the sensitivity of leucocytosis or left shift in diagnosis of subarachnoid haemorrhage (SAH) in emergency department (ED) patients presenting with headache.

Methods: This retrospective, Case-control study was conducted in a tertiary ED. Adult patients with headache who received a computed tomography (CT) with the diagnosis of SAH and had a complete blood count (CBC) represent the Case group, headache patients with normal CT and had a complete blood count (CBC) represent the control group. The white blood cell (WBC) count and percentage of polymorphonuclear cells (PMNs%) taken during admission and in the first 6 and 12 hours of admission were recorded. The sensitivity, specificity, negative predictive value (NPV) and positive predictive value (PPV) were calculated.

Results: A hundred ninety seven patients with SAH and 197 patients without SAH (control group) were enrolled in to study. The mean WBC count and PMNs% count of SAH patients admitted to the ED were found to be higher than in the control group. (13.3 ± 4.70 vs 9.50 ± 3.51 , $p < 0.001$ for WBC, $76.7\% \pm 15.7$ vs $65.27\% \pm 12.8$; $p < 0.001$ for %PMNs). Sensitivity, specificity, NPV and PPV of leukocytosis or increase in PMNs% (left shift) in the diagnosis of SAH was 89.8% (84.5-93.5, 95% CI), 46.7% (39.6-53.9, 95% CI), 82.1% (73.5-88.4, 95% CI) and 62.8% (56.8-68.4, 95% CI) respectively. Leukocytosis or an increase in PMN were positive in all patients with SAH in the first 6 and 12 hours of ED admission.

Conclusion: In our study, we found six hours after ED admission, leukocytosis or left shift to be 100% sensitive for diagnosis of non-traumatic SAH. CBC should be considered as a non invasive test for the exclusion of SAH in ED patients.

Keywords: Complete blood count, subarachnoid haemorrhage, diagnosis

Abstract:01630P

PARANEOPLASTIC LIMBIC ENCEPHALITIS; A RARE CAUSE OF NEW ONSET SEIZURES IN MALIGNANCY PATIENTS

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Paraneoplastic limbic encephalitis (PLE) is a rare disorder characterized by personality changes, irritability, depression, seizures, memory loss and sometimes dementia. The diagnosis is difficult because clinical markers are often lacking, and symptoms usually precede the diagnosis of cancer or mimic other complications. We report a Case of PLE associated with metastatic gastric cancer. Our primary aim is to heighten awareness of the disease entity to assist prompt initiation of appropriate investigations and improved levels of diagnosis.

This Case report describes the new onset of seizures in a 72-year-old male patient receiving chemotherapy for a diagnosed metastatic gastric cancer. Four days after the second cycle of chemotherapy, the patient was admitted to a neurological clinic because of the onset of generalized tonic-clonic seizures and confusion. The patient had also recently developed neurological symptoms of short-term memory loss and temporary confusion, and behavioral changes. His initial vital signs were; blood pressures 110/68, pulse rates was 126/min, temperature was 37.4 C, respiratory rate was 22 breaths/min. Routine laboratory testing, magnetic resonance imaging of the brain, electroencephalogram, lumbar puncture, serum and cerebrospinal fluid tests, and cranial computed tomography were performed on our patient. There were no metastatic mass in cranial MRI but there were hyperintense appearance in right parahippocampal area in flair MRI seen. Serum and cerebrospinal fluid tests were normal. Sox 1 gene was a positive in paraneoplastic panel. Periodic Lateralized Epileptiform Discharges were seen in EEG. He was consulted to neurology department. Based on the clinical picture, the patient's history of cancer, the brain magnetic resonance imaging findings and cerebrospinal fluid test results for paraneoplastic antibodies we concluded that our patient had a 'definite' diagnosis of paraneoplastic limbic encephalitis and he was subsequently treated with IVIG, oral steroids and antiepileptic therapy (levetiracetam) in stabilization of his neurological status. After 7 days Despite the neurological stabilization, cranial MRI was performed and there were normal MRI findings.

The etiology of seizure disorders in cancer patients is broad and includes some rather rare causes of seizures which can sometimes be overlooked by physicians. Paraneoplastic limbic encephalitis is a rather rare cause of seizures in cancer patients and should be considered in the differential diagnosis of seizure disorders in this population. Paraneoplastic limbic encephalitis remains a challenging clinical diagnosis with poor outcome if it is not recognized and treated early in the course of the disease.

Keywords: Paraneoplastic limbic encephalitis, seizures, malignancy

New Technologies in Emergency Medicine

Abstract:0251

NEW ASSEMBLED VIDEO LARYNGOSCOPE: A STUDY ON EFFICACY AND COST EFFECTIVENESS

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Background: Video laryngoscopes have been introduced in recent years as an alternative choice to facilitate tracheal intubation. Difficulties with tracheal intubation are mostly caused by difficult direct laryngoscopy with impaired view to the vocal cords. Many endoscopic intubation laryngoscopes such as the bullard laryngoscope, the upsher laryngoscope or the wuscope have been designed to visualize the vocal cords around the corner looking through a proximal viewfinder. Although they are useful devices, they have limitations for doing direct laryngoscopy and very expensive hence they're not used for routine tracheal intubation

Objective: To evaluate a new cost-effective assembled video assisted laryngoscope and assess its efficacy, ability to provide laryngeal exposure and facilitate intubation.

Materials & Methods: A macintosh intubating laryngoscope has been modified by attaching a waterproof usb camera with a inbuilt light source, which is located in the same position as the light source on the standard macintosh blade thus providing a view angle of up to 290 and the usb camera is connected to a laptop. Total of first 50 patients who presented to emergency department over a period of six months in need of intubation were included in the study and every alternate patient participated in the evaluation of the assembled video-laryngoscope (video assisted laryngoscope val). Information about patient demographics and airway characteristics, cormack-lehane (c/l) views and the ease of intubation using the val was collected. Failure was defined as more than one attempt in intubation.

Results: Excellent (c/l 1) or good (c/l 2) laryngeal exposure was obtained in 92% and 8% of patients respectively. In 25 patients in whom val was performed, resulted in a comparable or superior view. Intubation with direct laryngoscopy was successful in 95.2% of patients and val was successful in 95.4% of patients. 3 patients from val group and 4 patients from dl group was excluded

Conclusions: This new assembled val is the cheapest video assisted laryngoscope available costing around 3000 indian rupees (\$60), which can even be introduced into primary health care setup in developing countries. Val consistently yielded a comparable or superior glottic view compared with dl despite the limited or lack of prior experience with the device. Thus, the video assisted laryngoscope is potentially helpful during difficult direct laryngoscopy to guide the endotracheal tube into the larynx using the video-view. Because the device can be used for both, routine as well difficult tracheal intubation, it may be a helpful tool to intubate trauma Cases where c spine immobilization is unavoidable. The presented video assisted laryngoscope is a useful tool for documentation, teaching and monitoring tracheal intubation.

Keywords: Video laryngoscope, laryngoscope, cost-effective, assembled video-laryngoscope, intubation



Figure 1. assembled video laryngoscope with laptop

USB camera



Figure 2. The water proof usb camera with four led lights



Figure 3. View of vocal cords with new device

Table 1. comparison between the new video laryngoscope and direct laryngoscope

Laryngoscopy	Successful	Failed	Excluded
Direct Laryngoscopy	20	1	4
Video Laryngoscopy	21	1	3

Abstract:0407

TRANSPULMONARY HYPOTHERMIA WITH COOLED OXYGEN INHALATION IN A RAT MODELYahya Ayhan Acar¹, Erdem Cevik², Banu Karakus³, Orhan Cinar⁴, Aylin Hakligor⁵, Sule Ozsoy⁶, Duygu Sultan Celik⁷¹Department of Emergency Medicine, Etimesgut Military Hospital, Ankara, Turkey²Department of Emergency Medicine, Van Military Hospital, Van, Turkey³Department of Emergency Medicine, Şişli Hamidiye Etfal Education and Training Hospital İstanbul, Turkey⁴Department of Emergency Medicine, Gulhane Military Medicine Academy, Ankara, Turkey⁵Department of Biochemistry, Adana Numune Education and Training Hospital, Adana, Turkey⁶Department of Pathology, Bagcilar Education and Training Hospital, İstanbul, Turkey⁷Bagcilar Education and Training Hospital Research Center, İstanbul, Turkey

Hypothermia is one of the main considerations especially in post cardiac arrest care. Recent studies imply the need of rapid and easy applicable hypothermia techniques. Transpulmonary hypothermia is one of them. In this preliminary study we tested the idea which is hypothesized and published by us previously that whether just cooled oxygen inhalation can maintain hypothermia in a short period of time. In preliminary study we obtained ethical approval from ethical committee of Bagcilar Education and Training Hospital. Six rats were given general anesthesia with ketamine – xylazine (50 mg/kg – 10 mg/kg) combination and ventilated with 100% oxygen (10 lt/min) which is standardized at the temperature of 14 ± 2 °C. Cooling the oxygen was enabled by a novel device which was developed especially for this study and temperature standardized by heat sensors. We were able to continue hypothermia below 34 °C for 1-hour without additional hypothermia technique. Then the cooled oxygen inhalation was stopped and rats were rewarmed to initial rectal temperature levels in room temperature with external rewarming technique. Our preliminary results showed that it is possible to reach to the targeted rectal temperature (34 °C) with just cooled 100% oxygen inhalation in 22 ± 4 minutes. In histopathologic examination, trachea, lungs, kidneys, brain, and liver did not showed any pathologic changes. Just serum amylase levels were elevated but other routine biochemical parameters were in normal ranges. We concluded that further studies are needed in this promising hypothermia technique.

Keywords: Transpulmonary hypothermia, oxygen, induced hypothermia

Abstract:0695

NON-CONTACT ESTIMATION OF HEART RATE USING AMBIENT LIGHT IN PEDIATRIC CRITICAL CARE PATIENTSUfuk Bal¹, Alkan Bal², Murat Anil², Ayşe Berna Anil³, Fulya Kamit Can³, Neslihan Zengin³, Yuksel Bicilloglu², Gamze Gokalp²¹Faculty of Engineering, Muğla Sıtkı Koçman University, Turkey²Department of Pediatrics, Tepecik Teaching and Research Hospital, Izmir, Turkey³Department of Pediatric Intensive Care Unit, Tepecik Teaching and Research Hospital, Izmir, Turkey

We proposed a robust method for automated computation of heart rate (HR) from digital color video recordings of the human face. In order to extract photoplethysmographic signals, two orthogonal vectors of RGB color space are used. We used a dual tree complex wavelet transform based denoising algorithm to reduce artifacts (e.g. artificial lighting, movement, etc.). Most of the previous work on skin color based HR estimation performed

experiments with healthy volunteers and focused to solve motion artifacts. In addition to healthy volunteers we performed experiments with child patients in pediatric intensive care units.

We performed two sets of experiments to estimate mean heart rate (with 2 healthy and 7 PICU participants). Laptop's built-in webcam was used in these experiments. In order to validate our results, ECG measurements are used as reference heart rate values. At the first set, twenty-four experiments were conducted indoors to evaluate the HR assessment method on 2 healthy volunteers. Either indirect sunlight or fluorescent light was used as the illumination source. For healthy volunteers, each experiment in a session lasted 60 s where participants were sitting on a chair in approximately 50 cm from the webcam.

In addition, further experiments were conducted in the same manner on PICU patients of both gender and various ages. For patients, face videos are recorded while participants are lying on the bed in face up position. Camera is placed in front of the face of the patients. In order to investigate the feasibility of the proposed method for clinical applications, we studied the relation between hemoglobin levels of the PICU patients and heart rate estimation errors. Low hemoglobin causes underestimation of HR. Nevertheless, based on our results, it was concluded that our method could provide acceptable accuracy to estimate mean HR of patients in a clinical environment, especially given that the measurements can be performed remotely.

Conclusion: This study presents image and signal processing techniques to remotely assess the mean HR. On the basis of the results from the present study, we have demonstrated the feasibility of using a simple webcam to measure mean heart rate.

DTCWT is one of the most efficient methods for extracting required information from the corrupted data. Experimental results revealed that DTCWT processing of the corrupted data reduced the estimation error.

The presented algorithm seems to be quite effective and easy to use in the daily monitoring of home care patients. In addition, based on the results of the experiments performed in the intensive care units, it can be concluded that our method could provide acceptable accuracy to estimate mean HR of patients in a clinical environment. Thus proposed method would eliminate the need of using single use probes and monitoring equipment while measuring vital signals.

Experiments performed with anemic patients are resulted in higher error rates than others. Hemoglobin plays a dominant role in light absorption. Hemoglobin exists in blood and its amount is also a function of the heart beat. Therefore underestimation of heart rate of child patients (anemic patients) may depend on low hemoglobin rates. Our results revealed that the anemia is a very important factor that affects the non-contact HR estimation. Therefore further improvements are needed to reduce the estimation error for low hemoglobin levels.

Keywords: heart rate, web-cam, non-contact estimation, pediatric critical care

Orthopedic Emergencies

Abstract:0408

KINESIOTAPING IN THE TREATMENT OF ACUTE ANKLE SPRAINS IN EMERGENCY DEPARTMENT

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Introduction: Ankle sprain is the most common musculoskeletal system injury in Turkey although there is no study indicating incidence. We aimed to investigate the efficacy of kinesiotope in the treatment of acute ankle sprain at patients who admitted to emergency department.

Material and methods: The study is a prospective randomized clinical trial conducted in a tertiary care setting's emergency department. The patients whom reported with an acutely twisted ankle, were included in the study. Exclusion criteria were; patient who is under 18, pregnant, legally incompetent to take responsibility, fracture at ankle and/or foot, 48 hours since injury occurrence, multiple injuries, have neurologic deficit at lower extremities, chronic instability at ankle, had surgical treatment to ankle, knee and hip. After signing an informed consent form, eligible subjects were recruited for the study and were randomly assigned to a kinesiotope group and conservative treatment group. The random number table was used for randomization. All patients included in the study were given standard therapy which includes rest for 2 days, elevation of the affected ankle from heart level, ice application for 20 minutes 3 times per day for 5 days. The kinesiotope group patients also had application of kinesiotope for edema. Both groups also were prescribed non-steroidal anti-inflammatory drugs (NSAID). After regular use for 2 days, patients were told to take the drug if they had pain. And they were questioned whether they used the drug at the control days. Follow up measurements were done at 0, 3, 7 and 28 day by a blinded investigator who didn't know patients group. SPSS packet programme was used in statistical analysis. Variance analysis in repeated measures, Mann-Whitney U test, and t-test were used in analysis.

Results: A total of 186 patients were included in the study. 73 of them came to the first two follow-ups. Demographics were given in table-1. Both kinesiotope and elastic bandage group showed improvement in Karlsson score and that was statistically significant (figure 1). However there was no statistically significant difference in kinesiotope and elastic bandage. Both treatment modalities decreased VAS and ankle girth significantly and there was not statistically significance between two groups (table 2).

Discussion: The treatment of fracture is accepted as fixation and plaster, but in the treatment of the ankle sprain which is more common, there is no consensus. Recently, in the treatment of acute sprain, early mobilization and taping, elastic bandage and semi-rigid brace has gained importance as functional methods. These treatments are also completed with the rest, ice,

compression and elevation (RICE) application, even the RICE protocol has been reported as a treatment itself.

To our knowledge, kinesiotope in acute ankle sprains has not been studied before. According to our results, kinesiotope has benefits as a functional therapy over elastic bandage. It can be performed by emergency physicians after certification.

Conclusions: Kinesiotope in acute ankle sprains seems as an effective treatment modality in ED. It has many advantages as a functional therapy. Further studies are needed in this era.

Keywords: Ankle sprain, kinesiotope, elastic bandage

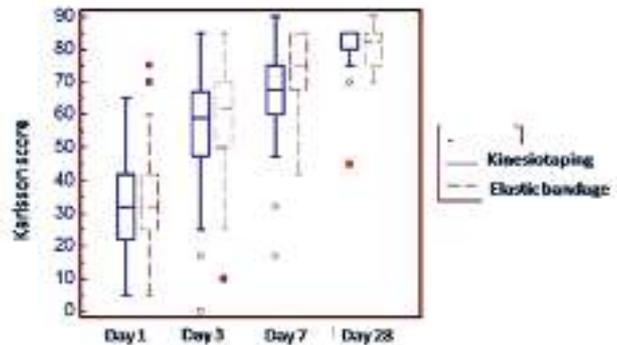


Figure 1. Karlsson scores for kinesiotope and elastic bandage.

Table 1. Patients' demographics.

Parameter	Kinesiotope group	Elastic bandage group	p	95% CI
Patients came 1,3 and 7. day follow ups.	38	35	NA	NA
Age	36.86±11.09	34.46±9.93	0.122	-0.65-5.47
Male gender (%)	44	47	0.739	-0.121-0.17
BMI	27.27±4.78	26.16±4.68	0.110	-0.26-2.49
VAS	5.30±2.36	4.91±2.26	0.266	-0.29-1.06
Ankle girth	53.79±3.82	52.81±3.88	0.083	-0.13-2.11

Table 2. Results of repeated measures variance analysis showed improvement in three parameters but there is no difference between two groups.

Parameter	Sig1	Sig2	Mean at day 1	Mean at day 3	Mean at day 7
Karlsson score	0.00	0.710	33.26±16.09	59.15±17.82	71.34±16.38
VAS	0.00	0.545	4.96±2.28	2.78±2.28	1.61±1.84
Ankle girth	0.00	0.231	53.15±3.80	52.26±3.83	51.62±3.95

Abstract:0111

THE UNUSUAL REASON OF THE SAGITTAL BAND RUPTURE: SNEEZE

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Introduction: The sagittal band (SB) function as a connection between the extensor tendon and palmar proximal phalanx, fasten the extensor tendons over the dorsum of the metacarpophalangeal (MCP) joint. These injuries often are treated with

surgical repair or reconstruction. In this Case the authors report a patient who had a SB rupture because of sneezing to the dorsal side of the hand.

Case: Fifty-seven years old male was admitted to emergency department (ED) with pain in left hand dorsum over the third MCP joint. The injury occurred two hours prior to the ED presentation. The patient was complaining of pain and deformation. Also limited movement of the third finger was determined. He had no trauma or romatologic disease. The patient was alert and oriented. He said that the severe pain suddenly started when he sneezed on his dorsal left hand surface. The pain extended from the third MCP joint especially flexion and extension (Figure-1). He was taken a non-steroidal anti-inflammatory drug but it was not providing adequate relief. In physical examination, the extensor tendon over the third MCP joint was shifted to the right side during flexion (Figure-2). SB tear was thought and the patient was consulted with orthopedic. The patient was treated with a splint that holds the injured MCP joint in 25 to 35 degree of hyperextension and was recommended three weeks follow-up.

Conclusion: Although high energy trauma is required to cause SB rupture, it must be keep in mind that, sneezing not only the reason of internal organ injuries but also may cause such a this kind of unexpected external injuries.

Keywords: sagittal band rupture, sneeze, metacarpophalangeal joint



Figure 1: Middle finger tendon looks over the MCP joint during extension.



Figure 2: During flexion of the fingers, middle finger tendon appears to replace to the ulnar side.

Abstract:0074

THE ACCURACY OF BEDSIDE ULTRASONOGRAPHY AS A DIAGNOSTIC TOOL FOR THE FRACTURES IN ANKLE AND FOOT SPRAINS

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Objective: Ultrasonography has been shown to be helpful in diagnosing fractures in the emergency department setting. The aim of our study was to determine the diagnostic accuracy of ultrasonography for fractures in the patients presenting to the emergency department with foot and/or ankle sprain and positive Ottawa Foot and Ankle Rules.

Methods: We performed a prospective study of consecutive patients aged 18 years and over who were admitted to the emergency department with acute foot and/or ankle sprain and positive Ottawa Foot and Ankle Rules. After examining the patients by bedside ultrasonography, we obtained anteroposterior and lateral radiographs of the ankle as well as anteroposterior and oblique foot x-rays. The x-rays were evaluated by an orthopedic surgeon who was blinded to the ultrasonographic examination results. The orthopedic surgeon's evaluation was considered the gold standard for diagnosing a fracture.

Results: Two hundred and forty-six patients were included in the study (Figure 1). In 76 (30.9%) of the patients, a total of 79 fractures were detected by x-ray. Ten false-negative and nine false-positive results were obtained by ultrasonographic examination. Only one patient, whose ultrasonography showed a fracture but whose x-rays were normal, had a fracture detected by computerized tomography (figure 2). The sensitivity and specificity of ultrasonographic scanning in detecting fractures were 87.3% (95% CI 77.5-93.4) and 96.4% (95% CI 93.1-98.2), respectively.

Discussion: There are limited reports that US has a high sensitivity and specificity in the diagnosis of ankle and foot fractures. We found that US can be used as a good diagnostic tool for detecting ankle and foot fractures in OAR positive patients. In our study, use of US showed good sensitivity (87.3%) and specificity (96.4%). In a study of 131 patients, the reported sensitivity and specificity of US were 100% and 99.1%, respectively. In another study which had a sample size of 110, the reported sensitivity and specificity of US for diagnosing fractures were 90.9% and 90.9%, respectively. In both of these studies, 20 and 11 fractures, respectively were detected in the foot and/or ankle. However, no navicular fractures have detected with US in Ekinci's study and distributions of the fractures were not specified in Canagasabey's study. The sensitivity and specificity of US can vary according to the fracture site (table 1). For example, the sensitivity and specificity of US for detecting navicular fractures were relatively lower in our study. US examination is fairly affected by the examiner's experience and skills. Therefore, studies with only one sonographer may not reflect the overall success rate of US. Although the five sonographers in our study had similar competency during the standard training on test patients, their individual degrees of success were different (Figure 3).

Conclusion: US had good sensitivity and specificity for diagnosing fifth metatarsal, lateral and medial malleolus fractures in the patients with foot and/or ankle sprain. However, sensitivity and specificity of US for navicular fractures was low.

Keywords: Ultrasound, foot and ankle sprain, fracture, diagnosis, sensitivity, specificity

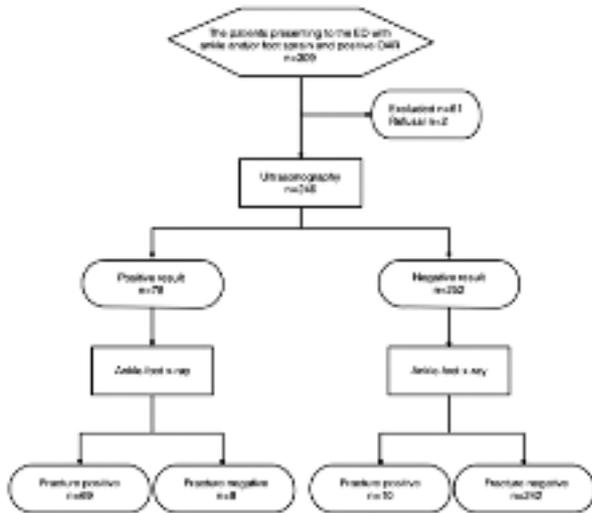


Figure 1. STARD flow diagram



Figure 2. Posterior of the lateral malleolus fracture that was not detected with x-ray; this fracture was identified by computerized tomography and ultrasonography. (A) Direct anteroposterior and lateral x-ray. (B) Fracture line in the computerized tomography coronal cross-section (arrow). F: Fibula, T: Talus, M: Medial malleolus. (C) Cortical disruption in ultrasonographic examination with the longitudinal plane (arrow).

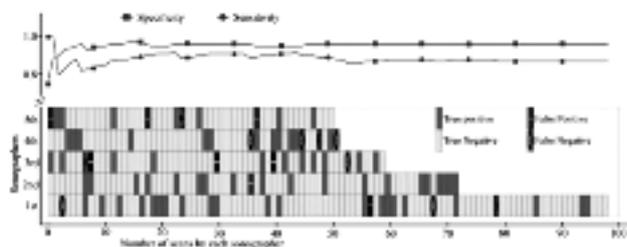


Figure 3. Variation in the sensitivity and specificity based on each sonographer's performance and the number of US scans they applied. The five sonographers are represented on the y-axis and all scans are represented on the x-axis. Each plot at the intersection of x- and y-axis represents a unique sonographer-scan match. The diagnostic results of each sonographer-scan match are represented by a different filling pattern in each plot. The cumulative sensitivity and specificity for all of the sonographers combined were calculated and recorded according to the chronological order of their US scans. For example, the very first scan for each sonographer is plotted in the first x-axis column, and their scans are aligned in order of application from left to right.

	Total US scanning area (n=330)	Lateral malleolus tenderness (n=147)	Medial malleolus tenderness (n=52)	Fifth metatarsal tenderness (n=97)	Navicular tenderness (n=34)
Fracture, n, %	79 (23.8)	38 (25.8)	7 (13.5)	29 (29.9)	5 (14.7)
False (-) US, n, %	10 (3)	5 (3.4)	2 (3.8)	0	3 (8.8)
False (+) US, n, %	9 (2.7)	3 (2)	1 (1.9)	3 (3.1)	2 (5.9)
Sensitivity, %, (95% CI)	87.3 (77.5-93.4)	86.8 (0.71-0.95)	71.4 (0.3-0.95)	100 (0.85-1)	40 (0.07-0.83)
Specificity, %, (95% CI)	96.4 (93.1-98.2)	97.3 (0.92-0.99)	97.8 (0.87-0.99)	95.6 (0.87-0.99)	93.1 (0.76-0.99)

Abstract:0371

DETERMINATION OF RADIOGRAPHY NECESSITY FOR WRIST TRAUMA; FIRST STEP TO BLACK SEA WRIST RULES

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Objectives: The purpose of this study was to evaluate physical examination and function tests recommended for identifying severe injury among patients presenting with wrist injury to the emergency department in the most comprehensive manner possible and to establish a reliable clinical decision rule capable of wide use and determining the need for radiography in wrist injuries.

Materials and Methods: This was a multicenter prospective derivation study planned for wrist injuries. All patients were assessed in terms of mechanism of trauma, inspection findings, heart rate, sensitivity at palpation, presence of pain with active movement, grasp strength and functional tests using an examination form under main headings. Two-dimensional conventional radiography was then performed, irrespective of presence or absence of suspected fracture. Radiographs were evaluated by a senior radiologist blind to the examination findings. Sensitivity, specificity and positive and negative predictive values were expressed for each symptom and examination finding. Incidences of symptoms among the fracture and non-fracture groups were analyzed using Pearson's chi square and Fisher's exact test.

Results: One hundred nineteen adult patients were enrolled during the 6-month study period. Age range was 16-65 years (mean 27). Fracture was determined in 24.3% of patients (n=29). Pain at dorsal flexion exhibited the highest sensitivity among the clinical findings in patients with fractures, at 89.7% (n=26). The second highest most sensitive examination finding was determined with the axial compression test, at 86.2% (n=25). Sensitivity for presence of sensitivity in the distal radioulnar drawer test and radial deviation test was 82.8% (n=24). Sensitivity of 96.6% (n=28) was observed when pain at dorsal flexion,

sensitivity at the radial deviation test, the axial compression test and distal radioulnar drawer test were evaluated together.

Conclusions: The presence of one of these examination findings increases suspicion of fracture and is sufficient for wrist radiography. In addition, there is a strong possibility of x-ray being unnecessary if all these four tests are negative in patients presenting with wrist injury, and this will prevent many non-essential x-rays being performed.

Keywords: Wrist injury, radiography, emergency, clinical decision rule

Abstract:0084

COMPARISON OF DIFFERENT CLINICAL DECISION RULES IN ACUTE BLUNT ANKLE AND MID-FOOT INJURIES: OTTAWA AND BERNESE ANKLE RULES

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Background: Acute ankle and mid-foot sprains are one of the most common causes of admission to the emergency services. Various clinical decision rules have been developed with the aim to reduce unnecessary radiography request.

Objective: The goal of our study is to compare the sensitivity and specificity of Ottawa Foot and Ankle Rules and Bernese Ankle Rules in determine to fracture to acute ankle and midfoot sprains.

Method: Patients with acute blunt md foot and ankle sprain presented to our emergency department between October 2012 to January 2013 were evaluated with Ottawa Foot and Ankle Rules and Bernese Ankle Rules.

Results: Two hundred and sixty patients were included in the study. In 42 (16.2%) of all patients, fractures were detected by orthopedic surgeon. Bernese Ankle Rules and Ottawa Foot and Ankle Rules in patients were positive 65.4% (n = 170) and 80% (n = 208) respectively. The sensitivity and specificity of Bernese Ankle Rules and Ottawa Foot and Ankle Rules in detecting fractures was determined 85.7% to 97.6% and 38.5% to 23.3% respectively.

Conclusion: Sensitivity of Ottawa Foot and Ankle Rules in the diagnosis of fractures is higher than Bernese Ankle Rules in patients with acute blunt mid-foot and ankle sprain.

Keywords: ankle and foot sprain, Bernese Ankle Rules, Ottawa Foot and Ankle Rules

Abstract:0093

THE EFFICACY OF METHOXYFLURAN FOR THE TREATMENT OF ACUTE PAIN DUE TO FRACTURES! A RANDOMIZED, TRIPLE-BLIND, PLACEBO-CONTROLLED STUDY

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Introduction: there is a long time after accident that patient come to hospital and pain is from most important complications. the box of emergency ambulances is free of pain control drugs. We investigated to assess Panthrox in form of inhaled as an analgesic in emergency services in our country.

Method and Materials: This cross-sectional study - an analysis of 100 patients were transferred to the emergency room. If the pain expressed by victims of less than 4 units (according to the scale), there was no need to use drugs. Examine the patient in the beginning and the end of the delivery of patient care, information about the Centre (the questionnaire) was recorded.

Results: The average age of participants was $64/14 \pm 71/36$ years (minimum 18 and maximum 80 years). Average pain scores after 5 minutes, 58.1 ± 8.5 was (at least 3 and maximum 10), the average 10 minutes after treatment with 19.2 ± 25.5 , respectively (minimum 2 and maximum 10) was Average pain scores 20 minutes after 28.2 ± 38.5 was (at least 2 and maximum 10), the mean pain score 30 minutes after 39.2 ± 94.4 , which was statistically significant relationship between the average pain score before treatment and after treatment there. (P = 0.00)

Conclusion: The main findings of this study were the reduction of pain in patients with fractures who used panthrox. The drug had no side effect in this study. It is recommended for analgesia for emergency use.

Keywords: Panthrox, Pain, Fracture

Other

Abstract:0244

ASSOCIATION BETWEEN COMPLETE BLOOD COUNT PARAMETERS AND URINARY STONE DISEASE

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Objective: To analyze the association between complete blood count (CBC) parameters and urinary stone disease

Methods: From 3099 patients who admitted urology outpatient clinic or diagnosed as urinary stone disease in emergency service 353 patients are included to study who had ultrasonography (USG) and/or non-contrast computerized tomography (NCCT) and CBC. Patients who had non-urinary system inflammatory disease in USG or NCCT, had fever, non-urinary system infection, anemia or diagnosed hematologic malignancy are excluded (n=27) Patients grouped in to two as stone group (n=74) and control group (n=252). Data's of patients are found from hospital database. After whole data is collected statistical analysis is done.

Results: Increase in RDW, MPV, PDW, WBC, granulocyte% and decrease in lymphocyte% is statistically associated with urinary stone disease patients. ($p < 0.001$, $p < 0.001$, $p = 0.006$, $p < 0.001$, $p = 0.003$, $p = 0.034$) Microscopic hematuria is associated with urinary stone disease and odds ratio for urinary stone prediction is 67.7 ($p < 0.001$). None of CBC parameters are associated with stone burden.

Conclusion: When evaluating flank pain patient it's important to remember that CBC parameters could support urinary stone disease and considering CBC results may be useful in diagnosis of this patient

Keywords: Blood Count, urinary stone, computerized tomography

Abstract:0255

BURNOUT IN EMERGENCY DEPARTMENT

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Objective: The aim of this study was to assess levels of the burnout syndrome among the emergency medicine workers.

Methods: After obtaining the approval of the Bozyaka Training and Research Hospital ethics committee, operation room workers were included in this study. Emotional exhaustion, depersonalization and personal success were evaluated with Maslach Burnout Inventory (MBI). The personal characteristics, habits and working conditions were evaluated with the socio-demographic data collection form. SPSS 16.0 package program was used for statistical analysis of the data.

Results: 22.2 % (n=21) residents, 3 % (n=3) physician, 17 % (n=17) health officer, emergency medical technician, 22 % (n=21) nurse, 22 % (n=21) employee and 14 % (n=15) security guard. Mean MTÖ-DT score 21.27 ± 7.28 , mean MTÖ-D score 8.77 ± 4.30 , mean MTÖ-KB score 12.00 ± 4.24 .

Burnout is not related with sex, smoking and alcohol use, having baby or not; but is related with marital status, job, years in work and number of nights on duty.

Conclusion: Regulation of working places according to years at work, improvement of duty conditions, psychological support, teaching the ways of coping with exhaustion would effectively contribute to the prevention of burnout.

Keywords: Emergency department, burnout, workers

Abstract:0269

EPILOIC APPENDAGITIS: A RARE AND NONSURGICAL CAUSE OF ACUTE ABDOMINAL PAIN

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Background: Epiploic appendagitis is an unusual cause of acute abdominal pain, which can mimic surgical causes of acute abdominal pain. It is treated conservatively. Because inaccurate diagnosis can cause unnecessary surgery, correct diagnosis is of utmost importance.

Methods: In this prospective study of 12 patients (4 women and 8 man, average age of 40 years, ranging between 20 and 55) were identified between June 2013 – July 2014. The study was carried out in an urban teaching and research hospital emergency department with approximately 488000 visits annually.

Results: The most common complaint was abdominal pain localized at right lower quadrant(72%) and left lower quadrant (%20). The most common clinical symptoms were anorexia, nausea and vomiting, respectively. Fourty four percent of the patients had a history of sudden onset of pain. Two patients had a history of appendectomy. For all patients, the diagnosis was confirmed by computed tomography. Examination of all patients was performed by the same physician. CT interpretation was made by three different radiologists at their shift.

Conclusion: Differential diagnosis is very important in acute abdominal pain particularly for detecting nonsurgical causes of the acute pain such as epiploic appendagitis to avoid unnecessary surgery. Emergency physicians can benefit from computed tomography as a diagnostic tool when epiploic appendagitis is a differential consideration.

Keywords: Epiploic appendagitis, nonsurgical, abdominal pain, computed tomography

Abstract:0326

HOMELESS PATIENTS IN THE EMERGENCY DEPARTMENT

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Objective: In our study, we aimed to investigate the demographic features and clinical condition of homeless people admitting to emergency department (ED).

Material-Methods: The patients aged 18 years and older and had been consulted with social service were retrospectively examined. Demographic features, admission time, complaints of admission, length of stay in the ED, performed clinical tests, diagnoses, clinical outcomes (admission to hospital, discharge, operation, death) and ED costs were recorded.

Results: The study was performed with 39 patients. The mean age was 68.4 ± 11.8 years; %89.7 of the patients were male and %74.4 of the patients were absolute homeless. Mean monthly admission number was 8.7 times. Mean length of stay in the ED was 456 ± 590 minutes. Emergency department costs per admission was 135.6 ± 128.5 Turkish Liras /admission. Homeless patients referrals resulted in admission to hospital wards in 32 (%9.2), admission to intensive care unit in 41(%11.8) of them.

Conclusion: In addition to acute disease management, specific approaches should be planned for homeless patients in ED's which are perhaps the only health units they refer due to their health problems.

Keywords: homeless, emergency department, health status

Abstract:0443**IS BLOOD ETHYL ALCOHOL LEVEL A GOOD PREDICTOR FOR TOTAL HOSPITAL COSTS IN TRAFFIC ACCIDENT?**Yalcin Golcuk, **Mustafa Hayran**, Murat Ozsarac, Adnan Bilge, Halil Ibrahim Dayangac, Mehmet Irik*Department of Emergency Medicine, Celal Bayar University, Faculty of Medicine, Manisa, Turkey*

Objective: The main purpose of this study is to state demographical properties of the patients whose ethyl alcohol content checked and to compare running cost of the hospital with ethyl alcohol content of the blood.

Materials and Methods: Patients older than 16 year-old presented to the emergency department (ED) because of to measure their blood alcohol level (BAL) between august 2013 - august 2014 were retrospectively evaluated from the patients charts. Gender, age, glasgow coma scale(GCS), BAL, cost of ED, total hospital costs and mortality were recorded.

Results: A total of 489 patients presented to the ED because of to measure blood alcohol level during the study period. The mean age of the study patients was 32±12 and 86.1% (n=421) of them were male. A 20.2% (n=99) of the study patients were found to have alcohol levels of over normal limits. There was no significant difference between the costs of ED of patients with and without alcohol (249±25 vs 227±10, respectively; p> 0,253). There was statistically significant difference between the costs of the hospital of the patients with and without alcohol over normal limits (3652±1426 vs 1555±277, respectively; p≤0.05). A 321 of 489 patients presented to the ED because of traffic accidents. The costs of hospital patients who admissions to the ED was significantly differ between patients with and without high alcohol levels (8835±3860 vs 1601±324, respectively; p≤0.05).

Conclusion: Positive BAL was significantly associated with total hospital costs.

Keywords: traffic accident; blood alcohol level; cost; ED

Abstract:0518**FORENSIC CASES AND ASSOCIATION OF PSYCHIATRIC DIAGNOSES AT EMERGENCY SERVICE**Erdem Cevik¹, Onur Durmaz²¹*Department of Emergency Medicine, Van Military Hospital, Van, Turkey*²*Department of Psychiatry, Balikesir Military Hospital, Van, Turkey*

Forensic Cases are diversified and commonly encountered Cases with high legal responsibility. In addition to low socio-economic status and level of income, psychiatric diagnoses such as substance and alcohol abuse, personality disorders, some axis 1 disorders have been reported to increase violent behavior.

Method: In this retrospective study, we evaluated substance abuse, psychiatric comorbidity, and relationship between type of forensic report and psychiatric diagnoses. We analysed forensic report who applied to emergency department between January 2012-April 2014.

Results: A total of 441 patients were included in the study. The mean age of the patients was 22.57 +/- 4.7 (18 - 58) and 99.1% of patients (437) were male. 12 (2.7%) patients with report of life-threatening while 58 (13.2%) patients with report of untreatable by simple medical intervention. The most common

injury regions in trauma patients were face and neck in 191 patients, pelvis and extremities in 127 patients, skin in 46 patients and head in 38 patients respectively. In 104(23.6%) of the patients had a psychiatric history. As the association between type of forensic report and psychiatric history was evaluated, high rates of psychiatric comorbidity were present in Cases of intoxication, assault and firearm wounds. In the 46 (44.2%) of patients with psychiatric history had substance use while it was more significant in Cases of assault, firearm injury / stab injury and intoxication. Patients with a diagnosis of adjustment disorder had a significantly higher rate of application due to assault, firearms / stab injury, and intoxication. As "Adjustment Disorder" and "Axis II Disorders" are the most common diagnoses in the field of military psychiatry, it is reflected in the criminal Cases also.

Conclusion: In conclusion, in the view of fact that the existing low socio-economic status and education level, male gender, young age, substance abuse, easy access to weapons and ammunition in military population, detailed evaluation including substance and alcohol use of subjects with psychiatric diagnoses and appropriate therapeutic interventions could have a positive impact on reducing criminal Cases with violent or injurious behaviours.

Keywords: Psychiatric Diagnoses, Forensic Cases, Emergency Service

Abstract:0522**DIAGNOSTIC IMPORTANCE OF "NEUTROPHIL GELATINASE-ASSOCIATED LIPOCALIN" AND "SEMAPHORINE 3A" AT "ACUTE KIDNEY INJURY" DEVELOPED SECONDARY TO EXPERIMENTAL RHABDOMYOLYSIS AT RABBITS**Ayhan Korkmaz¹, Gurkan Ersoy¹, Osman Yilmaz², Emel Altekin³, Sadiye Mehtat Unlu⁴, Leyla Seden Duru⁵, Emre Karli¹, Elvan Ocmen Duru⁵¹*University of Dokuz Eylul, School of Medicine, Department of Emergency Medicine, Izmir, Turkey*²*University of Dokuz Eylul, School of Medicine, Department of Animal Research Center, Izmir, Turkey.*³*University of Dokuz Eylul, School of Medicine, Department of biochemistry, Izmir, Turkey.*⁴*University of Dokuz Eylul, School of Medicine, Department of Pathology, Izmir, Turkey.*⁵*University of Dokuz Eylul, School of Medicine, Department of Anesthesiology and Intensive Care, Izmir, Turkey*

Introduction and Objective: Earliest increase of serum creatinine levels occur within 24 hours, which is used at the diagnosis of acute kidney injury (AKI), and the increase does not happen until 50% of renal functions are lost. This prolongs the time to diagnosis. "Neutrophil gelatinase-associated lipocalin" (NGAL) and "Semaphorin 3A" are new biomarkers for the diagnosis of AKI at early stage. Here, in our study, we aimed to compare the diagnostic importance of "neutrophil gelatinase-associated lipocalin" and "semaphorine 3A" at "acute kidney injury" developed secondary to experimental rhabdomyolysis at rabbits

Material and Method: Here in this study, 14 New Zealand male rabbits were used. All rabbits are placed in cages and IV line was established through their right auricular vein with 20G branule. Blood samples of 3 cc were drawn from each rabbit for the basal values of "serum creatinine", "serum NGAL" and "serum semaphorin 3A" levels. Later, all rabbits were randomly divided into to 2; "study" (n=7) and "control" (n=7) groups. While 10 ml/kg, 50% glycerol was injected IM on the both back foot of rabbits in the study group in order to create experimental rhabdomyolysis (n=7), no additional procedure was done for the control

group. For to prevent development of acute renal failure due to hypovolemia, 20 cc normal saline solution was infused to all animals. At both groups, 3rd, 12th and 24th hour, "serum NGAL", "semaphorin 3A" and "creatinine" levels were studied. At the end of the study, following left unilateral nephrectomy, the rabbits were sacrificed under high dose of ketamine injection. The development of AKI through kidneys were examined in the pathology department and were classified in 4 levels (such as 0-I-II and III. degree).

Results: According to pathological findings, AKI did not develop at rabbits in control group, however, in the study group "I. degree" AKI developed at six rabbits and "III. degree" AKI at one rabbit was developed. One of the rabbits in the study group developed "III. degree" AKI, and died before reaching 24th hour. No difference was found at 0. hour "serum creatinine", "serum NGAL" and "serum semaphorin 3A" median levels between "control" and "study groups". At 3rd hour of the study, while there was no statistically significant difference between "serum creatinine" and "serum NGAL" levels the difference between "serum creatinine" and "serum semaphorin 3A" levels were significant ($p=0.01$). At the 24th hour of the study, the difference between "serum creatinine" and "serum NGAL" levels was significant ($p=0.03$), however, the difference between "Semaphorin 3A" "serum creatinine" average levels were not.

Conclusion: Here in this study model, we found that serum "Semaphorin 3A" is a more valuable biomarker than "serum creatinine" and "serum NGAL" at the early stage diagnosis of acute kidney injury developed secondary to experimental rhabdomyolysis created by intramuscular injection of glycerol.

Keywords: Acute kidney injury, neutrophil gelatinase-associated lipocalin, semaphorin 3A, rhabdomyolysis, serum creatinine



Figure 1. Rabbit in the cage

Abstract:0538

COPEPTIN AS A BIOMARKER FOR THE DIAGNOSIS AND SEVERITY OF ACUTE PANCREATITIS

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Introduction: Acute pancreatitis (AP) is usually a mild and self-limiting disease, but it is developing a severe form, that is associated with high mortality in some patient. Earlier diagnosis is essential to achieve a better prognosis.

Copeptin is cosynthesized with vasopressin, thereby directly may the mirroring vasopressin levels; but copeptin is more stable in plasma and serum. Vasopressin reflects the individual stress level. Copeptin has been studied as a diagnostic marker and as a prognostic marker in different diseases. The present study aimed further to investigate changes of plasma copeptin levels in acute pancreatitis and also determine whether copeptin was associated with disease severity, in a group of acute pancreatitis.

Material and Method: This prospective study enrolled fifty consecutive patients with AP and a control group consisted of 50 healthy volunteers. Age, gender, etiology of pancreatitis, were recorded. The APACHE II score were also collected for evaluation of severity of the disease.

Venous blood was drawn at study entry for healthy control and patients. Plasma copeptin concentrations were measured in duplicate with the method based on the principle of competitive enzymeimmunoassay.

Statistical analysis was performed with SPSS 15.0. All values are expressed as median, mean \pm SD or counts. Comparisons were made by using chi-square test for categorical data, student t test for continuous normally distributed variables, and the Mann-Whitney U-test for continuous non-normally distributed variables. Correlations of copeptin with traditional predictors of disease severity were assessed by Spearman's correlation coefficient. ROC curves was configured to establish cutoff point of plasma copeptin level with calculated AUC and 95% CI. A p value <0.05 was considered significant.

Results: The overall mean age of patients with AP was 59.68 ± 15.98 years; 24 were male. Thirty-two patients had mild disease, and the remaining 18 had severe disease. The etiology was gallstones in 16 patients (7 mild and 9 severe). Alcohol was the cause in 1. Plasma copeptin level was $1,44 \pm 0.96$ ng/mL (95% CI 1.17-1.71) in acute pancreatitis patients, and was obviously higher than in healthy control ($0,33 \pm 0,15$ ng/mL; 95% CI 0.29–0.38; $P < 0.01$). Plasma copeptin level was $1,98 \pm 0.96$ ng/mL (95% CI 1.51-2.46) in severe pancreatitis (SP) was obviously higher than in mild pancreatitis (MP) (1.13 ± 0.83 ng/mL; %95 CI 0.83-1.43; $p < 0.01$). Plasma copeptin level was highly associated with the APACHE II score ($r = 0.341$, $P = 0.015$), using Spearman's correlation coefficient. The validity of the tests was evaluated by an analysis of receiver operating characteristic (ROC) curves. A ROC curve identified that a plasma copeptin level >0.32 ng/mL predicted acute pancreatitis patients with 94 % sensitivity and 54% specificity (AUC, 0.879; 95% Confidence Interval: 0.813-0.945) (Figure-1). When using a 0.5 ng/mL cutoff value, sensitivity of copeptin for acute pancreatitis was 72%, specificity was 92%, positive predictive value was 90%, and negative predictive value was 77%.

Conclusion: In the present study, copeptin plasma concentrations were significantly higher in AP patients compared with healthy individuals; and also, plasma copeptin levels showed significant differences between SP and MP in the admission, as a result of which this copeptin seems to be a potential early marker in acute pancreatitis and has predictive value as a severity marker on the admission.

Keywords: Copeptin, Acute Pancreatitis, Emergency Department, Biomarker

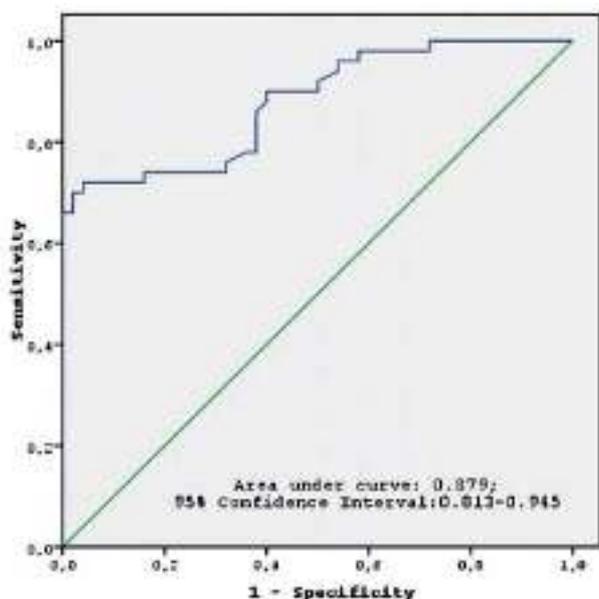


Figure 1. Graph showing the predictive significance of plasma copeptin level for pancreatitis patients.

Receiver operating characteristic curve was constructed based on the sensitivity and specificity of the plasma copeptin concentration for acute pancreatitis. The area under curve was calculated based on the receiver operating characteristic curve and expressed as 95% confidence interval. Area under curve ranges from 0.5 to 1.0. An area under curve closer to 1 indicates a higher predictive power.

Abstract:0540

BLOOD GAS ANALYSIS PARAMETERS HAVE A STRONG CORRELATION WITH ROUTINE BIOCHEMICAL ANALYSES AND COMPLETE BLOOD COUNT

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Introduction: Blood gas analysis (BGA) is a frequent test in emergency department (ED) for many clinical conditions. It has some parameters additional to blood gases such as hemoglobin, hematocrit, glucose, calcium, potassium, and sodium. In this study we aimed to investigate whether blood gas analysis parameters are concordant to complete blood count (CBC) and routine biochemical analyses. This is a report of our preliminary results.

Material and methods: This is an observational study conducted in a tertiary setting's ED. Patients in which BGA, CBC and routine biochemical analyses were studied at the same time for any reason were included in the study. Data were recorded

from patients' charts. Pearson test and t-test for independent samples were used in statistical analysis.

Results: A total of 347 (92 arterial BGA, 255 venous BGA) patients were included in the study. 172 (49.6%) of them were male and mean age was 58.49 ± 21.32 (min:18, max:99). There was not any statistically significant difference between arterial and venous BGA parameters. There was a strong correlation between BGA parameters, CBC, and routine biochemical analyses. Pearson correlation test results are as follows; for hemoglobin $r=0.956$, for hematocrit $r=0.918$, for potassium $r=0.747$, for sodium $r=0.733$, for calcium $r=0.726$, for glucose $r=0.942$.

Discussion: There are many studies on correlation of arterial and venous BGA mainly focused on pCO₂ and pH. In ED, BGA is a frequent test and it has advantages especially for being faster. According to our preliminary results, BGA has a good correlation in six parameters. Emergency physicians may use these parameters in initial evaluation of patients especially for starting the emergent therapies such as diabetic ketoacidosis.

Conclusion: BGA parameters may have a potential to take the place of routine biochemical analyses and CBC. Further studies and technologies are needed in this era.

Keywords: Blood gas analysis, correlation, routine biochemical parameter

Abstract:0549

THE LEVELS OF PLAZMA NEUTROPHIL GELATINASE ASSOCIATED LIPOCALIN (NGAL) IN PATIENTS WITH ACUTE UNCOMPLICATED LOWER URINARY TRACT INFECTIONS

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Objectives: Urinary tract infection is one of the most common bacterial infections in emergency department. In daily practice, urinalysis is commonly used to diagnose urinary tract infection and to decide whether to start empiric treatment. As indicators of urinary tract infection, urinalysis have some limitations. Thus, there is a need for a more rapid, specific, and sensitive laboratory diagnostic test to help guide the clinician in the decision of whether to begin empiric antibiotic therapy for urinary tract infection in the emergency departments. Neutrophil gelatinase associated lipocalin, an iron-carrier protein derived from human neutrophils, has an important role in the immune response to bacterial infection. In agreement with the literature, increased urinary NGAL values were observed in urinary tract infections, but there isn't enough information about the level of serum NGAL. In our study, we aimed to detect that the values of serum NGAL is diagnostic in patients with acute uncomplicated lower urinary tract infections.

Methods: 80 patients with symptoms of acute uncomplicated lower urinary tract infection and pyuria in urinalysis were included in the study. Their empiric antibiotic treatments were begun in the emergency department. There were 40 people in the control group. Before and after treatment was measured the levels of plasma NGAL, CRP, ESR, WBC, neutrophil.

Results: The levels of plasma WBC, neutrophil, CRP were increased in patients with urinary tract infection compared with

those in normal controls and decreased significantly after treatment ($p < 0.001$). There was no difference between pre-treatment and after treatment plasma levels of NGAL ($p = 0.091$). But the levels of plasma NGAL were increased in normal controls compared with in patients pre-treatment and after treatment ($p < 0.001$). In patients with urinary tract infection, plasma level of NGAL was not correlated with plasma level of WBC, neutrophil and CRP.

Conclusions: We think that plasma NGAL is not diagnostic biomarker for acute uncomplicated lower urinary tract infection.

Keywords: Emergency, Neutrophil gelatinase associated lipocalin, Urinary tract infection

Table 1. The laboratory data of both controls and patients with urinary tract infection (UTI) before and after they received treatment

Clinical variables	Control n = 40	UTI Pretreated n = 80	UTI Posttreated n = 80	P value Pretreated /Posttreated	P value Pretreated /Control
Serum NGAL (ng/mL) Median (range)	2.2800 (0.20-10.10)	1.0100 (0.37-10.10)	0.8000 (0.10-10.10)	=0.091	<0.001
Plasma WBC ($\times 10^9/L$) Median (range)	7.4500 (4.60-11.50)	8.8500 (4.40-21.50)	7.4000 (3.20-15.10)	<0.001	=0.002
Plasma Neutrophil (%) Median (range)	60.1500 (43.60-74.70)	71.8500 (45.30-94.10)	62.0000 (31.90-85.70)	<0.001	<0.001
CRP (mg/L) Median (range)	1.8000 (1.00-11.20)	4.7000 (1.00-308.70)	2.9500 (1.00-178.40)	<0.001	<0.001
Sedimentation (mm/ saat) Median (range)	11.5000 (2.00-48.00)	20.5000 (1.00-100.00)	16.0000 (2.00-95.00)	<0.001	=0.004
D-Dimer (ng/mL) Median (range)	70.0000 (17.00-184.00)	118.0000 (33.00-3262.00)	126.0000 (21.00-2283.00)	=0.270	<0.001
Urine culture	Positive: - Negative: 39 Contamination: 1	Positive: 30 Negative: 44 Contamination: 6	Positive: - Negative: 72 Contamination: 8		
Leukocyte esterase	Positive: - Negative: 40	Positive: 80 Negative: -	Positive: 6 Negative: 74		
Nitrite	Positive: - Negative: 40	Positive: 16 Negative: 64	Positive: - Negative: 80		
Urine leukocyte	Positive: - Negative: 40	Positive: 80 Negative: -	Positive: 3 Negative: 77		

Abstract:0616

INFLUENCE OF FASTING AT RAMADAN ON THE NUMBER OF RENAL COLIC VISITS IN THE EMERGENCY DEPARTMENT

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Introduction: Urolithiasis is a common disorder in emergency settings. The seasonal variation in renal stone diseases is well known. The highest reported incidence rates occur during the months of July, August and September. Low urine volume, an important factor mostly of an environmental nature, directly increases the risk of stone formation by increasing the urinary saturation of stone-forming salts. Fluid and diet restrictions during the month long intermittent Ramadan fast can influence the biochemical factors related to stone formation. Yet, studies on the effects of Ramadan fasting on incidence of renal colic are scarce, and have given variable and inconclusive results. The aim of this study was to assess the influence of ramadan fast on the number of renal colic visits in the local emergency department.

Material and Method: This was a prospective observational study, which was carried out in patients with renal colic admitted to our emergency department between 28 May and 27 August 2014. The study period was divided in to three parts: a month before Ramadan, during the month of Ramadan, and a month after the Ramadan. This protocol was approved by the local Ethics Committee before implementation. Diagnosis of renal colic was based on physician’s clinical judgment. Statistical analyses were conducted using SPSS 15.0 statistical software. Statistical significance was considered at $P < 0.05$ for all tests.

Results: Two hundred forty- nine patients (89 patient in a month before Ramadan, 87 patient during of the Ramadan and 73 patient a month after Ramadan) with a mean age of 41.31 ± 13.64 years (range 18-81 years) with symptoms of renal colic were enrolled into the study. There were 145 males (58.2%) and 104 females (41.8%). 20 patients of the total 87 patients, who admitted in Ramadan month, were excluded because of non-fasting. 44(65,7%) patients of total 67 patients, who were included in period Ramadan, were men and mean age of these patients were 44.75 ± 12.50 . 39 patients of total patients, who admitted to emergency department due to renal colic in Ramadan period, were admitted on first ten days, 20 patients(29.9%) were admitted on second ten days, and only 8 patients(11.9%) were admitted on third ten days. When means of air temperatures were compared according to months, lowest mean of air temperatures were detected in month before Ramadan (24.26 ± 3.55), highest mean of air temperatures were detected in month after Ramadan (32.45 ± 2.27). Although mean of air temperatures of Ramadan month were higher than mean of before Ramadan month, there was not detected that increased the incidence of renal colic. On urine analysis of subjects admitted in Ramadan period revealed that urine density, general urine crystals, and calcium oxalate crystals values were detected higher than other months (pre-Ramadan and post-Ramadan period.) ($p = 0.011$, $p < 0.001$, and $p = 0.002$) (Table-1)

Conclusion: Although at the beginning of Ramadan, admissions of renal colic increased probably because of volume restriction; the incidence of renal colic decreased at the second and third period of Ramadan due to adaptive mechanisms of the body.

Fasting causes some changes in urinary metabolites which have different effects on calculus formation. There is not enough evidence that Ramadan increases urinary calculus formation, but the effect of fasting on calculus formation risk factors and epidemiology of urolithiasis need to be investigated by further studies.

Keywords: Urinary stone; Fasting; Ramadan; Emergency Department

Table 1. Demographic and laboratory analysis of patients admitted at different periods.

	Before Ramadan	Ramadan	After Ramadan	P value
Patients Age	36.57±10.57	44.75±12.50	43.38±16.31	<0.001
Temperature (OC)	24.26±3.55	30.76±2.42	32.45±2.27	<0.001
WBC count	10642.70±3079.88	8998.51±2315.13	11441.10±1695.41	<0.001
Urea	31.26±8.83	33.85±7.56	36.88±6.76	<0.001
Creatinine	1.08±0.25	1.06±0.20	1.09±0.23	0.756
Sodium	138.38±2.77	139.42±2.62	141.82±1.63	0.214
Potassium	4.06±0.38	4.14±0.30	4.22±0.36	0.016
Calcium	9.55±0.43	9.56±0.35	10.87±10.35	0.001
Urine density	1020.79±9.23	1024.93±7.86	1023.71±7.17	0.011
Urine ketone	0.39±1.83	0.17±0.87	0.00±0.00	0.052
Urine leukocyte	16.34±52.04	7.15±21.90	17.48±43.74	0.521
Urine erythrocyte	60.29±101.77	79.37±115.03	114.05±117.16	<0.001
Uric acid crystal at urine	0.000±0.00	0.66±3.60	0.00±0.00	0.007
Hyaline cylinder	0.002±0.02	0.002±0.02	0.00±0.00	0.607
Renal epithelia	0.71±2.81	0.59±1.54	0.99±2.83	0.058
Amorphous crystal	5.10±16.01	3.34±19.20	0.00±0.00	0.002
General crystal	6.10±16.50	6.46±22.85	0.04±0.32	<0.001
Calcium oxalate	0.27±1.37	1.67±9.34	0.00±0.00	0.002
Triple phosphate crystal	0.04±0.24	0.02±0.07	0.00±0.00	0.111

Abstract:0619**THE PROGNOSTIC VALUE OF NEUTROPHIL-LYMPHOCYTE RATIO IN THE PATIENTS DIAGNOSED WITH ACUTE PANCREATITIS AT THE EMERGENCY DEPARTMENT**

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Objective: Decreased count of lymphocytes along with increased neutrophil count is associated with severe sepsis, bacteremia and surgical stress. The neutrophil-lymphocyte ratio (NLR) of white blood cell (WBC) obtained by rating these two different components between themselves is used to assess surgery and the state of inflammation. In this study NLR in the differentiation of biliary and non-biliary pancreatitis in patients with acute pancreatitis (AP). Methods: The patients over 18 years old diagnosed with AP as a result of analysis and visualization among the patients admitted to Emergency Medicine Clinic and General Surgery Clinic of Selçuk University Faculty of Medicine, and General Surgery Clinic of Konya Education and Research Hospital, between January 2011 and July 2014 were evaluated retrospectively, and 255 patients meeting the criteria were included in the study. The patients were classified etiologically as biliary pancreatitis and non-biliary pancreatitis. NLR rate, calculated using the WBC, neutrophils, lymphocytes values in the blood test, was examined according to the type of pancreatitis. Results: The mean age of 255 patients with AP included in the study is (mean ± SD) 58.64±17.6, and 81 (36%) of them were male. In the etiological factors, the number of patients with biliary

pancreatitis was 144 (64%) and non-biliary pancreatitis was 81 (36%), respectively. When patients were compared according to their physical examination, laboratory findings and pancreatitis etiology, significantly difference was observed between the groups in the values of mean arterial blood pressure (MAP), WBC, platelets, neutrophils, alanine aminotransferase, aspartate aminotransferase, gamma glutamyltransferase, alkaline phosphatase. WBC and neutrophil values in the group of non-biliary pancreatitis was significantly higher (p-value 0.018 and 0.022 respectively). However, contrary to expectations, there was no significant difference in NLR values between the groups (p 0.446).

Conclusions: In this study we investigated the relation of NLR between the groups in differentiating non-biliary pancreatitis and biliary pancreatitis in patients diagnosed with AP. According to our findings NLR was higher in the AP. However, there was no statistically significant change in NLR values between non-biliary and biliary pancreatitis.

Keywords: neutrophil-lymphocyte ratio, pancreatitis, white blood cell, hematology

Abstract:0625**THE ACCURACY OF NON INVASIVE TEMPERATURE MEASUREMENTS IN EMERGENCY DEPARTMENT**

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Introduction: Temperature measurement is an essential component of diagnosis and patient management in emergency departments. There are many technics and routes for measuring temperature, which can be classified into two major groups; invasive and non-invasive. The rectal route has been considered to be the gold standard in clinical practice. However, this method is not useful in emergency departments because of patients' discomfort, time and requirement of long disinfection time of thermometer. Further, insulation against feces or cool blood returning from the lower extremities can affect the accuracy of measurement. Due to these limitations, usually other non-invasive measurements are used as a rapid, practical and sterile method in busy emergency department settings. In this paper, we aim to describe the accuracy of tympanic, axillary and temporal artery measurements compared to rectal measurement to reflect core temperature.

Methodology: Across-sectional, observational study was conducted in the emergency department of Ankara University School of Medicine between 27/07/2014 and 01/08/2014. Patients admitted and treated with any complaint included in the study after their verbal informed consent was taken. Rectal, axillary, tympanic and temporal artery temperature measurements were performed and results were recorded by the same nurse at the same time. Normal range of body temperature was accepted between 35°C and 38,3°C. The data was analysed by SPSS ver. 20.0 software.

Results: A total of 61 patients were enrolled in the study. There was no hypothermic patient. With intraclass correlation coefficient analysis, the temperatures measured with temporal artery method were correlated to strong with rectal measurement and with the axillary and tympanic methods correlated to moderate. The cut-off value was estimated as 37.95 in the hyperthermia

of tympanic and axillary measurement and as 38.75 in the temporal artery measurement. The measurements examined the differences between medians, and for this purpose, 38.3°C was accepted as limit. It was estimated that tympanic scans showed 0.5°C lower, axillary scan 0.4°C lower in normothermia and 0.2°C in hyperthermia, and temporal artery scans 0.1°C higher in normothermia and 0.3°C higher in hyperthermia. Bland-Altman plots illustrate the temperature-related influence on the magnitude and the direction of the difference between tympanic measurements, axillary measurements, and temporal artery measurements.

Conclusion: The study was aimed to determine the best non-invasive temperature measurement method available in emergency department. Although there is no statistically significant difference between methods, the temporal artery thermometry has the potential to replace rectal thermometer in busy emergency department settings.

Keywords: Temperature Measurement, Temporal Artery, Emergency

Abstract:0633

IMPORTANCE OF MEAN PLATELET VOLUME IN PATIENTS WITH INITIAL DIAGNOSIS OF VENOUS THROMBOEMBOLISM

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Objective: It is to determine the prevalence of early period thrombus in patients to be evaluated on suspicion of venous thrombus and to show the usability of in order to determine a possible thromboembolic complication as well as to put forth the prognostic marker importance of mean platelet volume (MPV) for patients who are treated and are followed with venous thrombus.

Material and Method: The Cases in the study consisted of patients who were prediagnosed with VTE during January 1st, 2007 and December 31th, 2011 at Ankara University School of Medicine Ibn-i Sina Hospital Emergency Department according to the Venous Thromboembolism Risk Evaluation Form. Control group was formed from patients who were followed up in the emergency department of our hospital with a diagnosis other than VTE. Patients were determined according to inclusion and exclusion criteria. SPSS 15.0 for Windows software was used for statistical analyses. P<0.05 value was accepted to be statistically significant.

Results: The 426 patients were included in the study with VTE prediagnosis and 300 were included as control group. Of the VTE patients, 210 (49.2 %) were female, 217 (50.8 %) were male. Of the control group patients, 169 (56.3 %) were female and 131 (43.7 %) were male. 163 of the VTE patients were diagnosed with DVT, 81 were diagnosed with PE and 13 were diagnosed with DVT+PE. While the MPV value was determined to be high and statistically significant for the patient group with DVT diagnosis, all three parameters were determined to be statistically significant in the PE patient group. When the cut-off value of MPV is taken as 7,3 fL for DVT, sensitivity and specificity are calculated as 74 % and 76 % respectively. A negative correlation has been determined between thrombocyte and MPV. When

d-dimer cut-off is taken to be over 500 ng/mL for DVT Cases, sensitivity (diagnosis success rate) was calculated as 73 % whereas specificity (exclusion success) was calculated as 23 %. In control group, DVT, PE and DVT+PE patients an increase of PLT, MPV values were observed.

Discussion: Parameters to be used in the prediagnosis and diagnosis stages of VTE Cases is important for the clinician to show prevalence and prognosis. When the numerical values are examined, it is thought that the precursors status of MPV values regarding VTE prevalence will become clearer with the increase of the Case series.

Keywords: Emergency, MPV as marker, VTE

Abstract:0790

ASSESSMENT OF ISCHEMIA MODIFIED ALBUMIN LEVELS IN RENAL INFARCTION MODEL

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Objective: Renal infarction is a frequently misdiagnosed condition. Estimated incidence of renal infarction in emergency department is %0.004-0.007. It may cause mortality and severe morbidity if treatment has delayed. Although this clinical importance still no marker invented to diagnose or exclude renal infarction. In this experimental study we have aimed to show utility of IMA that demonstrated elevation of serum levels in several ischemic conditions in excluding diagnosis of renal infarction.

Materials-Methods: Eighteen Wistar Albino rats randomly divided into three groups (healthy control, sham, ischemia). We have created an experimental renal infarction model in ischemia group and compared IMA levels between these three groups. In the ischemia group renal infarction has been proven histopathologically. Difference of IMA levels between groups were compared with Mann-Whitney U test and Kruskal-Wallis variant analysis and NCSS 2007&PASS 2008 Statistical Software used for statistical analyses. Significance level was set as p<0,01.

Results: Histopathological evaluation demonstrated renal infarction in ischemia group and normal kidney tissue in sham group. Mean IMA levels has been measured as: Control group; 0,45±0,02, Sham group; 0,68±0,02, Ischemia group; 0,64±0,01. The IMA levels has found statistically significant between all three groups (p=0,004).

Conclusion: The results from this experimental study showed that serum IMA levels has significantly increasing in the condition of renal infarction. Further experimental and clinical studies needed to support the clinical utility of IMA to exclude renal infarction.

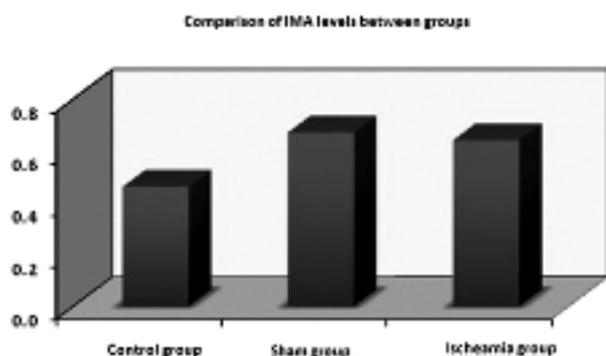
Keywords: renal infarction, ischemia modified albumin

Table 1. Comparison of IMA levels between groups

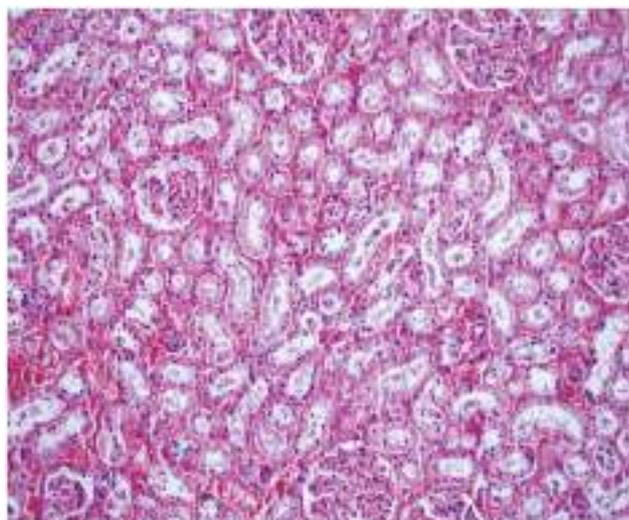
	IMA		*p
	Mean \pm SD	Median	
Control Group	0,45 \pm 0,12	0,48	
Shock Group	0,63 \pm 0,12	0,67	0,002**
Ischaemia Group	0,64 \pm 0,11	0,64	
Paired comparisons: *p			
Control * Shock	0,001**		
Control * Ischaemia	0,001**		
Shock * Ischaemia	0,004**		

Statistical assesment of Results:

Comparison of IMA levels between groups

**Figure 1.** Comparison of IMA levels between groups

Microscopic view of renal infarction

**Figure 2.** Histological findings of renal infarction.(x100 hematoxylin-eosin stain)

Abstract:0058A

PATIENT SATISFACTION IN THE IRAQ HEALTH SYSTEM: EMERGENCY DEPARTMENT IS A GOOD EXAMPLE

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Introduction: Patient centred healthcare is the corner stone of the health system, at meantime the patient satisfaction is one of the most important indicators, can influence the health system direction and itself can be influenced by many factors. No more focusing on disease management as main target of our healthcare, it is the time to redirect our steps.

The study was done to show the real relationship between patient and health staff from patient and /or relative point of view. It's very important that healthcare providers should play the role of patients to imagine the magnitude of their needs

Method: Data were collected by using structured questionnaire, random sample was taken of 2100 patient /or relative from Emergency Departments of 3 teaching hospitals(AlYarmuk, Alkindy and Basrah teaching hospitals) and 2 general hospitals(Imam Ali and Sadr general hospitals), All aforementioned hospitals are public.

Results: The majority of patients and/or relatives are less or not satisfied with communication skills of healthcare staff(Doctors, nurses and others),this includes information exchange with them,instruction of using medicine or follow up of their conditions, the most important issues like procedures that to be done for patients, and the prognosis and need for next visit.

Conclusion: The efforts should be performed to improve the communication skills of healthcare staff and psychological support training of staff to deal with violence tending patients and relative, especially those who loss their relatives!

Keywords: Satisfaction,communication,questionnaire,patient centred care

Abstract:00370P

MEAN PLATELET VOLUME; IS INFLAMMATORY MARKERS IN ACUTE APPENDICITIS?

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Objective: It was aimed in this study to investigate whether mean platelet volume (MPV) can be used as an inflammatory marker for the diagnosis of acute appendicitis (AA). It was also aimed to study the relationship between AA and white blood cell (WBC) count, neutrophil count and C-reactive protein (CRP).

Method: This retrospective study included Cases operated with appendectomy between 11 April 2011 and 1 July 2013. Based on the pathology examination, the appendicitis Cases were grouped as uncomplicated, complicated, and non-appendicitis Cases. The patients were examined with respect to age, gender, WBC count, neutrophil count, and MPV and CRP levels.

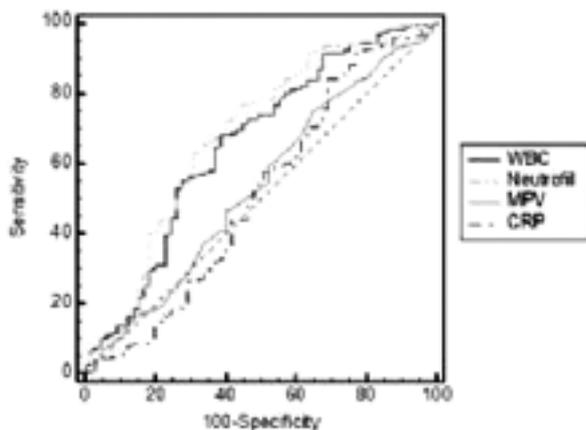
Results: Our study included a total of 275 patients. The study population consisted of 90 (32.7%) uncomplicated appendicitis Cases, 120 (43.7%) complicated appendicitis Cases, and 65 (23.6%) non-appendicitis Cases. It was found that uncomplicated and complicated appendicitis Cases had a significantly higher WBC and neutrophil counts than non-appendicitis Cases (for WBC count $p=0.001$; for neutrophil count $p<0.001$). MPV levels were not statistically different between the groups ($p=0.478$).

The neutrophil count had a sensitivity of 76.19%, a specificity of 56.92%, a PPV of 85.11%, and a NPV of 42.53%; WBC count had a sensitivity of 68.10%, a specificity of 61.54%, a PPV of 85.12%, and a NPV of 37.38%; MPV level had a sensitivity of 74.76%, a specificity of 35.38%, a PPV of 78.89%, and a NPV of 30.26%; and CRP level had a sensitivity of 84.29%, a specificity of 30.77%, a PPV of 79.73%, and a NPV of 37.74%.

Conclusion: Elevated WBC and neutrophil counts may be used as diagnostic tests in diagnosis of acute appendicitis, while CRP and MPV levels are not useful as diagnostic markers for acute appendicitis.

Keywords: Acute appendicitis, C-reactive protein, leucocyte count, mean platelet volume

Receiver Operating Characteristic (ROC) Curve of MPV, WBC, Neutrophil and CRP



MPV: mean platelet volume; WBC:white blood cell; CRP: c-reactive protein

Table 1. Comparison of CRP parameters between pathological diagnosis groups

	Nonkomplike apandisit (n=90)	Nonkomplike apandisit (n=90)	Komplike apandisit (n=120)	Komplike apandisit (n=120)	Apandisit değil (n=65)	Apandisit değil (n=65)
	Min-Max	Medyan [% 25-75 yüzdelikler]	Min-Max	Medyan [% 25-75 yüzdelikler]	Min-Max	Medyan [% 25-75 yüzdelikler]
CRP	0-341.66	13.05 [3.21-39.65]	0.10-431.80	17.76 [3.62-52.35]	0.16-443.00	17.65 [2.24-70.78]

P=0.555 CRP: c-reactive protein

Table 2. Comparison of MPV, neutrophil and WBC parameters between pathological diagnosis groups

	Nonkomplike apandisit (n=90)	Komplike apandisit (n=120)	Apandisit değil (n=65)	P
WBC	14.048 ± 3.735	14.333 ± 3.727	12.112 ± 4.467*,†	0.001
Nötrofil	10.945 ± 3.73	11.227 ± 3.399	8.891 ± 4.328*,†	<0.001
MPV	10.402 ± 0.934	10.272 ± 0.935	10.423 ± 1.000	0.478

*Differences with uncomplicated appendicitis, †: Differences with complicated appendicitis Test values were expressed mean ±SD MPV: mean platelet volume; WBC:white blood cell.

Table 5. The ROC analysis results pertaining to continuous variables

	Cut-off	AUC (p)	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	Accuracy	LR+	LR
MPV	10.8	0.532 (0.4455)	74.76 [68.32 - 80.49]	35.38 [23.92 - 48.23]	78.89 [72.56 - 84.35]	30.26 [20.25 - 41.87]	65.45	1.16	0.71
CRP	59.41	0.514 (0.7627)	84.29 [78.65 - 88.93]	30.77 [19.91 - 43.45]	79.73 [73.83 - 84.81]	37.74 [24.67 - 52.25]	71.64	1.22	0.51
Nötrofil	8.23 x103/μL	0.677 (<0.0001)	76.19 [69.84 - 81.78]	56.92 [44.04 - 69.15]	85.11 [79.20 - 89.87]	42.53 [31.99 - 53.59]	71.64	1.77	0.42
WBC	12.51 x103/μL	0.654 (0.0002)	68.10 [61.33 - 74.34]	61.54 [48.64 - 73.35]	85.12 [78.82 - 90.13]	37.38 [28.18 - 47.31]	66.54	1.77	0.52

Test values were expressed 95% confidential interval MPV: mean platelet volume; WBC: white blood cell; CRP: c-reactive protein

Abstract:00780P

CONTINUOUS THORACIC PARAVERTEBRAL INFUSION IN MODIFIED RADICAL MASTECTOMY: RANDOMIZED, PROSPECTIVE, DOUBLE BLINDED STUDY TO COMPARE EFFICACY OF ROPIVACAINE WITH AND WITHOUT FENTANYL

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Objectives: To determine postoperative VAS score and fentanyl consumption after modified radical mastectomy (MRM) in thoracic paravertebral infusion (TPI) of ropivacaine with and without fentanyl.

Materials & Methods: 40 women, ASA I & II were randomly allocated into 2 groups of 20 each.

1. Group R (Ropivacaine):- Paravertebral infusion of ropivacaine 0.2 % at the rate of 0.1ml/kg/hr 2hr after the initial block for 24hrs post op.

2. Group R+F (Ropivacaine Fentanyl):- Paravertebral infusion of ropivacaine 0.2 % + fentanyl 2µg/ml at rate of 0.1ml/kg/hr 2hr after the initial block for 24hrs post op.

Parameters recorded: • VAS (Visual Analogue Scale) at rest and arm movement: at recovery room, 30, 60,90,120 minutes, 8pm on day of surgery, 8am & 8 pm on POD1, 8am on POD2 and at discharge.

Results: • VAS was significantly lower in group R+F at 8am on POD1 both at rest (p = 0.016) and on movement (p = 0.042).

VAS score on movement was also significantly lower in group R+F at 60 min after arrival to PACU ($p = 0.010$)

• VAS was < 3 at all time intervals in both the groups.

Conclusions: Overnight infusion of fentanyl and ropivacaine in TPI for MRM results in reduced pain both at rest and on movement.

However as VAS remained < 3 in both the groups at all time intervals, addition of fentanyl 2µg/ml to 0.2% ropivacaine at 0.1ml/kg/hour seems to offer no advantage over plain solution of 0.2% ropivacaine at same infusion rate.

Keywords: thoracic paravertebral block, breast surgery, anaesthesia

Abstract:01310P

EVALUATION OF THE CELLULITIS MANAGEMENT EFFICACY AND SAFETY IN A OBSERVATION UNIT

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Introduction: Cellulitis is a common condition which is relatively easy to manage. However, as antibiotic treatment is administered intravenously, it often requires a short hospital stay. Cellulitis is commonly included in the list of admissible conditions in observation units (OU) worldwide. This study aims to describe the epidemiology of cellulitis, outcomes of cellulitis management, predictors of failed treatment at OU, and predictors of a positive blood culture for cellulitis in an observation unit in the United States.

Methods: This is a primary study conducted in an OU of an acute care hospital in the United States. Data on the following independent variables was prospectively collected by an emergency department physician: demographic characteristics of patients with cellulitis, comorbidities, history of prior treatment, selected physical and laboratory findings. Data on the following dependent variables were likewise prospectively collected: cost, reattendance, treatment failure, and a positive blood culture.

Results: There were 435 patients included in the study, 46% of whom were males and 54% females. The most common co-morbidities observed were hypertension (35.0%) and diabetes (23.7%). The predictor of failed OU treatment of cellulitis includes positive blood culture (95% CI OR >1) (Figure 1). 10% of patients with cellulitis had a history of failed prior treatment or recurrent cellulitis/abscess. Mean charges was significantly greater for those admitted to the general ward than for those admitted to the OU. Multivariate analysis showed no significant difference in re-attendance rates between patients admitted at the OU and those in the general ward ($p>0.05$). Increasing age and WBC were significantly associated with a positive blood culture (Fig. 2).

Conclusion: The OU is as efficacious as the inpatient ward in the management of cellulites. There is no significant difference in re-attendance rates between patients admitted at the OU and those in the general ward ($p>0.05$). Increasing age and leucocytosis were associated with a positive blood culture.

Keywords: Cellulitis, Observation Unit, predictors

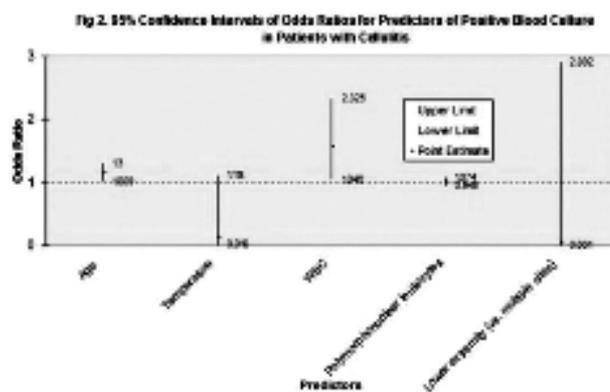


Figure 1.

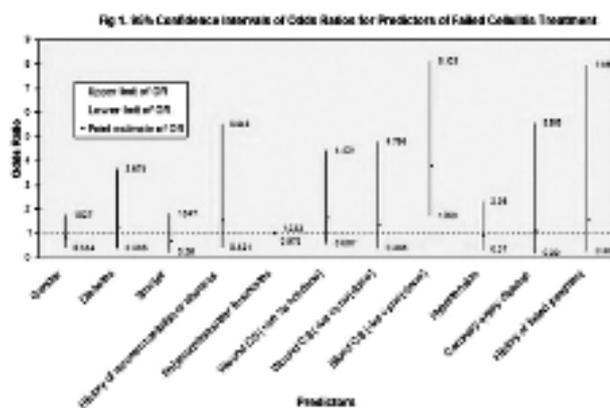


Figure 2.

Abstract:0350

THE THOUGHTS OF EMERGENCY PHYSICIANS ABOUT PALLIATIVE CARE: EVALUATION OF AWARENESS

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Introduction: Palliative care is an increasingly important issue in emergency departments throughout the world. The present study aimed to evaluate the perspectives and experienced problems of emergency physicians about palliative care.

Material- Method: A questionnaire that includes main topics of palliative care was prepared and it was sent through internet access to all emergency physicians who work in Turkey. The whole data were analyzed statistically by PASW 18. SPSS software 15.0 for Windows.

Results: 95 emergency physicians participated to study. Most respondents reported that they did not get any training about palliative care (77%). Most agreed that special training is needed to acquire palliative care skills (91%) and 69% of emergency physicians want to get training on palliative care. Additionally, possible problems about providing palliative care in ED were presented in Table 1.

Conclusion: Increasing awareness about palliative care is important in emergency departments and makes it possible for early recognition and appropriate management of palliative care patients. The present study not only indicates importance of

education about palliative care but also contributes about increasing awareness on this issue.

Keywords: emergency department, palliative care, education

Table 1. The evaluation of problems about palliative care patients

Possible Problems of PC patients	Count (Percentage)
They stay for a long time in ED.	90 (%94.7)
They come frequently to ED.	82 (%86.3)
Other departments don't want to admit them	73 (%76.8)
The patient relatives often have unrealistic hopes or expectations.	58 (%61.6)
It is not provided to require enough physiological support to patients.	30 (%31.6)
Often, there are a lot of unnecessary tests on palliative care patients.	16 (%16.8)
The management of pain carries many problems	11 (%11.6)

(PC: Palliative Care, ED: Emergency Department)

Abstract:0642

CONTRAST INDUCED NEPHROPATHY DUE TO DIAGNOSTIC COMPUTERIZED TOMOGRAPHY IN EMERGENCY DEPARTMENT

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Objective: Contrast induced nephropathy is third most frequent form of the hospital-acquired acute kidney injury. It causes prolonged hospitalization, higher rates of complications and increased mortality. The aim of this study is the frequency of diagnostic contrast enhanced computed tomography contrast nephropathy in patients in the emergency department and to investigate the risk factors taken.

Material and Method: In this study, demographic characteristics, contrast induced nephropathy incidence and risk factors of the patients that are admitted to Ankara Atatürk Training and Research Hospital emergency department between 1 March 2013- 1 March 2014. These patients who were admitted to emergency department because of traumatic or non-traumatic causes, had contrast enhanced computed tomography but they didn't have prevention techniques for contrast induced nephropathy.

Results: There were 283 patients in our study. They were older than 18, had normal (<1,2 mg/dL) or high (≥1,2 mg/dL) basal creatinin levels. 64% of these patients were male and 36% were female. 11.7% of all patients developed contrast induced nephropathy. 13.1 % of the patients who have had contrast induced nephropathy, had normal (<1,2 mg/dl) basal creatinin level and 86.9% of these patients had high (≥1,2 mg/dl) basal creatinin level. In patients between 18-30 years, the incidence of contrast induced nephropathy was 3% and in patients who were 80 years and older was 23.8%. 51.9%(147) of our patients had GFR < 60 ml/min and 48.1% (136) had GFR ≥ 60 ml/min. The incidence of contrast induced nephropathy in the patients whose GFR <60 ml/min was 18.4% and in the patients whose GFR ≥ 60

ml/min was 4.4%. The most frequent comorbid disease was HT and the most strong relationship between the rise of creatinin levels after contrast media administration and comorbid disease was chronic renal disease in the patients who were consisted in this study. 92,9% of our patients received 100 ml, 7.1% received 200 ml contrast media. 10.3% of the patients who were received 100 ml and 18.2% of the patients who received 200 ml contrast media had contrast inuced nephropathy. The most frequent computed tomography that our patients have received was thorax CT with the rate of 60.8%.

Conclusion: Chronic renal disease, hypertension, coronary artery disease and congestive heart failure with a history and GFR <60 ml / min in the group with a marked increased risk of contrast nephropathy were determined. Therefore, taking into account the risk of contrast-enhanced examinations in the emergency room asking for contrast nephropathy risk patients should be treated more carefully.

Keywords: Contrast Induced Nephropathy; Risk factors; Emergency department

Abstract:00960P

DIAGNOSTIC VALUE OF MEAN PLATELET VOLUME IN ACUTE APPENDICITIS FOR EMERGENCY DEPARTMENT PATIENTS

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Introduction: The diagnosis of acute appendicitis for patients referred to the emergency department with the complaint of abdominal pain remains challenging. In this study, we investigated the diagnostic value of mean platelet volume in acute appendicitis.

Methods: This clinical research study was performed retrospectively and included patients referred to the emergency department between January 1 and December 31, 2013, with the complaint of abdominal pain and were then discharged without a specific diagnosis in comparison to patients with a proven diagnosis of acute appendicitis. Control patients were selected using a randomization method from among patients of the same age and gender as acute appendicitis patients. The acute appendicitis group was subdivided into complicated and noncomplicated Cases according to the pathology results. The Mann-Whitney U test for continuous variables and the chi-square test for categorical data were used.

Results: This clinical research study was performed with 316 acute appendicitis patients and an equal number of control patients; 188 of the patients were male. Among the acute appendicitis patients, 67 presented with complicated acute appendicitis and 249 with noncomplicated acute appendicitis. The median mean platelet volume of the acute appendicitis versus control patients was 8.03 fL (IQR: 1.86; min: 5.53, max: 14.40) and 8.10 fL (IQR: 1.38; min: 5.70, max: 13.90), respectively (p=0.193). The platelet counts in the complicated and noncomplicated groups were 235 K/μL (IQR: 70; min: 116, max: 649) and 261 K/μL (IQR: 87; min: 124, max: 537), respectively (p<0.001).

Conclusion: Mean platelet volume is not a useful guide in the diagnosis of acute appendicitis for patients referred to the emergency department with the complaint of abdominal pain.

Keywords: mean platelet volume, acute appendicitis, surgery, emergency department

Pain Management in Emergency Medicine

Abstract:0792

DETERMINATION OF THE EFFECTS OF CHANGE IN ANXIETY LEVEL ON PAIN PERCEPTION IN PATIENTS WHO PRESENT TO EMERGENCY DEPARTMENT DUE TO ACUTE PAIN

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Background: Pain is the most common reason for ED visits. Pain related anxiety is considered that is a common condition in the emergency department. The aim of this study is to determine the level of pain and anxiety, and to investigate the effect of standard analgesic treatment and additional anxiolytic treatment on pain and anxiety in patients who presented to emergency department due to acute pain.

Method: This is a prospective, randomized, controlled, double-blind clinical study. The study group of patients was given deksketoprofen trometamol (DT) 50mg/2ml plus midazolam 0,01mg/kg, the control group was given DT 50mg/2ml. At 0th, 30th, 60th, 120th minutes of treatment, patients' pain and anxiety levels were measured by a horizontal 100 mm VAS (visual analogue scale). Patients' overall anxiety levels were measured with the hospital anxiety depression scale. After 60 minutes, fentanyl 1 mcg/kg i.v. was given as rescue medication to the patients stating insufficient improvement in pain reduction. The primary outcome measure was the comparison of pain and anxiety change at 0-60 minutes. The secondary outcome measure was the comparison need for rescue treatment and satisfaction of treatment.

Findings: The study was conducted with 180 patients. The median pain change was 37.5 (23-59.5) for the DT group (n=90) and 37.5 (16.7-61.2) for the DTM (DT plus midazolam) group (n=90) (p=0.470). The median anxiety change was 14.5 (0-51.7) for the DT group and 22 (0-54) (p=0.681) for the DTM group. 26.7% of participants in the DT group needed additional treatment at the 60th minute, compared to 40% in DTM group (p=0.058). 64% of patients in DT group and 57% of patients in DTM group reported that they were very satisfied with the treatment (p=0.770). 90% of patients in DT group and 89% of patients in DTM group reported that they would prefer the same treatment in future emergency department visits (p=0.802).

Conclusion: In patients who present to emergency department due to acute pain complaint, adding anxiolytic treatment to analgesic treatment does not contribute to reduction of pain and anxiety.

Keywords: Acute pain, Analgesia, Anxiety, Emergency Medicine, Pain management

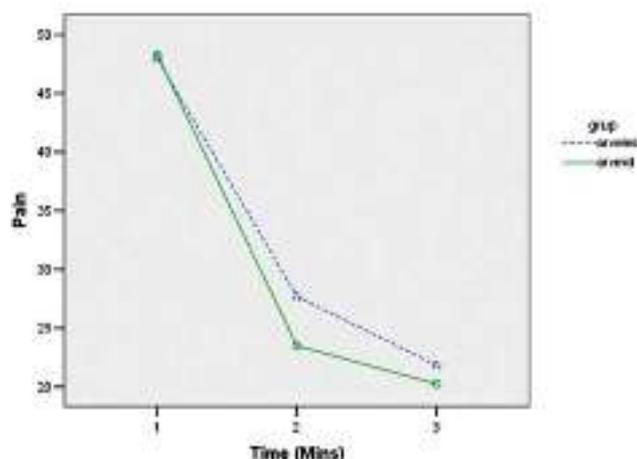


Figure 1. DT and DTM Anxiety Change (Delta) Graph

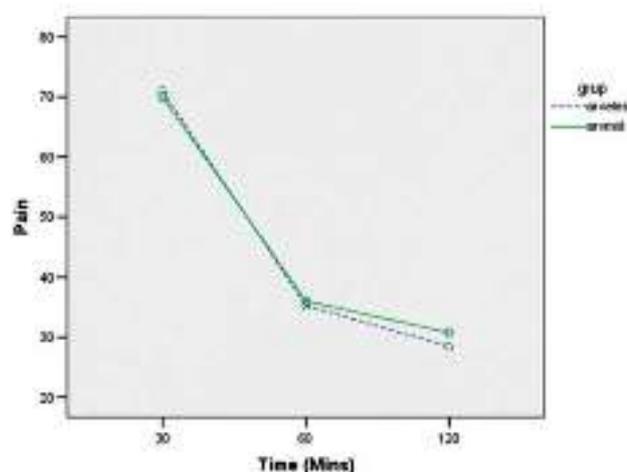


Figure 2. DT and DTM Pain Change (Delta) Graph

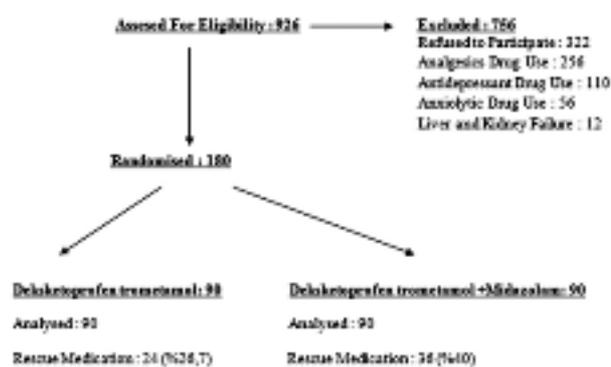


Figure 3. Patient Flow Chart

Abstract:0921

THE IMPACT OF INTERCULTURAL SENSITIVITY SCALE LEVEL ON COMMUNICATION PROBLEMS ACCORDING TO THE NATIVE LANGUAGE IN EMERGENCY HEALTH WORKERS

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Introduction: In health care settings, cultural awareness, sensitivity, competence of behaviors are necessary because even such concepts as health, illness and care mean different things to different people. Knowledge of cultural customs enables health care providers to provide better care and help avoid misunderstandings among staff, residents/patients and families. The aim of this descriptive, cross-sectional study to evaluate the intercultural sensitivity level in health workers according to variables of sociodemographic and the impact of level of Intercultural Sensitivity Scale on communication problems according to the native language.

Method: This descriptive, cross-sectional study was conducted by applying sociodemographic questionnaire form to Emergency department staff, 2014. We used "Intercultural Sensitivity Scale" that developed by Chen and Starosta. Sensitivity level of intercultural communication in accordance with certain variables were analyzed by SPSS18 Programme.

Results: The study included 113 emergency department staff. There were 50,4 %nurses, 7%doctors, 32.6% other medical staff (technicians, hosts). Our 66.4% participants were born in Ege region, 13.3% participants were born in Southeast and Eastern Anatolia region. The 94.7% participants' native language was Turkish, 3.5% Kurdish, 1.8% Arabic. Our 68.9% participants have been spoken one more language except their native language, 51.3% participants' answered often-to-often experienced problems related to language with the patients who could not speak Turkish. 22.1% participants need one more language to can communicate with patients. The most needed language was Kurdish, English, Arabic respectively. 59.3% participants' answers were if patients could not speak Turkish they could understood patients by relatives who speak Turkish or nonverbal communication. 69.9% participants' answers that when they could speak patients' native language it effects positively on behaviors, increase of reliance, decrease of anxiety and the adapted to suggestion quickly. 42.5% participants' opinion/suggestion were institutes must have certified full time translator for problems related to language with patients. 77.9% health workers could not know to translation service number of Turkish Health Ministry. The participants levels of intercultural sensitivity were found Cronbach's alpha reliability coefficient as 0.74. The analysis between intercultural sensitivity levels and native language was significant difference $F=3.88$, $p=0.02$.

Discussion: To understand the impact of language and culture on health care, it's important to look at the issues that influence health care. Speaking different languages, using different non-verbal expressions or cues can lead to communication barriers that may impact the service being provided. Addressing such barriers requires the cooperation of the patient, the provider and the organization. Intercultural communication sensitivity has shown itself as a substantially strong demand and requirement in globalization, international relations and different cultures become increasingly more intense. Therefore to analyze the level

of intercultural sensitivity studies carries a key quality reserve both for academically/socially. Our study's result showed that the communication is very important to feel safe and better healthcare for both health workers especially for emergency staff and patients.

Keywords: Intercultural Sensitivity, Communication Problems, emergency department, safe and better healthcare

Pediatric Emergency Medicine

Abstract:0563

THE COMPARISON OF THREE PEDIATRIC CLINICAL DEHYDRATION SCALES, BEDSIDE ULTRASONOGRAPHIC MEASUREMENT OF THE IVC COLLAPSIBILITY INDEX, INFERIOR VENA CAVA/ AORTA DIAMETER INDEX, AND PERFUSION INDEX IN PEDIATRIC EMERGENCY DEPARTMENT

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Objective: To prospectively validate three popular clinical dehydration scales, bedside ultrasonographic measurement of the IVC (Inferior Vena Cava) Collapsibility Index, inferior vena cava/aorta diameter index and perfusion index in children with vomiting or diarrhea relative to the criterion standard of percent weight change with rehydration.

Methods: We prospectively enrolled a non-consecutive cohort of children ≤ 18 years of age with an acute episode of diarrhea or vomiting. Patient weight, clinical scale variables and, the IVC Collapsibility index, inferior vena cava/aorta diameter index and the perfusion index were recorded before and after fluid resuscitation in the emergency department and upon hospital discharge. The percent weight change from presentation to discharge was used to calculate the degree of dehydration, with a weight change of $\geq 5\%$ considered significant dehydration. Receiver operating characteristics (ROC) curves were constructed for each of the parameters. Sensitivity and specificity were calculated based on the best cut-points of the ROC curve.

Results: We enrolled 54 patients and 42 patients had complete data for analysis. Of these, 52.3% had significant dehydration based on our criterion standard. The area under the ROC curve (AUC) of the Clinical Dehydration Scale (CDS), Gorelick and The World Health Organization (WHO) scales, the IVC Collapsibility index, inferior vena cava/aorta diameter and the perfusion indexes were 0.583, 0.525, 0.575, 0.571, 0.575 and 0.625, respectively ($p < 0.05$). We determined the highest sensitivity in CDC (91.7%) and highest specificity in IVC Collapsibility (85%).

Conclusion: The Clinical Dehydration Scales, the IVC Collapsibility index, inferior vena cava/aorta diameter index and perfusion index alone were not enough predictors of dehydration in children with diarrhea or vomiting. In our opinion, the combined use of CDS and caval index would be more useful for the emergency physicians in the detection of dehydration in children.

Keywords: Dehydration, Clinical Dehydration Scale, bedside ultrasound, caval index, perfusion index, pediatric emergency

Pre-Hospital/EMS/Out of Hospital

Abstract:0463

RELATIONSHIP BETWEEN HEALTH AND TRAUMA SYMPTOMS AMONG THE NON-CLINICAL COMMUNITY SAMPLE

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Proper psychiatric assessment is crucial for management of emergency department (ED) patients, regardless of their referral complaints. The importance of ED evaluation of psychiatric patients has been previously described in the literature, and psychiatric training for ED workers is described as a necessity for the proper management of such patients (1). Poor general and mental health were displayed as important reasons for frequent ED visits (2). Aim of this study was to demonstrate the relationship between health and psychiatric trauma symptoms.

103 participants were recruited through flyers posted around a large southwestern university and the surrounding community. Respondents were mailed the research packet which included an information sheet, a consent form, and the survey. This population survey included two measurement tools; the Short Form Health Survey to assess general and mental health perception, the Trauma Symptom Checklist-40 to assess a range of traumatic stress symptoms including dissociation, anxiety, depression, sexual abuse trauma index, sleep disturbances and sexual problems (3).

About half of the participants were female. Approximately three quarters of the participants (78%) were Caucasian, 7% were Hispanic, 8% reported other ethnicities. 54% of the participants reported having children. 66% of the participants reported being middle class. Two multiple regression analyses were performed, using health scores as the dependent variables and trauma symptoms as the independent variables. In the first model, trauma symptoms entered simultaneously as an independent variable to predict poor general health as a dependent variable. This model reached significance $F(6, 103) = 6.130, p < .001$ and predicted 28% of the variance. Specifically, anxiety symptoms were the only significant variable that is predictive for poor health ($\beta = -.73, p < 0.05$). In the second model, trauma symptoms entered simultaneously to predict poor mental health. This model also reached significance $F(6, 103) = 12.25, p < .001$ and predicted 44% of the variance. Specifically, depression symptoms were the only significant variable that is predictive for poor mental health participants ($\beta = -.41, p < 0.001$).

Patients refer to an emergency department for various reasons, and proper management of a patient starts with adequate anamnesis and a symptoms checklist including psychiatric evaluation. Our survey results demonstrate the importance of psychiatric symptoms and their roles for predicting people's general and mental health statuses. Emergency physicians should be aware of these symptoms and their correlation with overall health status of a patient, which was previously described in the literature as a vital factor for frequent ED visits. However, more research is

needed to understand the impact of depression and anxiety on human health.

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Keywords: general health, sf 36, tsc-40, anxiety, depression

Abstract:0057A

SYNERGISTIC LIFE-SAVER BANDAGE FOR PRE-HOSPITAL CONDITIONS AND TRAUMA CARE

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Blood loss is the major cause of death in both civilian and battlefield traumas. In the past, methods such as pressure dressing and absorbent materials were the only approaches towards the reduction of blood loss after major traumatic events. Currently, there are a variety of bandages available on the market as the first-aid device to stop bleeding from hemorrhagic wounds caused by traumatic injuries in hospital emergency situations. However, only a limited percentage of these are available for pre-hospital emergency conditions such as accidents and warfare. In this paper, we introduce a multi-functional emergency bandage (M-FEB) which is expected to have a synergistic life-saving effect due to the co-existence of a set of regular features within a single design, rendering it unique.

M-FEB is an anti-microbial first-aid device with optimized construction by means of stress-strain curves, inorganic anti-bleeding nano-structures having an almost infinite life time, and a layer prohibiting the pathogen passage in both directions. These complementary features are considered vital by the practitioners in hostile pre-hospital emergency conditions and get together to form a unique emergency bandage within a single design, which can be applied onto the wound with a single hand even by an injured person. In addition, visual aids printed on the fabric are provided for precise, accurate, and easy application in order to achieve the optimum pressure on the wound while the fabric slippage is avoided by the coated silicon stripes around the wound dressing.

Keywords: warfare, pre-hospital, emergency, multi-functional, first aid, bandage

Emergency bandage construction

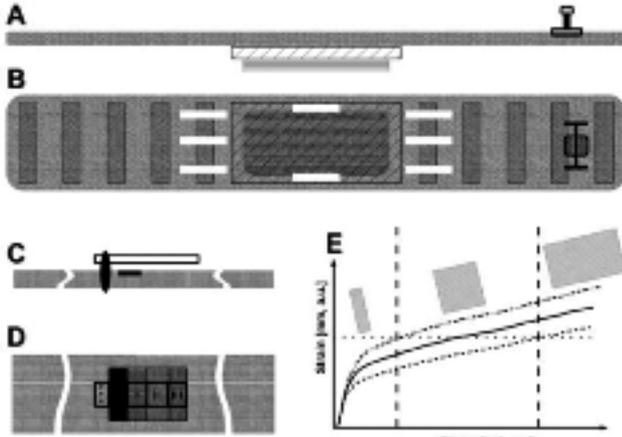


Figure 1. A is the cross-section, B is the top view of A, C shows the calibration display, D is the top view of C, E is the optimum stress-strain curve showing the aspect ratio of the printed references as a function of how much the bandage flexes

Stress-Strain curves of bandages with different behavior

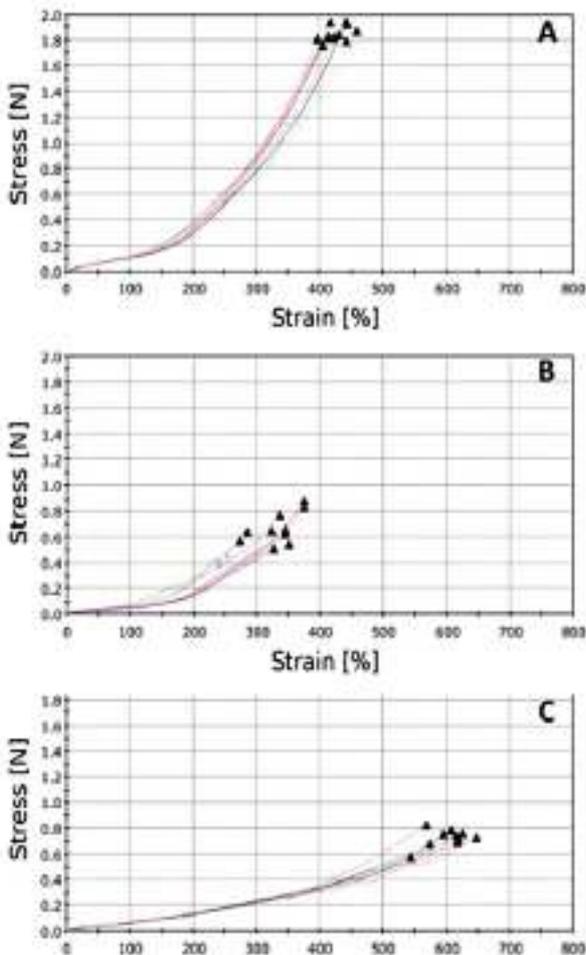


Figure 2. A shows a bandage expected to cause necrosis, B shows a fabric which is inefficient in stop bleeding, C is the optimum with flatter Young's modulus.

Research Issues & Methodology

Abstract:0298

EMERGENCY DEPARTMENT DURING LONG PUBLIC HOLIDAYS

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Objective: Literature refers to the increase in the volume of non-emergency patient visits to emergency departments during the time periods where regular clinical services are not offered or limited. The purpose of the paper is to study the impact of expected increase in the volume of patient visits in emergency department during holiday periods on physicians' tendencies regarding test and consultation requests, and the length of stay time for patients.

Methods: The study groups were composed of all patients who visited the emergency department during the nine-day public holiday due to religious festival of sacrifice –Eid al-Adha-celebrations and a nine-day non-holiday regular period. The data of patients' demographic information, reasons for their visits, patients' comorbid diseases, whether laboratory and screening tests has been performed or not, consultations, patients' length of stay and the way how their visits ended were compared statistically.

Results: For the study, 3523 (55.5%) during holiday period, 2830 (45.5%) during non-holiday period, a total of 6353 emergency department visits were recorded ($p < 0.001$). 1.9% decrease in laboratory test requests ($p=0.108$), 7.7% increase in radiology examination requests ($p < 0.001$) and 1.2% increase in consultation requests ($p=0.063$) were noticed during the holiday period. Length of stay for patients during the holiday period was 55.9 ± 75.3 minutes and 56.3 ± 71.9 minutes during the non-holiday period ($p=0.819$). The length of time for the patients for whom tests or consultations conducted was 88.6 ± 92.8 minutes during the holiday period and 92.6 ± 87.5 minutes during the non-holiday period ($p=0.224$).

Conclusion: We have observed that the number of patient visits to emergency services increases during the holidays as expected, but this increase does not lead to a similar increase in physicians test and consultation requests, expect radiology examination requests. Also the length of time for the patients in emergency services is not affected by the increase in the volume of patient visits during the holiday periods.

Keywords: consultation, emergency, holiday, length of stay, test

Abstract:0390

COMPARISON OF THE VENOUS BLOOD ELECTROLYTES AND HEMATOCRIT VALUES MEASURED BY BOTH BLOOD GAS ANALYZER AND THE LABORATORY AUTO-ANALYZER

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Background: It is important to obtain values of blood count and electrolytes accurately and early for the diagnosis and management of critically ill patients in emergency departments. Obtaining laboratory results of patients in laboratory conditions requires an average time of 30 - 45 minutes. Measurement of blood count and electrolyte values beside analyzing blood gas can be done with blood gas analyzer devices in a much shorter time. In our study, we aimed to compare values of hemoglobin, hematocrit and electrolytes (sodium, potassium, chloride) measured from venous blood samples by both blood gas analyzer device and laboratory auto-analyzer.

Material-Methods: Blood samples taken simultaneously from the same intravenous line of patients admitted to the emergency department were studied with both blood gas analyzer device and laboratory auto-analyzer in this prospective study. Hemoglobin (Hb), hematocrit (Hct), sodium (Na), potassium (K) and chlorine (Cl) values obtained from these blood samples were compared.

Results: A total of 100 patients were included in the study. There was no statistically significant difference between the measured values of laboratory (Lab) and venous blood gas measurements (Vbg) (all $p < 0.001$). Correlation coefficients of Na was $r = 0.720$, K $r = 0.785$, Cl $r = 0.790$, Hb $r = 0.757$ and Hct $r = 0.749$, respectively. Equations were created to get laboratory values from venous blood gas values. Lab Na = $Vbg Na \times 0.621 + 46.081$; Lab K = $Vbg K \times 0,23 + 1.977$; Lab Cl = $Vbg Cl \times 0.847 + 11.050$; Lab Hb = $Vbg Hb \times 0.583 + 5.015$; Lab Hct = $Vbg Hct \times 0.565 + 15.024$.

Conclusion: In our study, Na, K, Cl, Hb and Hct values of venous blood samples measured by both blood gas analyzer device and laboratory auto-analyzer were found to be positively correlated. Sodium, K, Cl, Hb and Hct values of venous blood samples can be measured by blood gas analyzer device fastly and can be used under life-threatening emergency situations and also in extremely crowded emergency departments to accelerate the patient recirculation.

Keywords: Blood gas analyzes, hemoglobin, hematocrit, sodium, potassium, chlorine

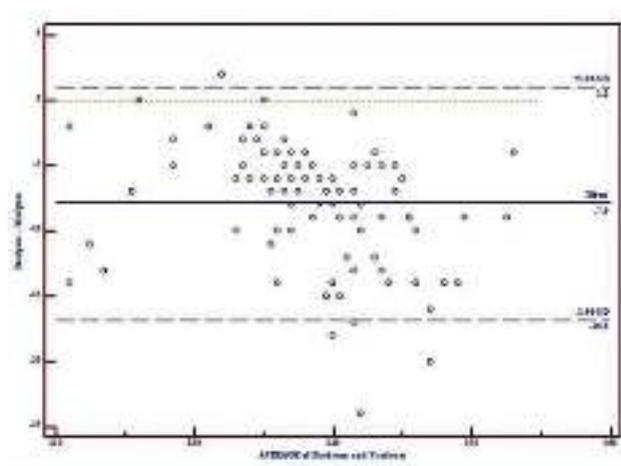


Figure 1. Bland Altman plots of laboratory and venous blood gases Na (Average vs. Difference)

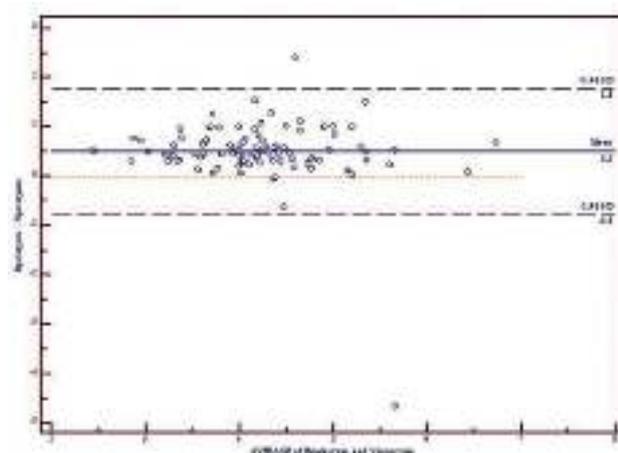


Figure 2. Bland Altman plots of laboratory and venous blood gases K (Average vs. Difference)

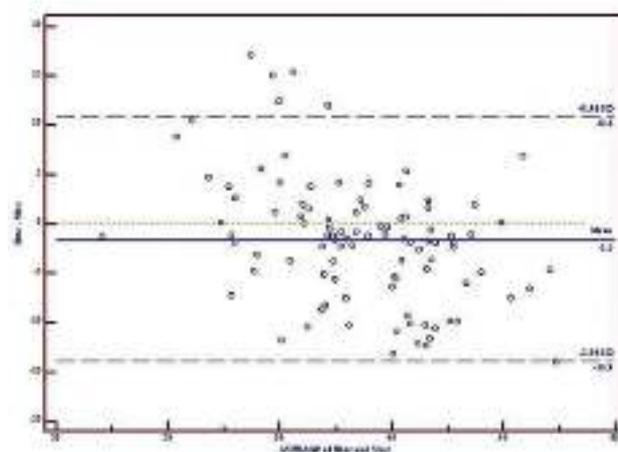


Figure 3. Bland Altman plots of laboratory and venous blood gases Hematocrit (Average vs. Difference)

Table 1. Comparison of hemoglobin, hematocrit, sodium, potassium, chlorine values measured from venous blood samples with both blood gas analyzer device and laboratory auto-analyzer

	Laboratory mean ±SD	Venous blood gas mean ±SD	MD mean ±SD	r value	p value	Blant-Altman 95% limits of agreement
Sodium	134.49±5.75	142.37±7.13	-7.9±4.6	0.720	p<0.001	-8.78 to -6.97
Potassium	4.46±0.77	3.96±0.86	0.5±0.65	0.785	p<0.001	0.36 to 0.62
Chlorine	100.70±5.9	105.8±5.96	-5.1±3.18	0.790	p<0.001	-5.73 to -4.47
Hemoglobin	12.22±2.44	12.36±3.17	-0.14±2.07	0.757	p<0.001	-0.55 to 0.27
Hematocrit	36.51±7.19	38.05±9.54	-1.54±6.32	0.749	p<0.001	-2.79 to -0.29

SD= Standart deviation; MD= Mean difference; r= Correlation coefficient

Table 2. Equations created to get laboratory values of hemoglobin, hematocrit, sodium, potassium, chlorine from venous blood gas values of them

	Regression Equation
Laboratory Sodium	Venous blood gas Na x 0.621 + 46.081
Laboratory Potassium	Venous blood gas K x 0.23 + 1.977
Laboratory Chlorine	Venous blood gas CL x 0.847 + 11.050
Laboratory Hemoglobin	Venous blood gas Hb x 0.583 + 5.015
Laboratory Hematocrit	Venous blood gas Htc x 0.565 + 15.024

Abstract:0404

A COMPARISON OF EFFICACY OF INTRAVENOUS ESOMEPRAZOLE AND RANITIDINE TREATMENT OF DYSPEPTIC PAIN: A DOUBLE-BLIND, RANDOMIZED, CONTROLLED TRIAL

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Objectives: Dyspepsia is a common presenting complaint in the emergency department (ED). Estimations of its prevalence range from 14% to 40% of healthy adults (1). Dyspepsia is associated with a complex of upper abdominal symptoms including: upper centered discomfort or pain, feeling of abdominal fullness, early satiety, abdominal distention and bloating, belching, and nausea. Treatment of these symptoms is desirable for both patient comfort and the prevention of further health problems.

Currently, PPI's and H2RB's are widely used by emergency physicians in Turkey for the treatment of patients with dyspepsia. The aim of this study was to compare the effects of intravenous esomeprazol and ranitidin for the treatment of dyspepsia in the emergency setting. Our second aim was to compare recurrent dyspeptic pain within 24 hours after discharge and cost of treatments in the treatment of dyspepsia. To the best of our knowledge, this is the first placebo randomized double blinded clinical trial to compare the efficacy of these two medications in this clinical setting.

Methods: This double-blind, randomized, controlled study was conducted in the emergency department of an urban tertiary-care hospital from March 2013 to June 2014. Patients were eligible for inclusion if they were aged 18 years or older, 60 years or older, had dyspspsia [VAS (visual analog scale) score >5] during their ED episode of care for which the attending physician recommended medication. Patients were excluded if they had the exclusion criteria. The need for identification and enrollment of participants by staff with conflicting work pressures resulted in recruitment of a convenience sample of patients.

Interventions: The study drugs used were esomeprazol, ranitidin and hidrotalcid. The study drugs were prepared for administration under sterile conditions by an emergency nurse's independent to the study. All patients eligible for the study were randomized to one of three groups:

First Group: 40 mg Esomeprazol with 5 cc syringe in 150 ml normal saline given as a slow intravenous infusion over 15 minutes and p.o. 10ml Hidrotalcid

Second Group: 50mg Ranitidin with 5 cc syringe in 150 ml normal saline given as a slow intravenous infusion over 15 minutes and p.o. 10ml Hidrotalcid

Third Group: 150 ml only normal saline given as a slow intravenous infusion over 15 minutes and p.o. 10ml Hidrotalcid

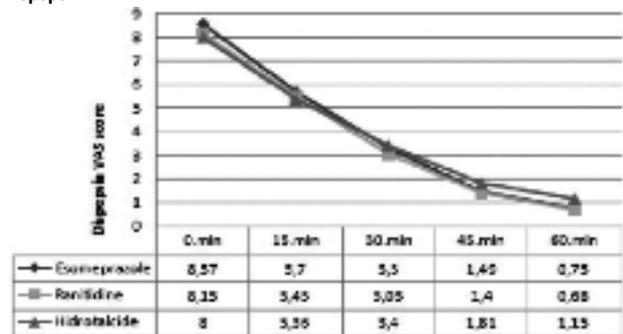
The self-reported 100-mm visual analog scale score, numeric score, severity score, adverse effects, persistent dispepticpain after treatment in 24 hours and overall satisfaction were recorded

Results: 286 subjects completed the study. Of these patients, 95 (33.2%) received esomeprazol; 94 (33.9%), ranitidine; and 97 (33.9%), hidrotalcid. The mean age was 27,43 years, and 62,4%(n=176) were female. Mean decrease in VAS score was 91,42±11,86 mm (mean±SD) for esomeprazol, 91,74±12,38mm for ranitidine, and 86,17±20,75mm for hidrotalcid. We compared the dyspeptic pain reduction efficiency efficacy across all treatments with the Kruskal-Wallis test (p =0,250).

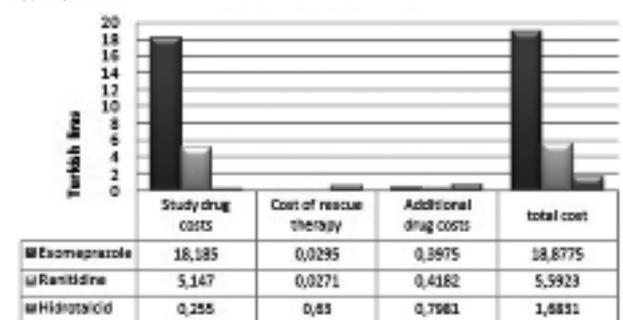
Conclusions: Intravenous PPI and H2RB provides no additional benefit over the conventional antiasit in the relief of acute, severe dyspeptic pain. Because of its neutral effects and higher costs, the use of IV PPI to treat such conditions should be discouraged in general clinical practice.

Keywords: Peptic ulcer, Esomeprazole, Ranitidine, Emergency medicine treatment

Dispepsia VAS score



Treatment cost



Respiratory Emergencies

Abstract:00660P

MANAGING ACUTE ASTHMA IN THE EMERGENCY DEPARTMENT: COMPARING DATA TEN YEARS APART

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Changi General Hospital, Singapore

Aim: The aim of the study was to compare the management of acute asthma in the emergency department (ED), studying data 10 years apart.

Methods: An audit was done 10 years ago, studying the management of acute asthma patients presenting to ED. MOH guidelines were used as a benchmark to determine how well the patients were managed. Prevalence of use of an objective clinical parameter, the peak expiratory flow rate, in the assessment of asthma and its treatment outcome, was also studied. A similar study was carried out now, 10 years later, and the results are compared.

Results: The data for current year were compared with that ten years ago. Of the 2781 and 2288 (current year and 10 years ago, respectively) patients with ICD codes '493 Asthma' that were screened, 45 and 227 patients below 13 years old were excluded. Samplings of every 4th and 3rd of the 2736 and 2061 adult patients were done. 49 and 57 patients were excluded in the final analysis. The sample sizes for were thus 635 and 630 for current year and 10 years ago, respectively. The Background demographics of the 2 groups of patients were similar. 17 out of 31 patients (54.8%) whose Background asthma control warranted steroid inhalers were prescribed one on discharge, compared to 14 out of 38 (36.8%) 10 years ago. Patients were prescribed systemic steroids in 594 out of 635 patients (93.5%), with 442 (69.6%) given in the ED, compared with 458 out of 630 patients (72.7%), with 238 (37.8%) given in the ED ten years ago. Patients requiring more than 1 nebuliser had ipratropium added in 316 out of 367 patients (86.1%), compared with 106 out of 224 patients (47.3%) 10 years ago. Documented asthma advice was given to 55.1% of discharged patients in current year, compared to 33.1% 10 years ago. The peak flow estimation was done or attempted at triage in 52.8%, compared to 76.6% ten years ago; estimation before disposition was 30.1%, compared to 55.1% ten years ago.

Conclusion: Patients presenting to the ED with acute asthma are better managed in the current year, compared to 10 years ago, using adherence to MOH guidelines as a benchmark. The use of the peak flow meter in assessing severity of acute asthma is, however, lower compared to that 10 years ago.

Keywords: acute asthma, emergency department, management, steroids

Abstract:01340P

THE ACCURACY OF MAINSTREAM ETCO2 LEVELS TO PREDICT THE SEVERITY OF COPD EXACERBATIONS PRESENTED TO THE EMERGENCY DEPARTMENT

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ObjectiveS: The end-tidal carbon dioxide (ETCO2) measurement was considered as an essential tool for the assessment of several conditions in emergency medicine. However, the diagnostic role of capnography in dyspneic patients still remains unclear. We aimed to analyze the alteration of the ETCO2 levels in COPD exacerbations and its role in the decision-making process.

Methods: All the individuals who were presented to the emergency department after COPD exacerbations were prospectively enrolled in the study. The patients were excluded if they refused to give informed consent, intubated after initial assessment, and had uncertain COPD diagnosis. The ETCO2 measurement using a mainstream capnometer was undertaken in the pretreatment and post-treatment period of COPD exacerbations.

Results: A total of 102 patients were enrolled in the study. Pre-ETCO2 and post-ETCO2 levels were positively correlated with arterial pCO2 levels ($r=0.756$, $p<0.001$ and $r=0.629$, $p<0.001$, respectively). The median pre-ETCO2 level was 32.0 (30.5-40.5) in discharged patients and 39.0 (31.0-53.5) in admitted patients. After the initial therapy in the ED was completed, the median post-ETCO2 level was found to be 32.0 (28.0-37.5) in discharged patients and 36.0 (32.0-52.0) in admitted patients. Although, a statistically significant difference was observed in the pretreatment period ($p=0.043$), no difference was observed in post-treatment period between ETCO2 levels ($p=0.107$).

Conclusions: End-tidal carbon dioxide levels were higher in admitted patients when compared with discharged patients on arrival to the emergency department. ETCO2 measurement has very little contributions while evaluating patients with COPD exacerbation in the emergency department.

Keywords: chronic obstructive pulmonary disease, endtidal CO2, emergency department

Abstract:0866

UNHINDERED EMBOLISM

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Introduction: Pulmonary embolism (PE) is a common cardiovascular emergency. It can lead to life-threatening, acute but potentially reversible right ventricular failure as a result of blockage of the pulmonary arterial bed. Diagnosis of PE is not easy. It may be overlooked due to the lack of a specific clinical presentation. On the other hand, early diagnosis is very important because early treatment is highly effective. In most Cases, pulmonary embolism is caused by blood clots usually from the deep veins of legs, and rarely from other parts of the body. In most of the Cases the presence of PE is suspected with clinical symptoms such as dyspnea, chest pain and syncope. In this paper

we present a 57 years old male patient diagnosed with pulmonary embolism immediately after detection of cardiac thrombus in the echocardiogram.

Case: A 57 year old male patient with history of coronary artery disease was admitted to the emergency room with chest pain. ECG was in normal sinus rhythm, and no ST-T changes were present. Blood pressure was 120/80 mm Hg, and pulse was 80 beats/min. Echocardiographic (echo) evaluation was performed in the emergency department, because the patient had coronary risk factors and typical chest pain. In the echocardiography a hyperechoic image 1,5x3 cm in size (intracardiac thrombi) in the dilated right ventricle was observed. The clinical condition of the patient deteriorated suddenly. Massive pulmonary embolism was detected in pulmonary CT angiography. Thrombolytic therapy was started. There was no thrombus in the repeated echo. The patient was admitted to intensive care unit after thrombolytic therapy, and his general condition gradually improved. Anticoagulation therapy was prescribed and the patient was discharged.

Conclusion: In patients with suspected pulmonary embolism, echocardiographic evaluation performed by emergency medicine specialists, may be beneficial in reducing the duration of diagnosis and treatment. Echocardiography as well as FAST should be expanded for use by emergency medical professionals.

Keywords: Pulmonary thromboembolism, Intracardiac thrombus, Echocardiography

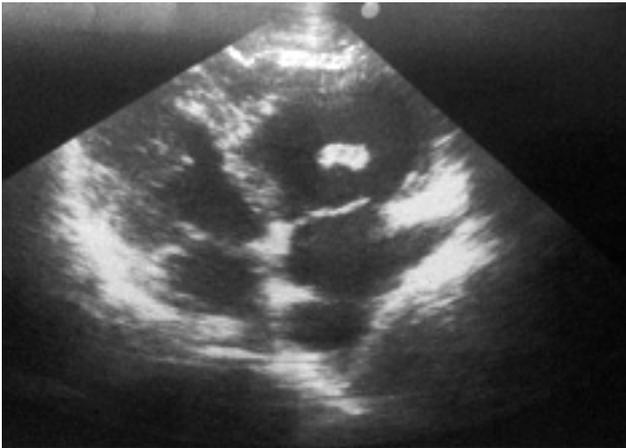


Figure 1. A hyperechoic image 1,5x3 cm in size (intracardiac thrombi) in the dilated right ventricle

Abstract:0888

PULMONARY ARTERY RUPTURE IN BEHCET PATIENT; CASE REPORT

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Introduction: The incidence of pulmonary artery aneurysm in male patients is 4%. The most common cause of pulmonary artery enlargement is pulmonary arterial hypertension in adults, Behcet's disease is also a rare cause. The most common symptoms of pulmonary artery aneurysm are airway obstruction and

hemoptysis. The most common causes of mortality are complications such as dissection or rupture of aneurysms in patients with pulmonary artery aneurysm. In this paper we presented a patient with Behcet's disease who admitted to our emergency department with complaint of hemoptysis, which we detected to be due to rupture of the pulmonary artery.

Case: A 34-year-old male patient admitted to the emergency department with complaint of bloody spitting, which began the day before. The vital signs were normal and no other pathology was detected in the physical examination. The electrocardiogram was normal. In the history the patient had Behcet's disease (for 12 years), and he was using colchium and diltiazem for therapy. Laboratory examinations were normal except that D-dimer was 803 (normal range 0-500). In the contrast-enhanced chest CT scanning, dilatation and rupture due to aneurysm of the pulmonary artery and an associated area of consolidation in the right lower lobe were detected. The patient was transported to an outer center including thoracic surgery and interventional radiology departments for continuation of the therapy.

Conclusion: It should be noted that Behcet's disease may affect the arteries and veins in any size and the symptoms such as hemoptysis which can be mortal should be investigated carefully.

Keywords: Pulmonary artery; Aneurysm; Rupture; Behcet's disease

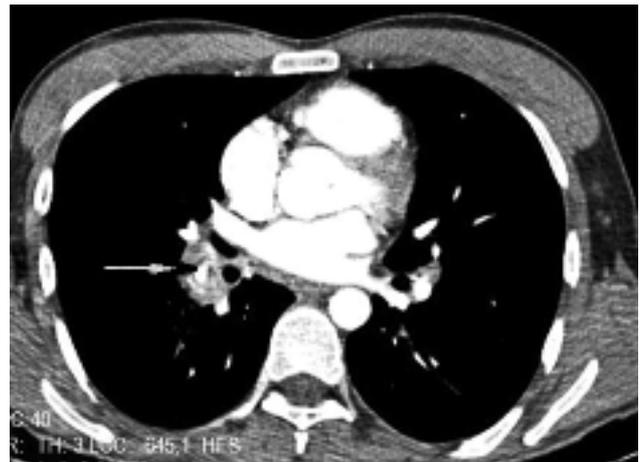


Figure 1. Pulmonary Artery Rupture



Figure 2. Pulmonary Artery Rupture

Resuscitation/CPR

Abstract:0611

ASSESSMENT OF BASIC LIFE SUPPORT AND ADVANCED CARDIAC LIFE SUPPORT KNOWLEDGE OF MEDICAL SCHOOL RESIDENTS**Gülhan Coşkun, Fikret Bildik, Ayfer Keleş, Ahmet Demircan, İsa Kılıçaslan, Zeynep Yüzgeç, Habibe Selmin Saka***Department of Emergency Medicine, Gazi University School of Medicine, Ankara, Turkey*

Introduction: We aimed to evaluate the level of knowledge regarding basic life support (BLS) and advanced cardiac life support (ACLS) in resident physicians in Gazi University Faculty of Medicine (GUFM), Turkey.

Materials-Methods: 327 resident physicians working in 34 different departments in GUFM were included to the study between June and July 2014. A questionnaire comprising the demographic data, the resuscitation training that resident physicians received in the past, 10 questions regarding BLS knowledge and 10 questions regarding ACLS knowledge. These 20 questions was prepared according to resuscitation guideline published in 2010 by American Heart Association (AHA). The data were recorded according to age, gender, cardiopulmonary resuscitation (CPR) training as well as the clinics they are working and how many years they have worked.

Results: The participation rate to the study is 57.9%. The participants mean age was 28.27 ± 3.21 and were composed of 165 (50.5 %) male and 162 (49.5 %) female resident physicians. 47.5% of the participants haven't received any resuscitation training after medical school graduation. 34.2% of them believe that CPR training in faculty of medicine is inadequate and the majority of residents (84.0%) believe that CPR training should be repeated. Resident physicians' mean number of correct answers was 4.48 in BLS questions, 4.67 in ACLS questions. Levels of success of the participants who received CPR training after graduation were significantly higher than the others.

Conclusion: This study has shown that resident physicians BLS and ACLS level of knowledge in GUFM is insufficient. Every physician has to know cardiopulmonary resuscitation perfectly and apply it quickly and accurately when it is necessary. Therefore resuscitation training must be repeated frequently with theoretical and practical lessons which are prepared according to updated international guideline standards.

Keywords: ACLS, BLS, residents, questionnaire

Abstract:0845

SEDOANALGESIA IN CARDIOPULMONARY RESUSCITATION**Bahadır Çağlar, İsmet Parlak, Serhat Akay, Huriye Akay, Gülden Özerk, Gökhan Yılmaz, Süha Serin***Department of Emergency Medicine, Bozyaka Educational and Research Hospital, İzmir, Turkey*

Introduction: Sedoanalgesia has been increasingly preferred in many noninvasive or invasive interventions performed in the emergency units. In addition to the patient comfort, sedoanalgesia improves the physician comfort as well, however, the literature

with regard to sedoanalgesia in cardiopulmonary resuscitation is still inadequate.

Case 1: A 45-year-old male was brought to the Emergency Unit by the 112 teams because of suddenly feeling faint at work. Since there was no detectable breathing or pulse, resuscitation was started and he was intubated. The patient had an asystolic cardiac rhythm which turned into ventricular fibrillation at 10 minutes during the CPR and he was defibrillated by biphasic shocks of 200 J. However, he started to make eye contact and move during the chest compression and defibrillation. In the following cycles, the patient started to disrupt the compressions and defibrillation process by moving his hands. Therefore, we were forced to tie the hands of the patient in order to avoid his interventions. The patient was delivered a combination of 3 mg midazolam and 50 µg fentanyl for sedoanalgesic purposes in order to desensitize him against the pain induced by compression and defibrillation. At 22 minutes, the patient's cardiac rhythm and pulse were evaluated, while the ECG showed an inferolateral myocardial infarction. The patient was transferred to the coronary intensive care unit.

Case 2: A 57-year-old male patient diagnosed with coronary artery disease, hypertension, and diabetes mellitus was brought to the Emergency Unit by his relatives because of chest pain. Since no breathing or pulse could be detected upon arrival, he received immediate CPR and intubation. The patient had ventricular fibrillation, therefore, he was defibrillated with shocks of 200 J and chest compressions were proceeded. After the 5th minute of the resuscitation and during the chest compression and defibrillation, the patient started to move his arms and legs along with voluntary eye movements. We had difficulty in defibrillating the patient in face of such movements and failed to carry out an effective chest compression. We tried to restrain him and thus prevent him from disrupting the emergency intervention, however, we did not succeed and therefore decided to deliver 3 mg midazolam and 50 µg fentanyl. The subsequent ECG revealed diffuse anterior ST elevation myocardial infarction and the patient was transferred to a center equipped with coronary angiography.

Conclusion: Patients rarely require sedoanalgesia during CPR. Although sedoanalgesia is used for many purposes in the emergency units, in this study, we aimed to highlight the necessity of sedoanalgesia during cardiopulmonary resuscitation in two Cases and contribute to the current literature on this subject. The appropriate dose of sedoanalgesia during CPR is another point of discussion that is beyond the scope of this study.

Keywords: sedoanalgesia, cardiopulmonary resuscitation, ventricular fibrillation

Toxicological Emergencies

Abstract:0284

RISING THREAT; BONZAI!

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 Ümraniye Training and Research Hospital

Introduction: Synthetic cannabinoids (SC) were first emerged in 2004 and becoming rapidly popular, especially among adolescents. SC's have various names worldwide where the most common one is "spice". However in Turkey they are simply known as "bonzai".

The most common form of natural cannabinoid is 9-tetrahydrocannabinol (THC).

In recent years, especially in the last months, the number of bonzai users has increased in our country. In this study we aim to draw attention to the consumption of bonzai among young people and reveal the demographic and basic clinical characteristics of these users.

Methodology: This was a retrospective study and conducted at Ümraniye Training and Research Hospital. All of the patients with synthetic cannabinoid intoxication who presented to the emergency Department (ED) throughout two years (1 July 2012 – 30 June 2014) were enrolled. Patient records were gained through the hospital information system (HIS) and all the other drug intoxications and also suspicious abuses were excluded. For the statistical analysis SPSS for Windows ver. 11.0 (Chicago,IL, USA) was used. The frequencies were given in median and 25-75% (interquartile range).

Results: 197 patients were included in this study where 190 patients (96.4%) were male and 7 (3,6%) female. Two patients were exitus, four were hospitalized, 52 left with their own will and in total 132 patients were discharged. Demographic specifications of the patients are shown in tables 1-3. During this two year study the number of abuses rose significantly in the second year, especially in June 2014 shown in the graphics as figure 1 and 2.

Discussion: Popularity of SCs is growing as they are cheap and cannot be discovered with routine screening tests. Psychoactive effects of the SC's are similar to the effects of THC, but they are more potent. Where they can cause anxiety or panic they can also cause the opposite like repressed anxiety. The most frequent cardiovascular effects are hypertension and tachycardia, but also effects such as bradycardia and hypotension have been reported at least some.

Although 4 intubated patients whose pulse rate and blood pressure (AT) was slightly lower with respect to all other patients pulse rate and blood pressure (AT) they were still at the normal range. However, in our study the patients GCS was an average of 15 and there was no obvious hypoxia where the SO2 average of the intubated patients was low measured as 21%. These patients had GCS 3 and their high PaCO2 in the blood gas is was noteworthy. The respiratory suppression state of these patients is thought to have gotten worse due to secondary hypercapnia, respiratory and metabolic acidosis. The death of 2 of the 4 intubated patients doesn't mean that the cannabinoids are harmless but it can be seen as a fact that can change the widely accepted assumptions. In recent months, especially in June 2014, the high patient admission is conspicuous. Again in these months the use

of bonzai and the bonzai related deaths frequently announced in the media increased public awareness.

Conclusion: The use of synthetic cannabinoids (bonzai) in the recent years, especially in the summer months of 2014 is stated in this paper. As the patients can have a benign clinical course, the process can also be fatal. It should be noted that especially patients with depressed respiration, low GCS and high PaCO2 values could end mortal and the necessity of early intubation should be kept in mind.

Keywords: bonzai, synthetic cannabinoids, spice, cannabinoids, emergency department

Table 1. Demographical findings and vital signs of all of the patients.

Variable	Median (IQR)
Age (year)	22 (19-27)
Male (n, %)	190 (96.4)
Pulse (beats/min)	89 (78-105)
SBP (mmHg)	120 (110-126)
DBP (mmHg)	70 (62-80)
SaO2 (%-%)	98 (97-99)
GCS	15 (15-15)

Table 2. Demographical findings and vital signs of the patients who were intubated.

Variable	Median (IQR)
Age (year)	29 (23-24)
Male (n, %)	4 (100.0)
Pulse (beats/min)	71 (45-125)
SBP (mmHg)	110 (83-125)
DBP (mmHg)	68 (45-77)
SaO2 (%-%)	41 (15-41)
GCS	3 (3-4)

Table 3. Outcomes of the intubated patients and their blood gasses test Results:

Patient	Age/sex	Clinical result	Ph	pO2 (%)	PCO2 (%)	HCO3 mmHg
Patient 1	34 / male	Entubated + Exitus	6.91	15	128	12
Patient 2	26 / male	Entubated + Exitus	6.58	65	173	?
Patient 3	19 / male	Entubated + Discharged	7.06	42	61	14
Patient 4	24 / male	Entubated + Discharged	6.90	40	119	11

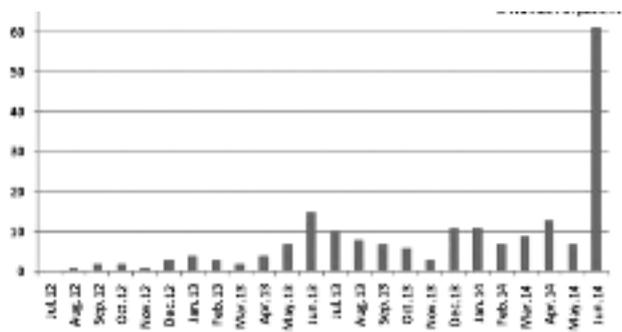


Figure 1. Number of patients presented to ED with bonzai consumption according to months.

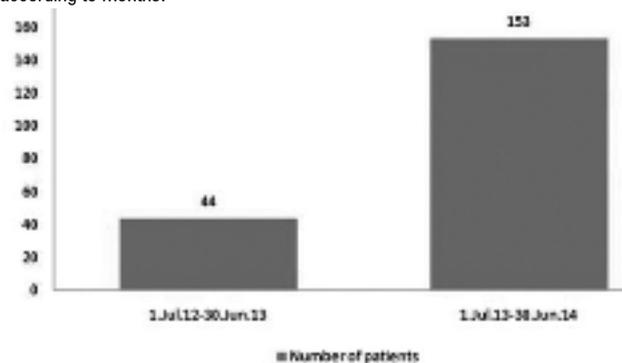


Figure 2. Number of patients presented to ED with bonzai consumption according to years.

Abstract:0462

SIMULTANEOUS USE OF INTRAVENOUS LIPID EMULSION AND PLASMA EXCHANGE THERAPIES IN THE MANAGEMENT OF MULTIPLE MEDICATION TOXICITY

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Introduction: In this report, we discuss the Case of a patient who ingested from multiple classes medications, presented with severe cardiovascular effects, and had a rapid recovery when treated with Intravenous Lipid Emulsion (ILE) and Plasma Exchange (PE) therapies in addition to conventional treatments.

Case: A 45-year-old woman ingested a toxic combination of amisulpride (28 g), diazepam (250 mg), valsartan (2240 mg), aripiprazole (45 mg), and paliperidone (21 mg) with suicidal intent. Upon arrival, her respirations were shallow and her blood pressure was not detectable. Oxygen saturation was 79% using pulse oximetry and her pulse was 110/min. The patient was monitored and fluid replacement was started. The patient became agitated and her respiratory condition deteriorated so she was sedated and intubated 10 minutes following her arrival. Electrocardiography (ECG) revealed right bundle branch block and prolongation of the QT interval (QTc: 547 ms)(FIGURE 1). Gastric irrigation was performed and activated charcoal (1 g/kg) was administered. The National Poison Information Center was consulted and reported that a dose of amisulpride greater than 16 g has proven fatal. The patient was taken urgently to the emergency critical care unit. Initial laboratory data revealed sodium 133

mmol/L, potassium 2,8 mmol/L, and arterial blood gas analysis revealed pH: 7.22, pCO₂: 30,7, pO₂: 70,3, HCO₃: 12,9, and Lac: 7,0. All other electrolytes, creatinine, blood urea nitrogen, glucose, hepatic transaminases, troponin and coagulation study results were within normal range. An infusion of lipid emulsion solution (20%) (Smoflipid; Fresenius Kabi Deutschland) was started at a rate of 100 ml/hour. One hour after the infusion of lipid emulsion solution an emergency PE (1 plasma volume) was carried out. Following the procedure, the ECG returned to sinus rhythm and the QT interval shortened to 541ms(FIGURE 2). The ILE infusion continued (100 ml/hour) for an additional 4 hours after the PE was performed. The PE procedure was repeated 18 and 36 hours following arrival. Forty hours following arrival, the patient's electrolyte and blood gas values improved and she was extubated. The patient did not develop any additional problems and was discharged from the hospital in good condition four days following her admission.

Discussion: ILE and PE are new and promising treatments for intoxications. However, considerable study remains to be completed to clarify the roles of these treatment options. A review of the literature did not identify any previous Cases in which ILE and PE were used simultaneously. We postulate that the toxic agents were dissolved in the lipid emulsion through ILE infusion and then eliminated effectively with PE. In this way, the ILE and PE treatments may have had a synergistic effect in improving the patient's clinical condition. Considering that these treatments have acceptable side effects and few complications, they have a promising future in the management of multiple drug intoxication.

Keywords: Lipid emulsion therapy, Multiple drug toxicity, Plasma exchange therapy.

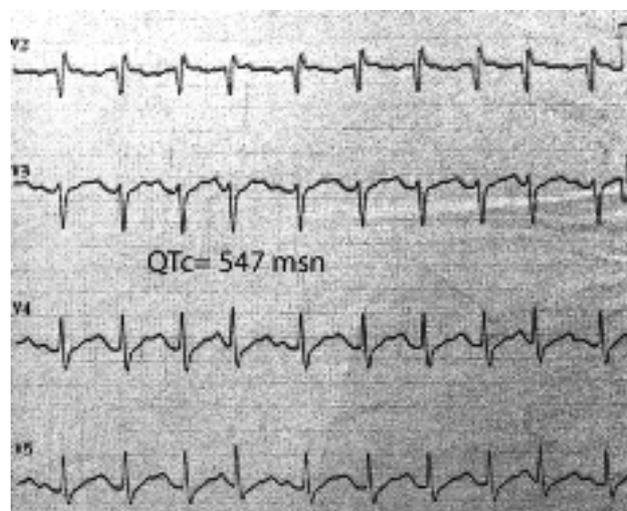


Figure 1. Patient's ECG at admission

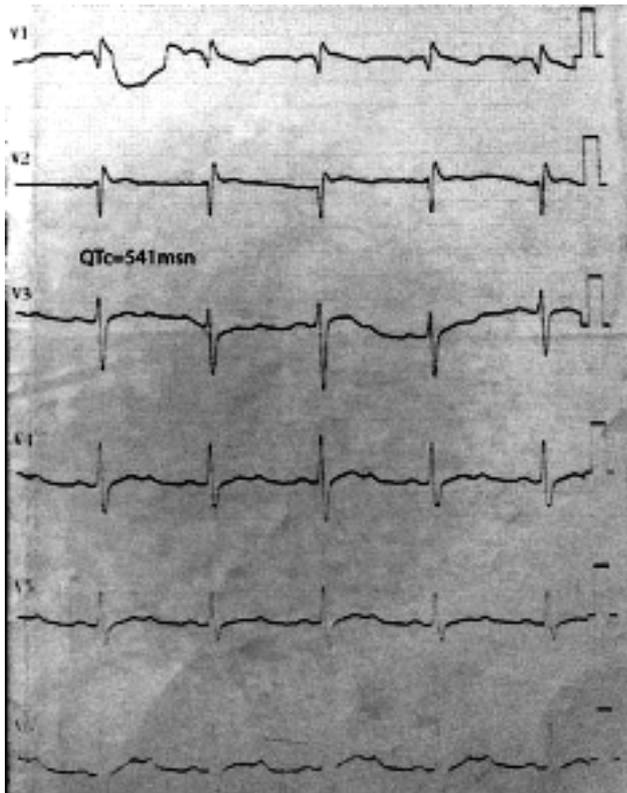


Figure 2. Patient's control ECG

Abstract:0628

LOW BLOOD LEVELS OF ACETAMINOPHEN BUT TOXIC?

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Acetaminophen has an excellent safety profile when administered in proper therapeutic doses, but hepatotoxicity can occur with misuse and overdose. In the United States, acetaminophen toxicity has replaced viral hepatitis as the most common cause of acute hepatic failure and is the second most common cause of liver failure requiring transplantation. Most patients who have taken an overdose of acetaminophen will initially be asymptomatic, as clinical evidence of end-organ toxicity often does not manifest until 24-48 hours after an acute ingestion. To identify whether a patient is at risk, the clinician should determine the time of ingestion, the quantity, and the formulation of acetaminophen ingested.

36 year old male patient was admitted to the emergency room with suicidal 30 vermidon tablet (15 g acetaminophen) intake. His vital signs revealed a temperature of 36°C, blood pressure of 122/82 mmHg, respiratory rate of 15/min, pulse rate of 88/min, and pulse oximetry reading of 96% on room air. He had no known history of disease. Physical examination was normal, Patient's gastric lavage was performed and laboratory tests were planned. N-acetylcysteine treatment was started. In 4th hour results, his ALT was 364 U/L, AST was 365 U/L and paracetamol level was 8 mcg/mL. In 6th hour paracetamol level was 7 mcg/mL. Both levels were not toxic and tended to decrease. Patient monitoring

and treatment was continued. In 24th hour his ALT was 3128 U/L and AST was 3978 U/L. It was seen that liver failure was occurred. The patient was transferred to the intensive care unit.

Minimum toxic doses of acetaminophen for a single ingestion, posing significant risk of severe hepatotoxicity is 7,5 - 10 g in adults. The serum acetaminophen concentration is the basis for diagnosis and treatment, even in the absence of symptoms, because of the delay in onset of clinical manifestations of toxicity. The Rumack-Matthew nomogram interprets the acetaminophen plasma concentration in micrograms per mL, as correlated with time in hours after ingestion, to assess hepatotoxicity risk for single acute ingestions of acetaminophen (Figure 1). In our Case, although paracetamol level was below the toxic limit, hepatitis developed in our patient. So, patients with paracetamol intake should be followed for a long time and control should be called for control. It doesn't mean that hepatitis will not develop in the absence of toxic levels.

Keywords: acetaminophen, toxicity, hepatitis

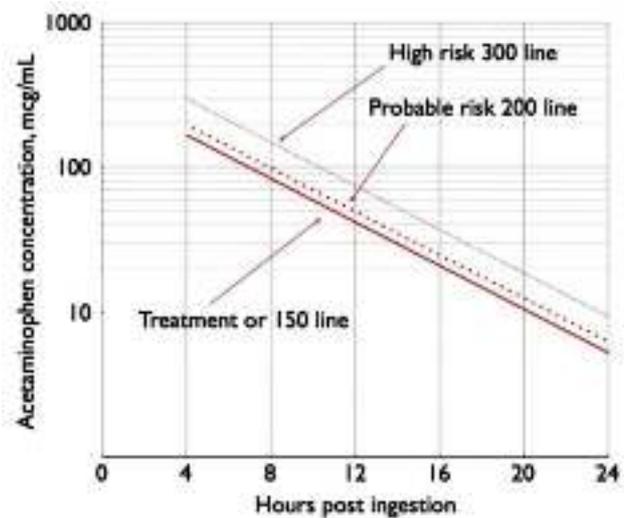


Figure 1. Rumack-Matthew Nomogram

Abstract:0948

DEEP VEIN THROMBOSIS DUE TO BONSAI USE

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Synthetic cannabinoid receptor agonists are becoming increasingly popular among adolescents as an abused substance. Chronic use of these drugs can lead to addiction syndrome and withdrawal symptoms similar to cannabis abuse. Spice drugs can cause potentially serious health care conditions that necessitate emergency department (ED) evaluation. In literature synthetic cannabinoid use has been associated with psychosis, agitation, seizures, acute kidney injury, hypokalemia, hypertension, tachycardia, myocardial infarction and, occasionally, death. Most Cases can be discharged from the ED after a period of observation.

Case: A 19 years old male patient was routinely using a synthetic cannabinoid receptor agonist namely bonsai for last five years, admitted to ED due to painful and swollen legs. He was conscious and his vital signs were normal. In his

physical examination bilateral swollen, red, tender legs were noted. His neurologic examination was normal. His laboratory results were as follows: white blood cell count 13900/ μ L (normal 3,9-10,7*10³ cells/ μ L); alanine aminotransferase 903U/L (0-35 U/L); aspartate aminotransferase 3796 U/L (0-35 U/L); lactate dehydrogenase 3370 U/L (125-220 U/L); creatine kinase high to be measured (30-170 U/L); creatine kinase M-band 6457 U/L (0-25 U/L). Other biochemical tests and coagulation tests were in normal ranges. Rhabdomyolysis and compartment syndrome were among differential diagnosis. Then he had bilateral doppler ultrasonography of lower extremities. It reported as follows: Bilateral all veins were in normal thickness; thrombosis inside right popliteal vein; appearance of hemorrhage inside crural muscles bilaterally. Since diagnosis of venous thrombosis was made, he had been given anticoagulation.

Two days later he again admitted to emergency room for an independent reason. It was observed that his complaints were tapering.

Conclusion: Little is known about the detailed pharmacokinetics and toxicology of the synthetic cannabinoids and receptor agonists, and few formal human studies have been published. Evidence suggests that synthetic cannabinoids are more potent compared to cannabis and could have longer half-lives, potentially leading to prolonged toxicological effects. It is hoped that legal action will curtail the use until further information can be obtained to elucidate the risks associated with use and abuse of these chemicals. Without such action or stringent prohibition of synthetic cannabinoids, we can expect the problem to increase, and expect to see an increase in morbidity and mortality in a young and vulnerable population associated with these chemicals.

Keywords: bonsai, deep vein thrombosis, toxicology

Trauma

Abstract:0102

COMPARISON OF BIOCHEMICAL AND PATHOLOGICAL EFFICACY OF FLUID RESUSCITATION AND L-ARGININE THERAPIES IN AN EXPERIMENTALLY FORMED TRAUMATIC BRAIN INJURY AND HEMORRHAGIC SHOCK MODEL IN RATS

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Objective: This study aimed to investigate the effects of fluid resuscitation and L-Arginine on biochemical parameters and apoptosis in brain tissue in an experimentally formed traumatic brain injury and hemorrhagic shock model.

Materials and Methods: The rats were divided into 6 groups. A diffuse head trauma with the Marmarou method (Figure 1) and a hemorrhagic shock model to reduce the mean arterial pressure (MAP) to 40 mmHg were formed. Except for the control group, other 5 groups were resuscitated with 0.9% NaCl, 7.5% NaCl,

L-arginine, 0.9% NaCl+L-arginine, and 7.5% NaCl+L-arginine, respectively. A MAP level of 60 mmHg was targeted for 3 hours. Blood gases were monitored hourly. Prior to sacrifice, blood samples were drawn for lactate, malondialdehyde (MDA), and total antioxidant capacity (TAOC) levels. Apoptotic cell counting was performed from the brain tissue samples of the sacrificed rats.

Results: MAP levels were higher in the SF group at the first hour, in the L-arginine+SF group at the second hour, and in the hypertonic group at the third hour ($p=0.00$). There was a significant difference between the treatment and the control group with respect to the pH levels at the second hour ($p=0.01$). Malondialdehyde (MDA) level was significantly higher in the control group compared to the treatment groups ($p<0.05$). No significant difference was found between the treatment groups in regard to MDA level. Lactate level was higher in the L-arginine group compared to the control group and the L-Arginine+hypertonic group ($p=0.00$ and 0.02 , respectively) (Figure 2).

Despite lack of statistical significance, resuscitation fluids (especially L-arginine) were associated with higher TAOC and lower apoptosis rates. Although there were an increase in neutrophil scores upon addition of L-arginine to the treatment regimen, it was not statistically significant.

Conclusion: In conclusion, L-arginine and resuscitation fluids were associated with increases in MAP and TAOC levels and reductions in MDA and apoptosis rates, although these agents increased lactate level and decreased pH level.

Keywords: Hemorrhagic shock, lactate, L-arginine, malondialdehyde, traumatic brain injury

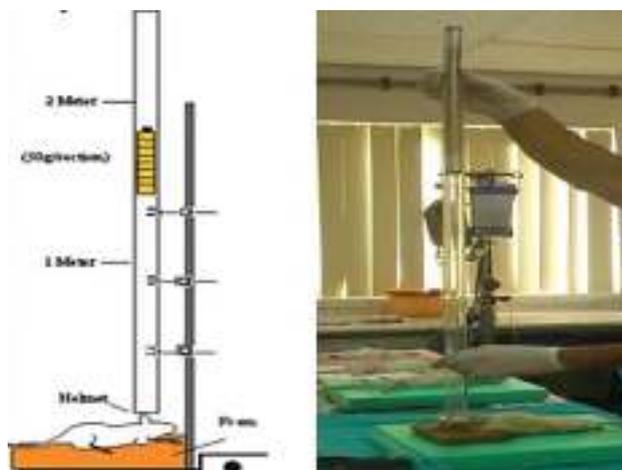


Figure 1. Marmarou Metodu

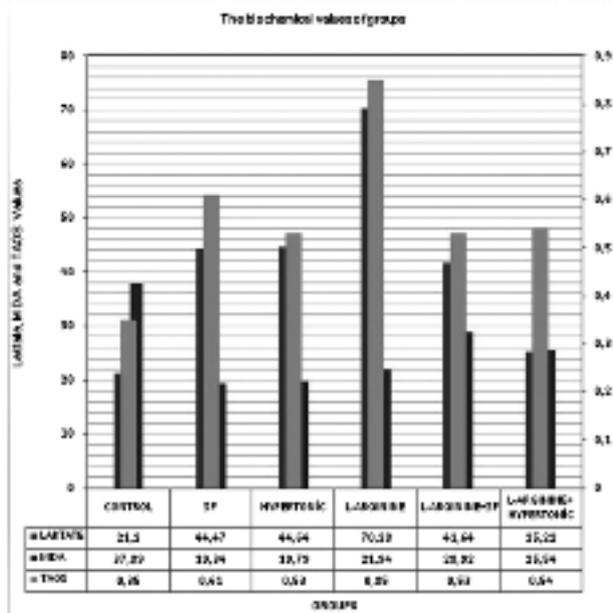


Figure 2. Comparison of biochemical values of the groups

Abstract:0376

EFFECTS OF CHITOSAN ACETATE ON EARLY BONE HEALING IN THE RATS THAT CREATE BONE DEFECT

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Aim: Bone healing is a complex process which includes pathophysiologic events that need a multidisciplinary approach. Because of that most authors have studies on this process. The agents which effect the bone healing positively, have a clinic usage. The best material to use for bone healing have to be effected on bone repair, and easy to use.

In our study, which is planned in our department and carried out in Trakya University Experimental Animal Studies Laboratory, we aimed to investigate the effects of Chitosan Acetate Bandage on bone healing.

Materials and Methods: Two separate study groups were formed each one including ten rats that create defects on their tibias. In the first group, the defect had been irrigated by serum physiologic and the bone biopsies had taken form bone on the seventh day. In the second group, Chitosan Acetate Bandage had applied to the defect and the bone biopsies had taken form bone on the seventh day.

The samples evaluated histopathologically for osteoblastic activite, inflamatory response and fibrosis scores. Ki kare test was employed to statistically analysis of the data and the significance line accepted as $p < 0.05$.

Results: Osteoblastic activite (Stage 4) and inflamatory response (Stage 4) were statistically significant high in Chitosan group according to normal salin group (respectively $p = 0.005$, $p = 0.010$). However there were no statistically significant results

for fibrosis scores (Stage 3, 4) between two groups (respectively $p = 0.175$, $p = 0.105$).

Conclusion: We determined positive effects of Chitosan Acetate on rats, that have bone defects by histopathologic evaluations.

Keywords: Chitosan Acetate, bone healing, trauma

Abstract:0559

PUNCHING - A RARE MECHANISM OF BLUNT TRAUMA CAUSED CARDIAC CONTUSION

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Introduction: Cardiac contusion is usually caused by blunt chest trauma. There are many blunt trauma shapes that causes cardiac contusion. Traffic accidents are the most frequent cause of cardiac contusion followed by violent fall impacts, aggressions and the practice of risky sports. Punch and assault is a very rare cause of cardiac contusion. Our Case is myocardial contusion after punching. Post-traumatic cardiac lesions spectrum varies greatly, ranging from no symptoms to decrease in cardiac function. Blunt chest trauma can lead to cardiac contusion in 5 to 50% of patients. Unfortunately, there is no gold standard for making this diagnosis. Several factors are used in conjunction to make this diagnosis, including a history of trauma, physical examination, ECG, echocardiography and serum cardiac markers. The ECG may be entirely normal or show nonspecific changes, such as dysrhythmias and the most common is sinus tachycardia. Echocardiographic findings may reveal a pericardial effusion or regional wall motion abnormalities. The sensitivity and specificity for CK-MB in the detection of cardiac injury is low in the setting of trauma, but troponin levels are more specific for detecting myocardial injury. We report a very rare Case with myocardial contusion after punching.

Case: 65-year-old woman admitted to the emergency department following punch to her chest wall. She did not recall the events leading up to the punch and could not remember if this pain was present before the punch. She had coronary artery disease history, on initial examination, she was tachycardic and had tenderness on lower sternum. Her initial vital signs were; blood pressure was 130/74, pulse rate was 112/min, temperature was 36.8 C, respiratory rate was 14 breaths/min. An ECG was obtained which revealed normal sinus rhythm at a rate of 112, with left bundle block (LBBB). Laboratory findings showed creatine kinase (CK) 143, CK-MB 37, and troponin I of 0.129. The patient was transferred to the intensive care unit for cardiac monitoring and follow-up serial cardiac enzymes. After four hours CK-MB level increased to 55 and a troponin to 0.644. Serial ECG monitoring was also obtained. She was consulted to the cardiologist. In echocardiogram there was left ventricular segmental wall motion abnormalities and left atrial enlargement. Coronary angiography was planned for the patient. In the coronary angiography there were no significant pathology. After evaluating all of the ancillary tests, the patient was diagnosed with cardiac contusion related with punching.

Conclusion: Blunt cardiac injury is a significant risk factor for cardiac dysrhythmia and myocardial injury. The clinical

presentation of the patients with blunt cardiac trauma varies widely. Cardiac enzyme determination has a useful role in the evaluation of patients with suspected myocardial contusion. Serial ECG and cardiac enzyme monitoring should be obtained from all of the patients presenting with blunt chest trauma.

Keywords: Blunt chest trauma, Cardiac contusion, Punching

Abstract:0687

ROLE OF VITTEL CRITERIA IN MULTIPLE TRAUMA PATIENTS PRESENTING TO THE EMERGENCY DEPARTMENT; MAKING THE DECISION TO PERFORM WHOLE BODY SCANNING

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Introduction: Trauma is one of the common causes of Emergency Department (ED) visits in the world and leading cause of death under the age of 40. 25-50% of deaths due to trauma are avoidable. The primary imaging modality in patients with multiple trauma is whole body scanning (WBS), although the decision to WBS a worldwide accepted clinical criteria have not been established. Clinicians need adequate and reliable criteria for evaluating patients with multiple trauma to identify patients who will benefit from WBS and to reduce unnecessary imaging.

Objective: The main objective of this study is to evaluate the use of the Vittel criteria in addition to a clinical examination to determine the need for a WBS in a patient who admitted to the ED with multiple trauma. We think that it would reduce morbidity and mortality. Management planning and delay in diagnosis rates will decrease. Need for WBS verified by calculating AIS and ISS. When $16 < ISS$ value, this reducing unnecessary follow-up in the ED, unnecessary additional tests and costs.

Materials-Methods: The study was practised in patients who admitted to Gazi University Medical Faculty ED with multiple trauma and performed WBS from April to September in 2014. Demographic data of 140 patients, vital signs at the time of application, mechanism of injury, GCS, physical examination, CT and other laboratory results, length of stay in the ED, Vittel score, Abbreviated Injury Scale (AIS) and Injury Severity Score (ISS) were recorded.

Results: In this time 802 trauma patients admitted to ED. 208 of them were considered multi-trauma patient. Three of them died and 5 patients were observed without tomography due to clinician view. For 58 of them regional scanning, 142 of them WBS is performed. 87 patients with motor vehicle accident, 32 patients with fall from height, 2 patients assault and 1 patient was admitted with gunshot wound. 64 patients admitted to hospital, 60 patients discharged, 10 patients left the emergency department because they refused the treatment, 3 patients referred to another hospital, 2 patients died after the hospital admission. Stay length in ED varied from 3 hours to 3 days. Beside these datas our study have not been finished yet.

Conclusion: The use of the Vittel criteria in addition to a clinical examination to determine the need for a WBS and ISS calculation in a patient who admitted to the ED with multiple trauma can be prevent missed diagnosis, reducing unnecessary follow-up and unnecessary additional tests in the ED.

Keywords: Sema ünal, Multiple tauma, Vittel Criteria, ISS

Abstract:0759

MINOR THORACIC TRAUMA IN THE EMERGENCY DEPARTMENT: PROSPECTIVE EVALUATION

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Introduction: Thoracic injuries are common and can be fatal. However, minor thoracic traumas (MTT) are generally simple, non life-threatening thoracic injuries and are common causes of referral to emergency services. Emergency treatment and management of major and fatal thoracic trauma were determined in detail in the literature. But there are no sufficient data especially in terms of treatment and follow-up of emergency MTT management. The aim of this study is to examine demographic characteristics of patients admitted to the emergency service with minor blunt thoracic trauma, their emergency management, effectiveness of imaging, duration of pain of patients after trauma, readmission causes after discharge and impact of different analgesics on patient satisfaction.

Materials-Methods: Stable patients who admitted to Antalya Education and Research Hospital Emergency Department due to blunt chest trauma between July 2013 and April 2014 were enrolled in this study. Age, gender, mechanism of injury and other accompanying injuries, positive radiographic findings, the severity of pain and recommended analgesic treatment of the patients included in this study were recorded prospectively to study form. Patients enrolled in the study were called at 7th and 30th days by making phone calls and repeated hospital admissions and their satisfaction with the treatment given were questioned.

Results: A total of 186 patients with a mean age of 48 ± 17 years (min: 18, max: 91) were included in this study. 131 (70.4%) were male and 55 (29.6%) were female. 170 patients (91.4%) were discharged from the emergency department while 16 (8.9%) were hospitalized. 8 patients (4.5%) underwent surgery. 151 patients (86%) were admitted due to a fall on level ground, most commonly injured site was anterolateral thorax and 7th-8th ribs, and most frequently seen injury were soft tissue injury and rib fractures. In 59 of the patients, complaints that could not be explained with radiographs and examination were present and rib fractures and associated injuries were observed in 23 (38.9%) of performed tomographies of these patients. Breathing exercises and analgesic tablets were advised to all discharged patients. No significant difference was detected between satisfaction of patients and analgesic drug types used. Average pain level of patients with readmissions at 1st and 7th days was found to be significantly higher as compared to other patients. There was no additional pathology in any of the patients admitted to the hospital again.

Conclusion: Patients with minor thoracic trauma can be safely treated with appropriate analgesics and outpatient follow-up recommendations. As pain is a decisive factor in hospital readmission, it would be appropriate to prescribe adequate and appropriate analgesic and give detailed information to the patient about the pain.

Keywords: minor thoracic trauma, analgesic, pain

Table 1. Detected Thoracic Pathologies in Patients with Minor Injury

	n:	%
Rib fractures *	28	15,1
Pneumothorax **	10	5,4
Hemothorax ***	6	3,2
Contusion	11	5,9
Soft tissue injuries	146	29,6

Other pathologies are also found in 12 patients with rib fractures
 ** Pneumothorax is accompanied by hemothorax in 3 patients and contusion in 2 patients.
 *** Hemothorax is accompanied by contusion in 3 patients

Table 2. Satisfaction Status of Patients by Treatment Groups

Treatment given	Not Satisfied n/(%)	Satisfied n/(%)	P
Paracetamol	3	34	0,677
NSAIDs and codeine	15	80	0,429
NSAIDs	7	55	0,244

Abstract:0899

EVALUATION OF PENETRATING INJURIES IN EMERGENCY DEPARTMENT

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Introduction: Trauma is the major leading cause of death in healthy young adults between the ages 1-44. The most common factors that cause death are traffic accidents, falls from height, gunshot wounds and penetrating or stab wounds. Penetrating trauma by sharp object is classified in low-velocity wounds and damage is related to depth and angle of attack. The importance of penetrating injuries varies according to the body part and findings of some penetrating injuries may be initially obscured. The present study evaluates the trauma mechanisms, types of injury and demographic data of the penetrating trauma patients admitted to the Emergency Departments of Hacettepe University.

Material-Methods: This descriptive study retrospectively evaluates the trauma mechanisms, types of injury and demographic data of 648 patients admitted to the Emergency Departments of Hacettepe University with penetrating trauma between January 1, 1999 to December 31,2013. Types of trauma, results of diagnostic imaging studies, treatment methods, consultations, hospitalization ratio, complications were noted. The Glasgow Coma Scale (GCS), Revised Trauma Score (RTS), Injury Severity Score (ISS), and the Trauma and Injury Severity Score (TRISS) probability of survival rate for blunt trauma and penetrating trauma were calculated for all patients.

Results: Among the 648 patients enrolled in the study, 564 (87%) were male. The mean age was 31 (18-75) years. Most frequent admission was detected between 2002-2005 (n=241, 38%). The most common mechanism was found to be stabbing injuries (n=348, 54%). The most common injuries in the body were upper extremity (46,5%), lower extremity (28,5%), thorax (21,9%), head and neck (16,5%) and abdomen (16,4%). On admission Glasgow Coma Scale was lower than 15 in 30 patients. The mean RTS was 7,64 (1- 7,84), and the mean ISS was 4,36 (1-75). FAST was performed in 88 patients and fluid was detected in 13 patients. Most commonly performed CT was abdomen and solid organ injuries detected in 21, gastric and intestinal injuries

detected in 11 patients. Cranial CT was performed in 24 patients and fracture and intracranial bleeding were detected in 3 patient. The most frequent consultations were plastic surgery (32,9%), cardiovascular surgery (21,8%), general surgery (18,8%). The one hundred and sixty one patients underwent moderate and major surgery. Complications were developed in 13 patients. The 75,2% (n=487) treated in emergency department and 16,2% (n=105) of patients were hospitalized in wards, 2,2% (n=14) of patients hospitalized in intensive care unit and 10 (1,5%) patients were died.

Discussion: Majority of penetrating injuries are limited resiliency of tissue and 60-80% of injuries with less than 10% mortality. Penetrating trauma in abdomen are highly susceptible to injury and hemorrhage, and symptoms of bowel perforation may delay 12-24 hours. Heart and great vessels are under risk on injury in thorax and also chest wound compromises breathing. Penetrating trauma in neck may damage trachea and vessels and accompanied by neurological finding. Head trauma may cause serious intracranial bleeding.

Conclusion: In our study majority of penetrating wounds were detected in extremities but serious and lethal penetrating injuries were detected on thorax and abdomen. Penetrating wound in thorax and abdomen should be evaluated multidisciplinary and radiological imaging and surgical treatment should be planned at an early stage.

Keywords: penetrating trauma, emergency department.

Abstract:0939

EVALUATION OF GUNSHOT WOUNDS IN EMERGENCY DEPARTMENT

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Introduction: Gunshot wounds are one of the major lethal trauma in the emergency department and 38,000 deaths develop in US annually due to shootings. Injuries are related to energy and speed of bullet. Bullet spins in their route and cause much more injury than expected. In this study we aimed to evaluate injury pattern of gunshot wounds in the emergency department.

Material-Methods: This descriptive study retrospectively evaluates the trauma mechanisms, types of injury and demographic data of 142 patients admitted to the Emergency Departments of Hacettepe University with penetrating trauma between January 1, 1999 to December 31,2013. Types of trauma, results of diagnostic imaging studies, treatment methods, consultations, hospitalization ratio, and complications were noted. The Glasgow Coma Scale (GCS), Revised Trauma Score (RTS), Injury Severity Score (ISS) were calculated for all patients.

Results: Among the 142 patients enrolled in the study, 128 (90,1 %) were male. The mean age was 36 (18-77) years. Majority of wounds were detected in lower extremity (n=68, 47,9%), head and neck (n=44, 31%), upper extremity (n=41, 28,9%) and thorax (n=36, 25,4%). On admission Glasgow Coma Scale was lower than 15 in 30 patients. The mean RTS was 6,29 (0- 7,84), and the mean ISS was 8,06 (1-26). FAST was performed in 23 patients and fluid was detected in 3 patients. X-Ray was performed in 64 patient and X-ray had no pathological finding in 25 patients. Most frequent pathological finding were in extremity included bullet and bone fractures (n=34). Most commonly performed

CT was thorax CT (n=25) followed by cranial CT (n=23) and abdominal CT (n=19). Pneumothorax, hemothorax and lung injury was detected in 10 patients. Rest of the injuries were restricted in chest wall. Major intracranial injuries were detected in 20 patients. Intra-abdominal solid organ and bowel injury was detected in 11 patients. The most frequent consultations were orthopedics (50,7%), cardiovascular surgery (36,6%), brain surgery (19%), plastic surgery (18,3) and general surgery (14,8%). Complications were developed in 10 patients and most frequent complication was nerve injury. The 38,4 % (n=55) treated in emergency department and 34,5% (n=49) of patients were hospitalized in wards, 2,8% (n=4) of patients hospitalized in intensive care unit and 24 (16,9%) patients were died.

Discussion: Bullets with high speed include high level of energy and cause greater tissue damage than expected because of cavitation formation. Bullet trajectory is curved due to gravity and as bullet strikes object it slows and its energy transferred to object. Density of tissue affects the efficiency of energy transmission and strength and elasticity of an object determine damage degree. Solid organs are dense and have low resilience. Fluid filled hollow organs transit energy and cause increased damage but air filled organs absorb energy cause less damage. Air in lung absorbs energy, parenchyma is compressed and rebounds so pneumothorax or hemothorax can be seen. Bone resists displacement until it shatters. The cavitation energy trapped inside skull caused serious and lethal bleeding.

Conclusion: Bullets have high velocity/energy can cause potential internal organ injury. Injury can be greater than we expected. In any gunshot injury to head, chest and abdomen rapid transport to operating room and aggressive shock treatment should be provided in emergency department.

Keywords: gunshot wound, injury, emergency department.

Abstract:01350P

THE SIGNIFICANCE OF ROUTINE THORACIC COMPUTED TOMOGRAPHY IN PATIENTS WITH BLUNT CHEST TRAUMA

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Purpose: The purpose of this study is to find out whether use of Thoracic Computed Tomography (TCT) as part of non-selective computed tomography (CT) guidelines is superior to selective CT during the diagnosis of blunt chest trauma.

Subjects and Methods: This study was planned as a prospective cohort study and was conducted at the emergency department between 2013 and 2014. A total of 260 adult patients who did not meet the exclusion criteria were enrolled in the study. All patients were evaluated by an emergency physician and their primary surveys were completed based on the ATLS principles. Based on the initial findings and ATLS recommendations, patients in whom thoracic CT was indicated were determined (selective CT group). Routine CTs were then performed on all patients.

Results: Thoracic injuries were found in 97 (37.3%) patients following routine TCT. In 53 (20%) patients, thoracic injuries were found by selective CT. Routine TCT was able to detect chest injury on 44 (16%) patient for whom selective TCT would not otherwise be ordered based on the EP evaluation (nonselective TCT group). Five (11%) patients in this nonselective TCT group required tube thoracostomy, while there was no additional treatment provided for thoracic injuries in the remaining 39 (89%).

Conclusion: In conclusion, we found that the nonselective TCT method was superior to the selective TCT method in detecting thoracic injuries in blunt trauma patients. Furthermore, we were able to show the nonselective TCT method can change the course of patient management albeit at low rates.

Keywords: Chest trauma, CT, emergency radiology, thorax

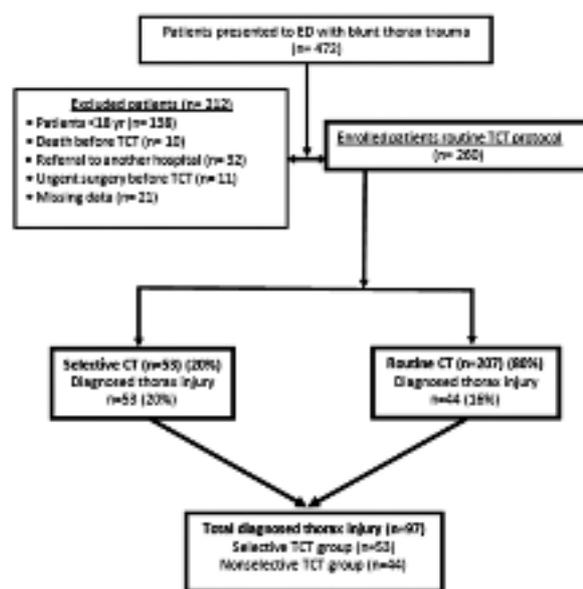


Figure 1. Flow Chart

Abstract:01610P

REGIONAL AUDIT OF HAND TRAUMA ASSESSMENT IN NORTH-WEST LONDON EMERGENCY DEPARTMENTS

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Background: Hand trauma accounts for approximately 20% of emergency department presentations, totalling more than 1.36 million attendances in the UK each year. The consequences of inadequate early management may be serious and long-lasting, including impaired functional ability, altered cosmesis and pain; therefore, a thorough and accurate initial assessment is crucial to the management of these patients.

Objectives: This audit retrospectively assessed hand trauma documentation in minor emergency medicine departments of five major north-west London hospitals, using it as a marker for adequacy of initial assessment and management of hand trauma.

Methods: Information Governance approval was obtained from all institutions involved. A retrospective analysis of hand trauma documentation based on College of Emergency Medicine

guidelines was carried out over a two-week period in August 2013. Data were collected from the electronic database used by each of these hospitals, Adastra, on mechanism of injury, hand dominance, assessment of tendon injury, assessment of nerve injury and pain management. Cases were identified by limiting the search to the specified dates and 'minor injuries.' The retrieved Cases were hand-searched for any relating to hand trauma. Paediatric patients, those with burns, splinters, insect bites, and those leaving the department before being seen by a doctor or experienced nurse practitioner were excluded.

Results: 347 Cases were retrieved. 61% (212/347) documented hand dominance, 95% (331/347) documented mechanism of injury, 54% (187/347) documented appropriate assessment for tendon injury, 78% (272/347) documented assessment of nerve function, while only 40% (161/347) referenced pain management.

Discussion: This audit highlights the fact that assessment of hand trauma is variable: while mechanism of injury is largely well documented, the other standards are substantially less so. The reasons for this are variable, and may include lack of understanding of hand function, inadequate knowledge of hand anatomy and poor documentation. This audit has raised awareness of these gaps in our understanding and initial management of hand injuries. Our institution has taken steps to improve the situation, including the Introduction of a hand trauma 'prompt sheet' within the emergency department, which was found to improve confidence in assessing hand trauma.

Conclusion: The burden of hand trauma is a large one, with important and potentially devastating long term consequences if not managed appropriately. Through the instigation of key interventions, management of these injuries may be improved.

Keywords: Hand trauma assessment, emergency department, minor injuries

Abstract:0552

ASSESSMENT OF MAXILLOFACIAL TRAUMA IN EMERGENCY DEPARTMENT

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Introduction: Diagnosis and management facial injuries are a challenge particularly in the setting of coexisting polytrauma in emergency department. Our goal is to broaden clinical data of maxilla-facial (MF) trauma patients for public health measures. In this study we analyze etiology and pattern of MF trauma and coexisting injuries if any.

Patients and methods: In the study MF injuries were diagnosed after evaluation of the patients' history, physical examination, forensic record and radiological studies. Patients with isolated nasal and dento-alveolar fractures were excluded and in patients with suspected more severe facial injuries, maxillofacial CT scans were performed.

Results: 556 (73.7%) male and 198(26.3%) female patients were included in the study. Mean age was 40, 06 ± 17, 2. Majority of the patients (n = 432, 57.4%) were between the ages of 18–39

years and predominantly male. Above 60 years of age, referrals were mostly woman. 172 (22,8%) patients suffered from 232 total injuries both to cranium and body.

Conclusion: MF trauma management is sometimes challenging in emergency departments. Knowing the MF trauma presentations, concomitant non facial injuries and TBI patterns are important for emergent management of patients. Orthopedic injuries followed by Traumatic Brain Injury (TBI) were the most common co-existing injuries in patients with maxilla-facial trauma and only frontal fractures are significantly associated to TBI (p < 0.05) if coexisting facial bone fracture occurred

Keywords: Maxillofacial trauma, Mid face fracture, Emergency department



Figure 1. Facial fractures according to anatomical sites

Table 1. Trauma Mechanisms According to Age and Gender

Ages	Gender	Violence	Stumble and fall	Traffic accidents	Strike by object	Occupational	Explosion	Total (%)
19-30	Male	99	32	59	13	0	1	204 (27.1)
	Female	16	9	17	1	0	0	43 (5.7)
31-40	Male	85	22	30	6	8	2	153 (20.3)
	Female	9	9	13	0	0	1	32 (4.2)
41-50	Male	52	23	19	1	1	0	96 (12.7)
	Female	5	8	13	2	0	0	28 (3.7)
51-60	Male	16	27	14	2	0	0	59 (7.8)
	Female	6	10	17	1	0	0	34 (4.9)
61-70	Male	8	8	5	1	0	0	22 (2.9)
	Female	0	11	4	0	0	0	15 (2.0)
Above 70	Male	2	13	7	0	0	0	22 (22.9)
	Female	1	8	7	0	0	0	46 (6.1)
Total (%)		299 (39.7)	210 (27.9)	205 (27.2)	27 (3.6)	9 (1.2)	4 (0.5)	754

Table 2. Fractures and injury patterns in patients with c existing maxillofacial trauma

		<i>n of patients</i>	<i>% of patient</i>
Orthopaedic Injuries	Hand/wrist	17	9.8
	Forearm	16	9.3
	Femur	16	9.3
	Tibia/Fibula	16	9.3
	Humerus	11	6.3
	Clavicula/scapula fracture	10	5.8
	Foot/ankle	9	5.2
	Lomber Vertebra	3	1.7
Abdomino-pelvic injuries	Pelvic fracture	13	7.5
	Spleen hematoma	5	2.9
	Liver hematoma	4	2.3
	Pelvis hematoma	2	1.1
	Gastric perforation	2	1.1
	Retroperitoneal hematoma	1	0.5
Thoracic injuries	Clavicula/scapula fracture	10	5.8
	Pneumothorax/hemothorax	11	6.3
	Costa fracture	7	4.0
	Pulmonary contusion	2	1.1
Traumatic brain injuries	Subarachnoid hemorrhage	30	44.1
	Brain contusion	15	22.0
	Epidural Haematoma	14	20.5
	Pneumocephalous	13	19.1
	Subdural hemorrhage	11	16.1
	Diffuse axonalinjury	4	5.8

Wound Management

Abstract:0529

EXPLORING THE ANTIBACTERIAL EFFECT OF "CHITOSAN LINEER POLYMER" (CELOX™) IN A EXPERIMENTAL INFECTED RAT MODEL

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Background and purpose: Wound infections are stil a serious problems of emergency departments since its rate is around 8-10%. We aimed to discuss if "Chitosan Lineer Polymer" (CLP) (a local hemostatic agent) has antibacterial effect of in a experimental infected rat model.

Methods: Following ether anesthesia, dorsal site of 11 rat was shaved and a 2 cm long paravertbral incision was done. Later, the wound edges were clamped for 2 minutes to increase occurrence rate of wound infection. In order to contaminate the cut area a suspension of Staphylococcus Aureus (108 CFU/ml) is poured onto it. Later, the rats are randomly divided into: CLP (n=6) (2 gr CLP poured into the cut area) and control, (n=5) groups (no treatment). The rats were observed for 6 days. Everyday, the cut areas, were observed by "wound evaluation scale" (WES) for: redness, edema, discharge. Following sacrifice tissue samples were taken and investigated for bacteriological analysis.

Results: In CLP group 1 rat died. There was no significant difference for WES value of control group, however there was significant difference for the 1. and 5. days WES of CLP group (p=0.032) was (CLP group: 3+0.83 (3,0-5,0), Control Group: 6+1.73 (2,0-6,0)). On behalf of mean bacterial count of groups, there was no significant difference between groups (CLP group: 1x10⁵+354881, Control Group: 1x10⁵ +472154) (p<0.05). When WES is compared between groups on 1. and 5 days, we percieved that wound infection was more evident in CLP group since p=0.034.

Conclusions: Here in this experimental infected rat model study, application of CLP into the wound area didn't decrease the occurrence rate of infection.

Keywords: Emergency department, chitosan lineer polymer, wound infection

**Poster
Presentations**

P-001

[Havayolu Yönetimi]

A TECHNIQUE THAT SHOULD BE REMEMBERED IN ADVANCED AIRWAY: SURGICAL CRICOTHYROTOMY

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Introduction: Airway management is the most important step for resuscitation in the emergency department. Emergency intubation may be required in the event of respiratory or cardiac arrest. Various techniques exist for establishing advanced airway. One of the alternatives to orotracheal intubation is cricothyrotomy.

Case: A 3-year-old, 13-kg girl was brought to the emergency department due to bleeding from the nose and mouth. We learned that cardiopulmonary arrest had occurred 10 min before arrival at hospital. Chest compressions were immediately initiated. At the same time, the blood and other secretions inside the mouth were aspirated while efforts were made to establish respiration support with a balloon-valve mask. When the orotracheal intubation stage was reached, intubation failed due to massive bleeding and secretions inside the mouth and oropharyngeal edema. Subsequent repeat orotracheal intubation was again unsuccessful, and advanced was established with surgical cricothyrotomy. Pulse and blood pressure were taken at the 10th minute of cardiopulmonary resuscitation (CPR)(heart rate: 120 beats/min, BP:70/30 mmHg). The patient was admitted to the intensive care unit. Tracheostomy was performed in the intensive care unit. We later learned that hypoxic brain damage developed, together with epileptic episodes associated with this. The patient was discharged with GCS: 14 on the 7th day of hospitalization.

Conclusion: Consideration of alternatives to orotracheal intubation can be life-saving in airway management.

Keywords: advanced airway, cricothyrotomy, emergency department



Figure 1. Surgical cricothyrotomy kits

P-002

[Havayolu Yönetimi]

ADULT EPIGLOTTITIS: A RARE DIAGNOSIS SUCCESSFULLY TREATED

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Introduction: Acute epiglottitis is a potentially life-threatening syndrome produced as a result of inflammation, usually caused by infection, which affects the epiglottis and surrounding structures. The incidence of epiglottitis in adults is about 1 /100,000 per annum. Because of the possibility of a rapid, fatal airway obstruction, awareness of epiglottitis is important and the disease should be considered a medical emergency. We report here the case of a 25-year-old male patient with acute infectious epiglottitis. He was treated medically and discharged 5-days of hospital stay.

Case Presentation: A 25-year-old man admitted to the emergency department with a 5 day history of a sore throat, painful dysphagia, muffled voice and high fever. There was no additional disease at his medical history. On initial examination he had tachycardia (115 beats / min), tachypnea (24 breaths/min) and fever (38.5 ° C). His blood pressure was 120/70 mm Hg and oxygen saturation was 95%. On physical examination he had oropharyngeal hyperemia, anterior neck tenderness and trismus. In laboratory he had leukocytosis (16,730 / mm³) and other biochemical tests were normal. We took a soft-tissue lateral neck X-ray (Figure 1). With these findings we suspected deep neck infection and performed neck computed tomography (CT). According to the CT report the epiglottis folds were thicker than normal, both tonsils were hypertrophic, the epiglottic vallecula and bilateral pyriform sinus were obliterated (Figure 2). The patient was consulted with Ear Nose Throat (ENT) Department and was examined by flexible fiberoptic laryngoscope, the epiglottis was seen hyperemic and inflamed. The patient was admitted to the ENT Department with a diagnosis of acute epiglottitis. The patient was treated with intravenous methylprednisolone(40 mg a day) and ceftriaxone(1 mg twice a day) for 5 days. The patient's symptoms improved and the patient was discharged. No complications occurred.

Conclusion: Recent studies have found an increasing incidence of acute epiglottitis in adults. It seems that acute epiglottitis, classically considered a disease of children, is now becoming a disease of adults. These patients should be monitored in the intensive care units. In case sudden upper airway obstruction occurs, equipments for immediate endotracheal intubation and cricothyrotomy should be available at the bedside of all patients with epiglottitis treated conservatively.

Keywords: epiglottitis, adult, Emergency department



Figure 1. Lateral neck soft tissue X-ray

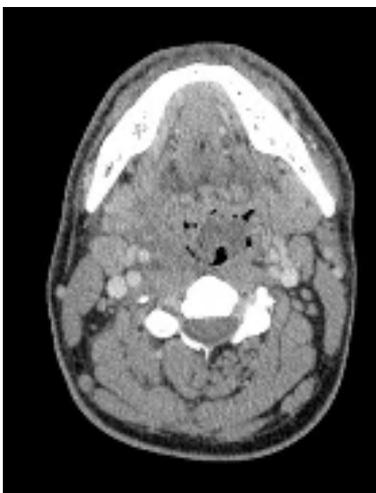


Figure 2. Neck CT

P-003

[Havayolu Yönetimi]

COMPARISON BETWEEN CPAP AND BIPAP VENTILATION IN TREATMENT OF POSTOPERATIVE PULMONARY COMPLICATIONS

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Introduction: Postoperative pulmonary complications (PPC) are as prevalent as cardiac complications and contribute significantly to morbidity, mortality and length of hospital stay. Determination of frequency and clinical impact of PPC in modern practice is limited because of lack of a uniform definition of PPC in the literature.

Aim of the work: To evaluate the role of non invasive ventilatory support with BIPAP or CPAP in recovery from post operative pulmonary complications after non cardiac surgery.

Patients and Methods: This is a prospective randomized study which was conducted in the Kasr Alaini Cairo University Hospital Sixty patients who underwent non cardiac surgery and suffered (PPC) were included in the study and classified into three group 1 (BIPAP group), group 2 (CPAP) and group 3

(standard group).. Informed written consents were taken from the next of kin.

Results: Out of sixty patients admitted postoperatively by respiratory problems, 29 patients had atelectasis (48.3%) and 16 patients suffered bronchospasm. The hemodynamic status and ABG at the time of ICU admission showed no significant difference between the three groups. However, in spite of that there was significant improvement in PH, PaO₂, PaCO₂ and O₂ sat among patients assigned to BIPAP group on the next day of admission in comparison to CPAP group and standard group. The length of stay in ICU was significantly shorter among patients assigned to BIPAP group (p value 0.04).

Conclusion: Our study demonstrated the feasibility, good tolerance and safety of BIPAP for the treatment of post operative respiratory problems as well as significant improvement in ABG on the next day of admission and shorter length of ICU stay.

Keywords: Postoperative pulmonary complications (PPC) - BIPAP - CPAP

P-004

[Havayolu Yönetimi]

PROGNOSTIC VALUE OF LACTATE CLEARANCE IN SEVERE COMMUNITY ACQUIRED PNEUMONIA

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Introduction: Severe community acquired pneumonia (SCAP) occurs in approximately 18–36% of all CAP and the mortality rate could be as high as 67% in patients with SCAP. Several studies have described a correlation between baseline lactate concentration and mortality of ICU patients.

Aim of the work: To follow lactate clearance after admission for 24 h which could be an indicator of outcome in severe community acquired pneumonia.

Patients and Methods: Forty-six consecutively admitted adult patients were diagnosed as severe community acquired pneumonia. Lactate was measured at the time of admission (H0), reassessment of lactate level was done after 8 h and also another lactate measurement done after 24 h. In a trial to follow the guideline for management and to optimize oxygen delivery (DO₂) and reach a ScvO₂ P70%, ScvO₂ was measured through a central venous blood sample done at the same time with lactate. During the study resuscitation by inotropic medications and patient's physiological parameters were measured routinely. All data needed to calculate the Acute Physiology and Chronic Health Evaluation (APACHE II) score were recorded.

Results: Most of patients in the current study were above the age of 60 years. Twenty-five patients had lactate clearance of more than 40%, those patients were included in group 1, whereas 21 had lactate clearance of 40% or less and they were included in group II. There was no significant difference in the age and sex distribution between both groups. Out of 21 patients included in group II, inotropic drugs were used in 8 patients (38%), whereas there was one patient only in group 1. The rate of intubation in addition to the mean APACHE II score and ICU length of stay was significantly higher in group II compared to group I. Over the first 24 h three readings for mixed venous oxygen were recorded and included in the analysis. The reading of mixed venous oxygen recorded after 24 h of ICU admission was significantly high in

group 1. All indices of blood lactate clearance over the first 24 h were higher in group 1 compared to group II, however it was only significantly high after 24 h (p-value 0.01).

Conclusion: Our study suggests that lactate clearance could be used as a useful biomarker which is inexpensive and a reliable predictor of patient outcome in critically ill patients admitted to ICU with severe community-acquired pneumonia.

Keywords: SCAP; Lactate clearance; ICU outcome

P-005

[Havayolu Yönetimi]

RAPIDLY SURGICAL AIRWAY MANAGEMENT IN EMERGENCY DEPARTMENT AS A LIFE-SAVING INTERVENTION

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Carotid artery injuries result in significant mortality and morbidity. The majority of patients with vascular neck injuries died at the site where the injury occurred or during transport to medical facilities. Therefore, if immediate treatment is not given, fatal complications can occur, resulting in death. The aim of this study is to show that the importance of life-saving emergency treatment.

33 years old male had an attack at emergency department and a knife injury on his neck. He had a huge hematoma in his neck. After a couple of minutes he had dyspnea and respiratory arrest in 5 minutes. Patient could not be intubated so cricothyroidotomy performed. After cricothyroidotomy patient started to breathe. His O₂ saturation improved. He sent to an university hospital. Left carotid artery (LCA) injury determined with computed tomography angiography. No other injuries were noted. Emergent cerebral angiography demonstrated brisk contrast extravasation indicating active bleeding from the cervical LCA. Endovascular repair of the cervical LCA performed with cerebral angiography. The patient was transferred to the surgical intensive care unit with a guarded prognosis due to the initial cardiac arrest and possible consequences global anoxic brain injury.

Traumatic ICA transection is a well described sequelae of missile penetrating neck injury. This patients have serious clinical problems like airway obstruction.

Cricothyrotomy is a rarely performed but potentially life-saving procedure. Cricothyroidotomy, also known as cricothyrotomy, is an important emergency procedure that is used to obtain an airway when other, more routine methods (eg, laryngeal mask airway] and endotracheal intubation) are ineffective or contraindicated.

Keywords: Surgical airway, carotid artery injury,



Figure 1.

P-006

[Kardiyovasküler Aciller]

ATRIAL FIBRILLATION TRIGGERED BY EXERTION AND ISCHEMIA BACK TO NORMAL SINUS RHYTHM WITH 10 MINUTE REST

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Atrial fibrillation (AF) is the most common abnormal heart rhythm observed in clinical practice. In AF, blood pools in the atria. It isn't pumped completely into the heart's two ventricles. As a result, atrium and ventricle don't work together as they should. It is characterized by an irregular and often rapid heartbeat. The exact mechanisms by which cardiovascular risk factors predispose to AF are not understood fully but are under intense investigation. Catecholamine excess, hemodynamic stress, atrial ischemia, atrial inflammation, metabolic stress, and neurohumoral cascade activation are all purported to promote AF. It may cause no symptoms, but is often associated with palpitations, fainting, chest pain, or congestive heart failure. We will present a patient with atrial fibrillation triggered by exertion and ischemia, after 10 minute rest back to normal sinus rhythm without any treatment.

62 year old male patient was admitted to the emergency department with palpitations started when walking uphill. He did not describe chest pain. On admission his vital signs were; blood pressures 116/68, pulse rates was 180/min, temperature was 36.9 C, respiratory rate was 18 breaths/min. In his medical history he had diabetes mellitus. He had no medical history of an other diseases except diabetes mellitus. There was no history of drug use except insulin. System physical examination findings were normal.

Laboratory testing revealed normal values. ECG was taken and A 12-lead electrocardiogram (Figure 1) revealed atrial fibrillation. Patients were monitored. After ten minute resting the rhythm back to normal sinus rhythm on the monitor without any medical and electrical treatment. Second ECG was taken and ECG revealed normal sinus rhythm((Figure 2,3).We thought exercise and ischemia induced atrial fibrillation. Cardiology consultation was requested. Patients were hospitalized for advanced research in cardiology service. Coronary angiography was performed to the patient. Coronary angiography showed 95% narrowing at the left anterior descending, both branches of the circumflex artery and 80% blockage of the right coronary artery.

Atrial fibrillation has strong associations with other cardiovascular diseases, such as heart failure, coronary artery disease, valvular heart disease, diabetes mellitus, and hypertension. New onset and effort-induced atrial fibrillation is vital. Because it may be a precursor of coronary artery disease. Such patients should be requested cardiology consultation and further research should be done.

Keywords: Atrial Fibrillation, Exertion And Ischemia, Coronary Artery Disease



Figure 1. The patient's admission ECG after walking uphill -Atrial fibrillation

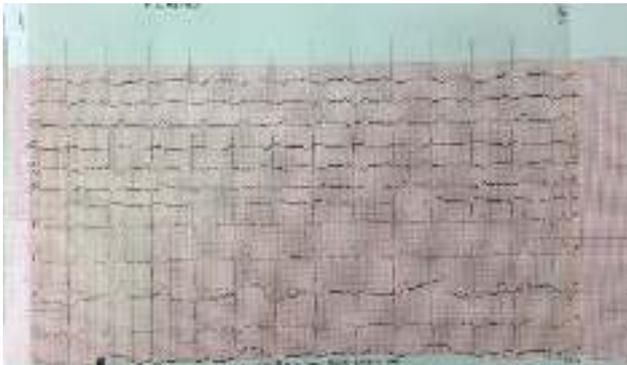


Figure 2. Taken after 10 minutes resting ECG - sinus rhythm



figure 3. Atrial Fibrillation Triggered By Exertion And Ischemia Back To Normal Sinus Rhythm With 10 Minute Rest.

A RARE AND INTERESTING CASE; RETURNING TO NORMAL SINUS RHYTHM WITHOUT ANY TREATMENT FROM COMPLETE AV BLOCK

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Introduction: Third-degree AV block, also known as complete heart block, is a medical condition in which the impulse generated in the SA node in the atrium does not propagate to the ventricles. Because the impulse is blocked, an accessory pacemaker in the lower chambers will typically activate the ventricles. usually we see symptomatic patients but sometimes, patients are asymptomatic or have only minimal symptoms related to hypoperfusion. Patients with narrow complex escape rhythms (eg, those whose escape rhythm occurs above the His bundle) are more likely to have minimal symptoms. In these situations, symptoms include the following: Fatigue, Dizziness. Return to a normal rhythm from Third-degree AV block without any treatment is very rarely. Now we report a case; return to a normal sinus rhythm without any treatment from complete AV block.

Case: A 74 year –old male patient was admitted to emergency service with complaints of dizziness, weakness, feeling faint. Her complaints had first started 1 year ago and these complaints were repeating sometimes. Patient were admitted to the neurology and cardiology department for these complaints but they have been found no significant illness to cause this situation. There was no history of chronic disease and drug use. On physical examination her vital signs were; blood pressure 100/60 mmHg, heart rate 42/min, respiration rate 12/min and body temperature 36.6°C. There were no murmurs or gallops. Other physical examination findings were normal. Laboratory testing revealed normal values. ECG was taken and A 12-lead electrocardiogram (Figure 1) revealed third-degree heart block. Patients were monitored. Cardiology consultation was requested for pacemaker implantation. After five minute the rhythm back to normal sinus rhythm on the monitor without any medical and electrical treatment. Second ECG was taken and ECG revealed normal sinus rhythm (figure 2,3). Patients were hospitalized and permanent pacemaker was implanted. She was discharged after 3 days.

Conclusion: As a result cardiac conduction abnormalities may be the underlying cause in patients presenting with syncope or feeling faint and also third-degree AV block may be an underlying condition in patients who present with sudden cardiac death. When treated with permanent pacing, the prognosis is excellent.

Keywords: Third-degree AV block, cardiac conduction abnormalities, sudden cardiac death

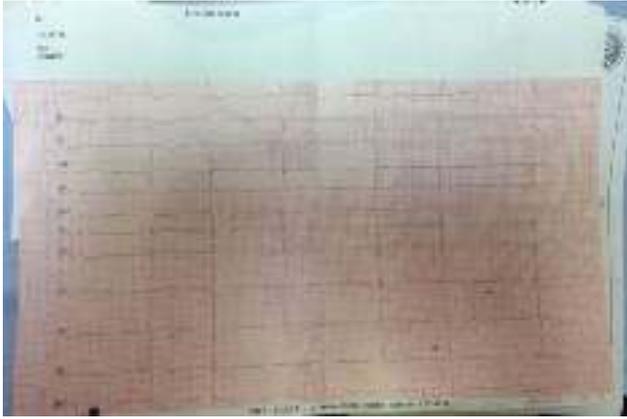


Figure 1. Patient's admission ECG compatible with third-degree block



Figure 2. Second ECG was taken 5 minute after first ECG - it was compatible with normal sinus rhythm



Figure 3. Returning to a normal sinus rhythm without any treatment from complete AV block.

P-008

[Kardiyovasküler Aciller]

ACUTE PERICARDITIS:MIMICKING ACUTE MYOCARDIAL INFARCTION

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Objectives: Acute pericarditis is the most common pathologic process involving the pericardium. Chest pain, pericardial friction rap, electrocardiographic changes, and pericardial effusion are cardiac manifestations of many forms of this disease. In acute pericarditis pericardial effusion, especially important clinically when it develops within relatively short time, since it may lead to cardiac tamponade. In this case we aimed to present pericarditis case which looks like myocardial infarction.

Case: A 17 years old male patient was admitted to the emergency department with complaints of severe, sharp, retrosternal chest pain which run since one hour. He was smoker but denied any drug abuse. In his story he hasn't got any disease. He hasn't use dany medication. He didn't have any medical

family history. Physical examination was unremarkable, the general condition was good. Blood pressure 120/80 mmHg, body temperature: 36.4, heart rate: 98/min, respiratory rate: 12, GCS: 15. His electrocardiography showed ST elevation on D2-D3-AVF and ST depression on V1-3. urine analyses for drugs was negative. Laboratory tests AST: 45 u / l ALT: 14 u / l CPK: 535 u / l CK-MB 59 u / l. Troponin: 0.612 (0-0.02) ASO: 117 RF: 10.6. Arter blood gases is normal. Chest radiography is normal. He had consulted to cardiologist and admitted to angiography unit for coronary angiography. His coronary angiography didn't show any vasküler pathology. His ecocardiography is was consistent with pericarditis EF: %60. We started to treat patient with 800 mg of ibuprofen 2 * 1 and after 1 day treatment ECG returned to normal. In the following days the patient was discharged.

Conclusion: ECG findings that occur with acute pericarditis may resemble an acute myocardial infarction. The patient with ST-segment elevation, pericarditis should be considered in the differential diagnosis

Keywords: Myocardial infarction, acute pericarditis, emergency medicine

EKG-1

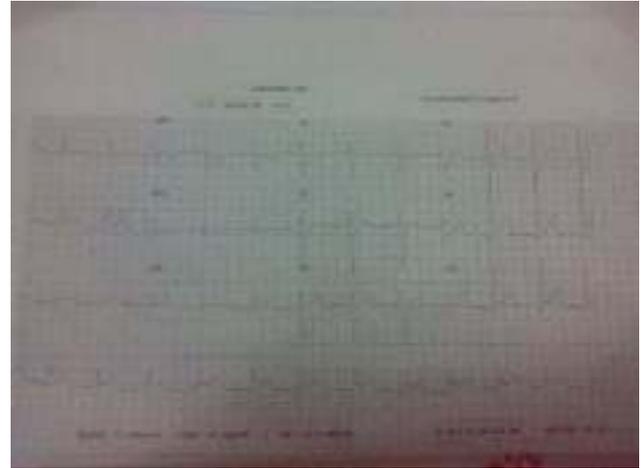


Figure 1. First EKG in emergency department

EKG-2

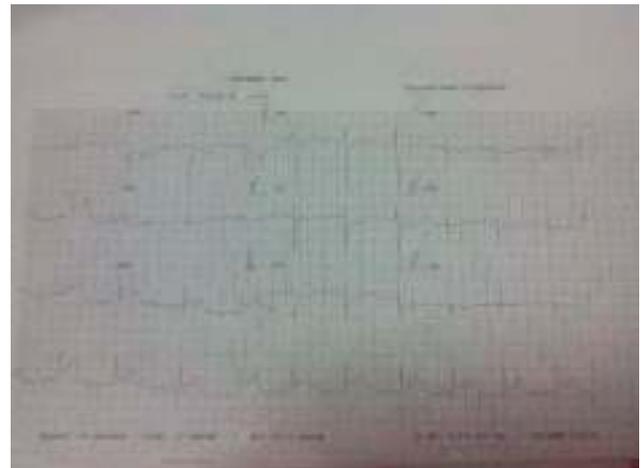


Figure 3. First EKG in emergency department

EKG-3



Figure 3. EKG after ibuprofen treatment

P-009

[Kardiyovasküler Aciller]

MYOCARDIAL INFARCTION FOLLOWING A BEE STING. A CASE REPORT OF KOUNIS SYNDROME

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We described here A 40-year-old man envenomated by a bee sting that caused myocardial damage compatible with -ST elevation acute myocardial infarction. He developed a typical course of myocardial infarction; the ECG changes were reversed to almost all normal limits. He had non significant mild lesion in proximal port of RCA in coronary angiography.

Myocardial damage following prolonged spasm in the coronary arteries may be the underlying factor. This is a case of Kounis syndrome, which is the concurrence of acute coronary syndromes with conditions associated with mast cell activation including allergic or hypersensitivity reactions as well as anaphylactic or anaphylactoid insults. The clinical implications and pathophysiology of this dangerous association are discussed.

Keywords: Bee sting; Myocardial infarction

P-010

[Kardiyovasküler Aciller]

VENA CAVA SUPERIOR SYNDROME RELATED WITH SUBCLAVIAN HEMODIALYSIS CATHETER IN END STAGE RENAL DISEASE PATIENT

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Objective: The Superior Vena Cava Syndrome (SVCS) is a collection of signs and symptoms resulting from obstruction of superior vena cava. Although the majority of cases of SVCS are complication of malignancy (lung cancer, lymphoma), 5-10% of cases occur in nonmalignant conditions such as secondary to central venous catheter or cardiac pacemaker leads placement, post radiation sequelae. We presented a case of SVCS in end stage renal disease (ESRD) patients secondary to subclavian venous catheter placement for hemodialysis.

Case report: A 60 year old woman with dizziness and near syncope presented to our emergency department (ED). The patient, who had had a previous history of ESRD on maintenance hemodialysis for two years was complaining of dizziness, edema of face and neck for a month. The patient's right subclavian hemodialysis catheter was removed before 1.5 months ago and right femoral hemodialysis catheter was inserted.

On admission to our ED, the patient had a blood pressure of 81/43 mmHg, heart rate 108/min, respiratory rate 23/min, temperature of 36.5°C, peripheral oxygen saturation of 96% and Glasgow Coma Scale score of 15. Her physical examination had revealed crackles in bilateral lung bases, edema of face and neck. Other system examinations were normal. ECG was showed sinus tachycardia. The initial laboratory tests showed hemoglobin of 9.6 gr/dl, leukocytosis of 14,5 K/ıu, glukoz of 171 mg/dl, üre of 67 mg/dl, cre of 5,2 mg/dl. The coagulation tests were normal. Transthoracic echocardiography and computerized tomography of cranial revealed no acute pathology. SVCS was suspected and CT angiography of neck and thorax was ordered. CT angiography of neck and thorax showed thrombus in the right superior vena cava (Figure 1).

The patient was admitted to intensive care unit and anticoagulant therapy was started. Thrombolytic therapy was administered to the patient who was progressing to hemodynamically unstable condition. After thrombolytic therapy, the patient's vital signs had stabilized. On 4th day of admission to intensive care unit, the patient occurred fever and hypotension. On 18th day of admission, the patient died as a result of septic shock secondary to catheter infection.

Discussion: There has been an increase in SVCS associated with intravascular devices. The incidence of subsequent venous stonosis is approximately 30-50% with subclavian catheterization. The clinical diagnosis is made on the basis of characteristic signs and symptoms of central venous obstruction. Patients may complain of symptoms such as shortness of breath, cough, swelling, headache, confusion or coma. The most common physical examination findings are swelling of the face and neck. The most useful imaging study is CT angiography of thorax.

There are three approaches to management in central venous obstruction associated with dialysis catheter (observation, percutaneous angioplasty and surgery). Asymptomatic lesions do not require treatment. If the patient is symptomatic or hemodynamically unstable, catheter directed pharmacologic thrombolysis or mechanical thrombectomy can be considered. Systemic anticoagulation should be considered.

Conclusion: Central venous catheter in hemodialysis patients may result in SVCS. The risk of SVCS is higher in the subclavian catheterization. The subclavian vein should not be used unless it is necessary.

Keywords: central venous catheter, superior vena cava syndrome, dialysis

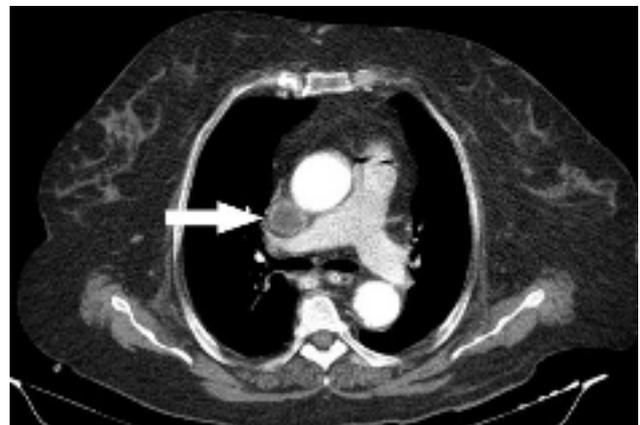


Figure 1. Thorax CT angiography showing occlusion of the superior vena cava

P-011

[Kardiyovasküler Aciller]

NEAR DROWNING COMPLICATED BY ST SEGMENT ELEVATION MYOCARDIAL INFARCTION

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Introduction: Near drowning is confined as respiratory impairment from submersion in water. It can be a reason for emergency medicine during summer. Complications include hypoxic injury to central nervous system and respiratory system failure.

Case: A 42 year old female with a history of hypertension and smoking presented to our emergency department (ED) after submersion to sea water 1 day ago. She described she submerged for few minutes and aspirated small amount of sea water. She denied any chest pain. She was admitted to another ED and discharged after observation. She began to feel fatigue, and developed nausea and shortness of breath before admitting to our hospital.

During admission she looked moderately ill. She was tachycardic with a pulse rate of 145/min. Her breath sounds were bilaterally equal with rhoncus. Thoracic computed tomography showed bilateral consolidations scattered through all lobes. Arterial blood gas appeared normal. Electrocardiogram was consistent with anterior ST segment elevation myocardial infarction. Her troponin level was 31.97 ng/ml.

She was transferred to another hospital for coronary artery angiography was total occlusion of left anterior descending coronary artery was observed. Non drug eluting stent was placed after thrombus aspiration.

Report: Myocardial ischemia after near drowning and drowning can be associated with disruption of coronary oxygen flow after submersion and reversed after restoration of normal flow. Our case demonstrates atherosclerotic plaque rupture and excessive thrombosis can be an alternative explanation. Emergency physician need to be aware that myocardial ischemia and infarction can occur without hypoxemia.

Keywords: near drowning, myocardial infarction, respiratory aspiration

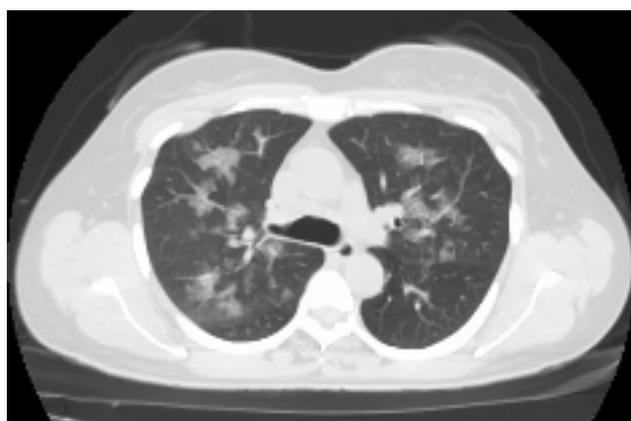


Figure 1. Thorax computed tomography showing bilateral infiltration consistent with aspiration.

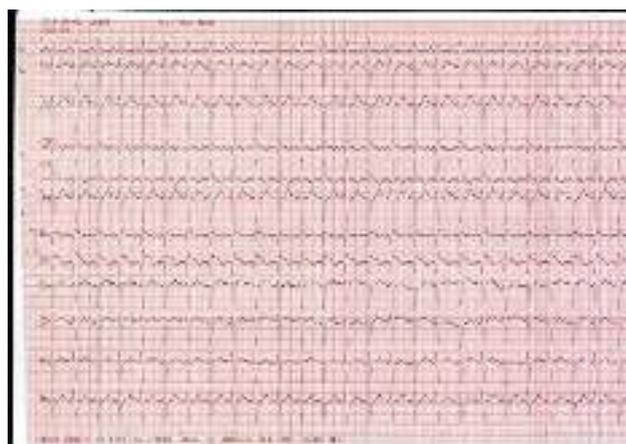


Figure 2. Electrocardiogram of patient consistent with anterior ST segment elevation myocardial infarction

P-012

[Kardiyovasküler Aciller]

NON TRAUMATIC AORTIC RUPTURE AND PERICARDIOCENTESIS PERFORMED DURING RESUSCITATION

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Introduction: Aortic rupture is an emergency of aorta where loss of integrity across the entire thickness of aorta is observed. Unlike aortic rupture, an aortic dissection involves partial involvement of the aorta where blood dissects medial and intimal layers of aorta. We report a case of non-traumatic aortic rupture presented to our emergency department (ED) diagnosed with bedside ultrasound during resuscitation.

Case: A 67 year old male with a history of hypertension was brought to ED after cardiopulmonary arrest. His wife stated that he collapsed without any symptoms. He was brought to ED while being resuscitated.

Upon arrival he had ventricular fibrillation and chest compressions were initiated after defibrillation. After the patient was intubated, bedside ultrasound showed pericardial effusion reaching 3 cm thickness. Subxiphoid pericardiocentesis was applied and 50 ml of partially coagulated blood was aspirated. During resuscitation, pericardiocentesis catheter was replaced and after 500 ml of blood was drained, patient regained pulse. Computed tomography of thorax and abdomen with intravenous contrast showed extensive mural thrombus with a maximum depth of 10 mm and linear extensions in arcus and descending aorta consistent with acute rupture. Also pericardial fluid was observed as well.

While patient was prepared for cardiovascular operation, his status deteriorated and developed cardiopulmonary arrest. Patient died despite 45 minutes of resuscitation.

Discussion: Spontaneous rupture of aorta without aneurysm, trauma or ulcers is reported rarely in the literature. Its symptoms and radiologic appearance can mimic other aortic emergencies. Hemopericardium in the absence of intimal flap or aortic dilatation should raise suspicion of acute aortic rupture where prompt diagnosis with bedside ultrasound and surgery can be lifesaving.

Keywords: aortic rupture, bedside ultrasonography, Pericardiocentesis



Figure 1. Sagittal section of computed tomography of thorax with intravenous contrast showing aortic rupture site in ascending aorta (arrow)

P-013

[Kardiyovasküler Aciller]

A RARE COMPLICATION OF ALLERGY: "KOUNIS SYNDROME"

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Introduction: Allergy is one of the most frequent causes of the emergency department (ED) admissions. A wide spectrum of etiologic causes including foods, inhalation, insect bites and contacts are responsible this situation. Simple urticarial lesions and life threatening complications like anaphylactic shock syndrome can occur due to this. Allergic Myocardial Infarction also named as Kounis Syndrome is one of these complications. Here, we report a case of Kounis Syndrome following bee sting.

Case: A male patient aged 42 admitted to the ED with the complaint of bee sting 1 hour ago and urticarial rash. He had no prior illness and stated that he had bee sting on his arm nearly an hour ago while he was working on the field. Also, he complained of a pain on his forehead, continuing for 15 minutes spreading to his chin. He had a smoking history of 1 pack/day and had no family history of illness. His initial ECG revealed ST elevation in V1-4 derivations and had no reciprocal changes. Vital signs were stable and his physical examination revealed no specific changes except urticarial rashes. In laboratory tests; CK: 116 IU/L, CK-MB: 15 IU/L and Troponin-I was valued as 0.008 ng/ml however there was not anything specific tests either. He was initiated feniramine maleat and metil prednisolone due to allergic reactions also acetylsalicylic acid and nitrate infusion were given regarding to acute coronary syndrome. He was regarded as ST elevated myocardial infarction as he had no ECG changes during follow-ups in addition to his decreasing symptoms. After that he was consulted to cardiology department and coronary angiography was planned. No patologic findings were observed during the operation and the patient's situation were regarded as Kounis Syndrome following bee sting.

Conclusion: Acute coronary syndrome management and suppressing the allergic reaction were the basic principles in the management of Kounis Syndrome. In type 1 Kounis Syndrome, primary medications are nitrates and calcium channel blockers as the basic mechanism is coronary vasospasm. Steroids and antihistaminic drugs are used to suppress the allergic reactions and coronary vasospasm. In type 2 Kounis Syndrome, ACS protocols should be followed, antihistaminic and steroid drugs should be

kept in mind. Also coronary angiography must be performed, vasospasm should be dissolved by direct intracoronary drugs and angioplasty should be performed if it is necessary.

Keywords: Kounis Syndrome, Bee sting, Chest pain, Emergency department.

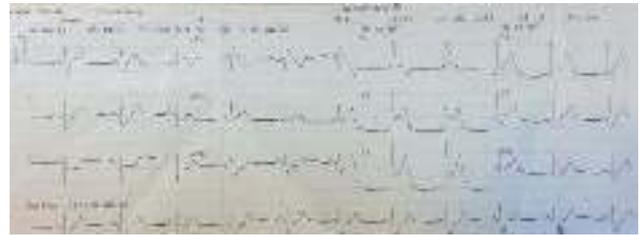


Figure 1. ECG

P-014

[Kardiyovasküler Aciller]

ACUTE CORONARY SYNDROME WITH ST ELEVATION (STEMI) PREHOSPITAL TROMBOLYTIC THERAPY CASE REPORT: VUK PETAR NIKOVIC¹, TATJANA T RAJKOVIĆ²

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Introduction: Acute coronary syndrome (ACS) refers to any group of symptoms attributed to obstruction of the coronary arteries. The most common symptom prompting diagnosis of ACS is chest pain, often radiating of the left arm or angle of the jaw, pressure-like in character, and associated with nausea and sweating. Acute coronary syndrome usually occurs as a result of one of three problems: ST elevation myocardial infarction (30%), non ST elevation myocardial infarction (25%) or unstable angina (38%). Metalyse is indicated for the thrombolytical treatment of suspected myocardial infarction with persistent ST elevation or recent left bundle branch block within 6 hours after the onset of acute myocardial infarction symptoms. The amount of salvageable heart tissue is inversely related to the duration of coronary artery occlusion, up to 6 hours after the first symptoms of acute myocardial infarction (AMI), when myocardial ischaemia becomes irreversible.

Target: Importance of prehospital thrombolysis in an acute coronary syndrome with ST segment elevation.

Material-Methods: This is a case report about a 55 years old man who had a myocardial infarction and was treated with thrombolytic therapy in the prehospital setting by the emergency service.

Results and Discussion: The patient rode a bicycle in the morning for about 10 km. While riding he felt chest pain, filling shortness of breath. Passerby called Emergency services at 6:24 am. In the emergency car ECG was done which showed a ST segment elevation from V1 to V6. Arterial pressure was 160/90 mmHg, heart frequency 70/min, SpO₂ 96%, GCS 15. In the car was administered therapy: Zofran 4mg, Aspirin 500 IV. Heparin 10.000 IJ, Vandal 10mg, and in 6:52 Metalyse amp. 10.000 IJ/10ml: 6000/1KG 55kg. Ringerlactate 500 ml IV. When patient arrived in Emergency department, laboratory analysis and heart ultrasonography were made. Personal anamnesis: Patient has high cholesterol, doesn't drink therapy, consume alcohol, doesn't smoke. Within 120 minutes primary coronary angiography was made, which showed proximal LAD stenosis 70% - 90% TIMI III, a implantation STENT

Keywords: Acute coronary syndrome, Prehospital thrombolytic therapy



Figure 1.



Figure 2.

P-015

[Kardiyovasküler Aciller]

A CLINICAL DIAGNOSIS IN EMERGENCY DEPARTMENT MISDIAGNOSED WITH AORTIC DISSECTION: "MULTIPLE ARTERIAL EMBOLISM"

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Introduction: Arterial embolism is a kind of situation that could begin in one or more arteries acutely and if not treated early that can cause the death of affected organ, extremity and even the patient. The most frequent etiologic factors are believed to be cardiac such as atrial fibrillation, myocardial infarction, valvular diseases and endocarditis are the leading causes.

Case: 59 year old male patient admitted to emergency department (ED) with the complaint of acute abdominal and right leg pain that had begun in the morning. He had a history of previous Myocardial Infarction (MI), coronary stent and hypertension. It was learned that he had not been using anti-thrombotic and anti-hypertensive drugs for a while. He had cranial MR scanning in another hospital, was given Clexane as there were multiple embolic infarctions and he was referred to our hospital.

His vital signs were; blood pressure: 160/90 mmHg, pulse rate: 90 /minutes and oxygen saturation: 99%. In physical examination; he was medium- well and agitated, his right lower extremity had 3/5 muscle tone monoparesia and hypoesthesia, he had abdominal tenderness in all quadrants and defense. Also his right extremity was pale and cold. Pulse of right femoral artery was weak but palpable however the pulses of the right dorsalis pedis, right tibialis posterior and right tibialis anterior arteries were not felt properly. All the other extremities had normal pulses and there was no difference in blood pressure between right and left side. His ECG revealed atrial fibrillation and T wave inversions in V4-5-6 derivations. He had lower extremity doppler ultrasonography and there was monophasic blood flow in right femoral, right popliteal and right dorsalis pedis arteries however there was no flow in tibialis posterior artery. There was no specific finding in his laboratory tests and the patient had thoraco-abdominal pelvic tomography with contrast material. Renal infarction due to right renal artery embolism and filling defect due to thromboembolism in right external iliac artery were obtained. Superior mesenteric vein was normal and there was no finding of aortic dissection. The patient was consulted to urology, neurology and cardiovascular surgery departments. Urology did not plan an immediate operation however neurology suggested continuing Clexan medication. Urgent embolectomy was planned by cardiovascular surgeons. The patient was also operated on the following days by general surgery department with the pre-diagnose mesenteric ischemia and necrotic gut segments were extracted. The patient had cardiac arrest on post-op days and was exitus.

Conclusion: Arterial embolism generally originate from heart and atrial fibrillation is one of the most frequent causes. Uncommonly in some cases they could be multiple and could cause the death of affected organ, extremity and even the patient. As in our case, ischemias in extremities and neurologic findings could be seen in aortic dissection without central causes, it should be kept in mind for differential diagnosis. Doctors should be careful in these kind of patients about arterial embolism, should always remember that embolism could be in multiple organs and appropriate diagnostic methods should be used without wasting time.

Keywords: Multiple arterial embolism, Aortic dissection, Differential diagnosis, Emergency department.



Figure 1. Abdominal CT



Figure 2. Abdominal CT



Figure 3. Abdominal CT



Figure 4. Abdominal CT

P-016

[Kardiyovasküler Aciller]

QUICK TREATMENT SAVES LIVES: A CASE WITH HYPERKALEMIA

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Introduction: Hyperkalemia is a life threatening metabolic emergency and common in the emergency department. Especially in the elderly population, related to cardiac arrhythmias, it can present with rapid deterioration in vital signs and general condition. We also reported rapid improvement observed with dialysis treatment in elderly female patient with hyperkalemia who brought to the emergency department due to persistent bradycardia.

Case: 86-year-old female patient was referred to our emergency service due to persistent bradycardia which did not respond to atropine from another hospital. Her medical history included hypertension, heart failure, COPD and her medications were amiodarone, digoxin, sotalol, theophylline and telmisartan. At admission blood pressure 90/50 mmHg, pulse 41 bpm, temperature 36.1°C, saturation %89, general condition was critical, blurred consciousness, bilateral basal crackles, bilateral 3+ pretibial edema, at cardiovascular system examination S1+ S2+ S3-, bradycardic, 2/6 systolic murmur was found aortic and mitral region. ECG was first degree AV block and the patient was monitored (Figure 1). She was treated at another facility with 2 amp atropine, 1 amp calcium gluconate, 500 cc %5 dextrose + 5 IU crystallized insulin 100ml/h because of bradycardia, oliguria and hyperkalemia. Fluid therapy was continued. Pathological laboratory values were urea: 90mg/dl, creatinine: 2.22mg/dl, Na: 120mmol/L, K:8.2mmol/L, at arterial blood gas analysis pH:7.36, pO₂:86.7 mmHg, pCO₂: 28.7 mmHg, HCO₃:16.5 mmol/L, Lactat: 2.5 mmol/L. After nephrology consultation at emergency intensive care unit, dialysis catheter from the right internal jugular vein was inserted. First hour of arrival the patient was started on dialysis treatment, other treatments were stopped. Dopamine infusion was started (5mcg/kg/min) with dialysis. She was treated with 600 cc ultrafiltration and 3 hours hemodialysis and second hour her pulse was 55 bpm. After completion of dialysis the patient's rhythm was back to normal

(Figure 2). General condition and consciousness were recovered. Blood pressure (129/52mmHg) and pulse (73 bpm) increased, laboratory values were urea: 37mg/dl, creatinine: 1.08mg/dl, Na: 127mmol/L, K:4.2mmol/L. We followed her at emergency intensive care unit 1 day; vital signs were stable and cardiac rhythm was normal, daily urine out put was approximately 3500 cc. Transthoracic echocardiography results were EF: %60, TR: moderate, PAP: 45 mmHg, MR: mild, aortic stenosis mild. Cardiology clinic control was proposed for regulation of drugs and ECG. The patient's dialysis catheter was removed and transferred to observation area of emergency department. We observed her 12 hours and mobilized, there was no problem. She was discharged with recommendations.

Discussion: Hyperkalemia is a life threatening metabolic emergency and common in the emergency department. In the elderly population, as in our case general condition and vital signs deteriorates quickly, related to cardiac arrhythmias. In some cases, calcium gluconate, insulin infusion etc. Potassium lowering drugs as well as atropine for arrhythmias found useful. Infact that in elderly patients with poor general condition should not be insisted on applying this treatment options and should not be late for hemodialysis treatment.

Keywords: Cardiac arrhythmias, Hemodialysis, Hyperkalemia.



Figure 1. Patient's initial ECG

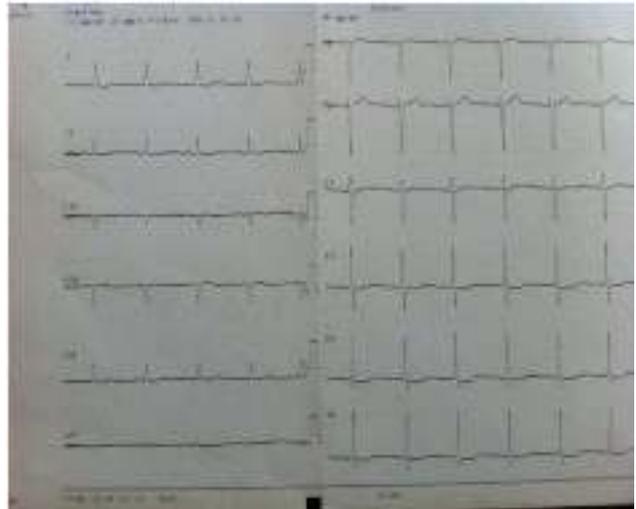


Figure 2. Patient's control ECG

P-017

[Kardiyovasküler Aciller]

A PRESENTATION OF A CASE: PANCARDITIS OF A YOUNG PATIENT WHO APPLIED WITH TYPICAL CHEST PAIN

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Introduction: The cases that threaten the life must be taken into account for the patients who applied to the emergency department (ED) with typical chest pain. As it is seen during daily practical applications acute coronary syndromes (ACS) are one of the most seen cases. But except ACS there are many groups of illnesses that applies with chest pain.

Case: 27 years old male patient applied to the ED with the complaints of compressive chest pain which started a night before and after continuing of an hour repeated again. The patient did not have any risky factors for cardiacs except smoking of a package of cigarettes a day. He did not have chronic illnesses and medicine treatment. In family history, only his father had congestive heart failure. According to his electrocardiography (ECG), sinus rhythm was 70 pulse/min. and in D2, AVL, V2 and V6, ST segment elevation and in AVR ST segment depression was seen. With typical chest pain and ECG findings the patient was diagnosed as ACS and a treatment of 300 mg acetylsalicylic acid PO, 5 microgram/min. glycerol trinitrate and 5000 IU heparin IV was applied. Then the patient was consulted to cardiology with pre diagnoses of ACS and sent to cardiology intensive care unit for primer coronary angiography. According to angiography, right and left coronary arteries were found at the normal limits. And according to the findings of emergency service; troponine was 14.288 ng/ml (N:0-0.033 ng/ml) and CRP was 4.72 mg/dl (N: 0-0.50 mg/dl). Rheumatological and viral markers were sent and determined as normal. According to patient's bed side ECG, it was coherent with pancarditis so the treatment of acetylsalicylic acid and beta blocker started for the patient. During the checkings and the controls, level of troponine and CRP decreased and the symptoms regressed. After 5 days of internation the patient discharged from the hospital without any complications.

Conclusion: Pancarditis is an inflammatorical illness which effects pericardium, endocardium and muscle of heart. Moderate facts that seen with often chest aches can be asymptomatic. During prodromal period, viral infection symptoms are seen in many patients. Although there are not original variations, diversifications of ECG are often seen. It must be considered as separator diagnosis for the patients who applies emergency service with chest ache and has ECG variations.

Keywords: Chest pain, Pancarditis, Emergency department.

ECG

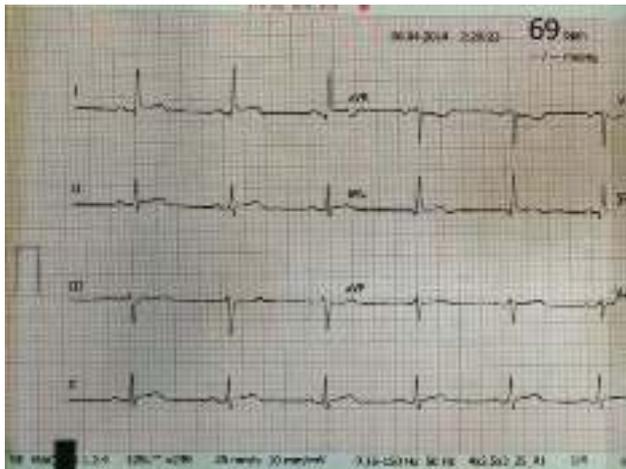


Figure 1. Derivations of ECG: DI-III, aVR, aVL and aVF.

ECG

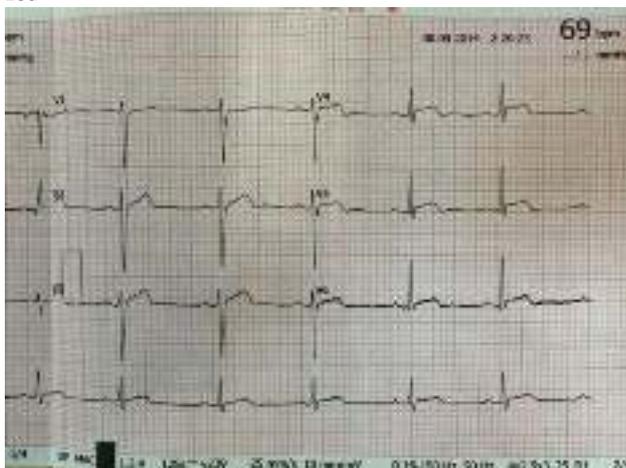


Figure 2. ECG Derivations: V1-6.

P-018

[Kardiyovasküler Aciller]

ARTERIAL HYPERTENSION AND STROKE IN REPUBLIC OF MOLDOVA

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Introduction: The arterial hypertension represents an actual medical, economic and social problem, due to its high incidence amongst the population and major risks that it implies. According to the data of the World Health Organization, 600 million people in the whole world have an exceeded arterial hypertension.

Through its high prevalence amongst the population, its invaliding character of complications and its extensions towards more and more young groups of population, the arterial hypertension obtains also a social and economic connotation, besides the medical one.

Materials-Methods: the data presented here are collected from records of emergency care, through Institute of Emergency Medicine, Chisinau, between years 2009-2013. The analysis provides information on the prevalence and incidence of cerebral vascular diseases associated with hypertension.

Results: In 01.01.2013 in Republic of Moldova were 57 699 patients who have suffered a stroke. Of the total stroke morbidity (57 699) - 35 387 (61,3%) are associated with hypertension and 22 312 (38,67%) are cases without hypertension. Stroke morbidity with hypertension increased from 19 052 cases in 2009 to 35 387 cases showed an increase in morbidity 2013. Stroke morbidity without hypertension from 15 796 cases in 2009 increased to 22 312 cases in 2013. Of 11 060 new cases of stroke in 2013 - 5 894 (53,29%) were on a background of hypertension and 5 166 (46,7%) cases without hypertension.

Conclusion: Cerebrovascular diseases increases every year, both in incidence and prevalence, the WHO is appreciated that it will become by 2030 the leading cause of mortality in the world. Given the seriousness of stroke, high mortality rate, high degree of disability and incapacity to work of survivors, social reintegration difficulties and high cost of necessary expenses for care of these patients, primary prevention of stroke is central, along with organizing services emergency medical assistance, emergency treatment and rehabilitation time cerebrovascular patients.

Keywords: Arterial hypertension, stroke.

P-019

[Kardiyovasküler Aciller]

A RARE CAUSE OF SUPERIOR VENA CAVA SYNDROME

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Superior vena cava syndrome is characterized with obstruction of blood flow from the head, neck, upper torso, or extremities to the right atrium. Acute dissection of the aorta is one of the most dramatic cardiovascular emergencies. Classically, aortic dissection presents as sudden, severe chest, back, or abdominal pain that is characterized as ripping or tearing in nature. However, there are several cases presenting with atypical features.

A 86 year-old-man with a known history of chronic aortic aneurysm presented to the emergency department with a complaint of shortness of breath, headache, swelling and discoloration of skin of his face. His symptoms began and progressed within 2 hours. He denied any chest, neck or abdominal pain. His family also described loss of consciousness lasting for nearly 30 minutes. On arrival, his GCS was 15 and initial vital signs were; heart rate 108 beats/min, blood pressure 101/53 mmHg, respiratory rate 32 breaths/min, temperature 36.3 °C and oxygen saturation was 96%. Physical examination of the patient revealed cyanosis and swelling of the skin of his face and neck. His neurological examination was unremarkable. A clinical diagnosis of acute superior vena cava syndrome was made. Portable chest radiograph

showed a widened superior mediastinum. CT scan of the chest showed aortic aneurysm and 10 X 7 cm neatly limited soft tissue density substantially compressing the superior vena cava and left brachiocephalic vein. This lesion was preliminary reported as tumor or organized thrombosis. His echocardiography revealed no significant abnormality. The patient was admitted to intensive care unit(ICU) of cardiovascular surgery. At the following day the patient became hypotensive even under positive inotropic treatment and therefore taken to emergent surgery. Surgery revealed type A thrombotic aortic dissection. In the meanwhile the patient developed cardiopulmonary arrest and showed no clinical response to resuscitation.

Superior vena cava syndrome is a set of symptoms that results when a mediastinal mass compresses the SVC or the veins that drain into it, resulting in obstruction of blood flow from the head, neck, upper torso, or extremities to the right atrium. Mostly this severe disease is caused by tumors which compress or develop inside the superior vena cava. In cases of rapidly occurring symptoms, thrombosis or compression of superior vena cava due to hematoma (trauma, voluminous, dissecting aortic aneurysm) should be considered. In our case, CT scan of the chest only detected aortic aneurysm and thrombus formation causing a mass effect. The rapidly developing hematoma and thrombus between intima and media layer of aorta in the saccular aneurysm region compressed the vena cava superior and caused the syndrome.

Pubmed search revealed very few cases of aortic dissection related with superior vena cava syndrome. In the case of Stajnic et al, the diagnosis of vena cava superior syndrome was confirmed with echocardiography. In another case published by Briqui et al, the diagnosis of dissection was not suspected before CT scan because of the rarity of such a manifestation. In our case echocardiography and even the CT scan had misdiagnosed the case. The diagnosis was made in the surgery. In the cases of acutely developing symptoms of SVC syndrome, especially if the patient has previous aortic aneurysm, aorta dissection should be suspected as imaging techniques may not be able to confirm the diagnosis.

Keywords: superior vena cava syndrome, aortic dissection



Figure 2.

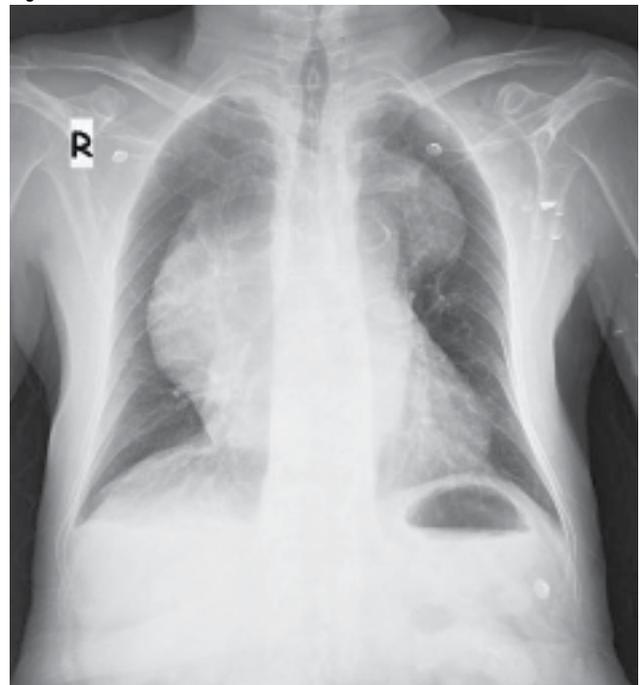


Figure 3.



Figure 1. Emergency department

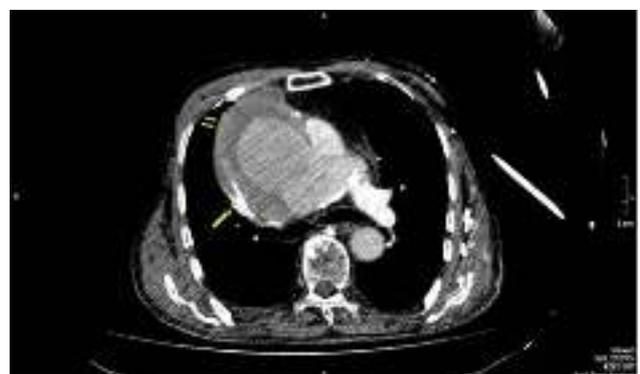


Figure 4. Axial contrast enhanced CT: Huge saccular aortic aneurysm (double arrows) obliterating superior vena cava (large arrow)



Figure 5. Axial contrast enhanced CT: Huge saccular aortic aneurysm (double arrows) obliterating superior vena cava (large arrow)

P-020

[Kardiyovasküler Aciller]

ALTERED CONSCIOUSNESS AND ATRIAL FIBRILLATION DUE TO PRIMIDONE INTAKE

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Introduction: Primidone is an anticonvulsant drug used for the treatment of essential tremor, which is metabolized into phenobarbital and phenylethylmalonamide. Its side effects are relatively common and usually dose-dependent. Some patients, particularly elderly, may experience confusion, dizziness, sedation, ataxia, nausea, and malaise even in doses of 50 mg/day or lower. Side effects may become more pronounced with increasing doses. However, atrial fibrillation as a side effect of the drug neither has been reported in the literature nor it is specifically indicated by the package insert. Here, we would like to report a patient who developed sedation, confusion, and atrial fibrillation after primidone use.

Case: A 68-year-old woman presented to our emergency department with nausea, vomiting, perspiration, and somnolence sometime after taking primidone (mysoline) 250 mg. Her past history was notable for hypertension and peripheral facial paralysis. It was learnt that mysoline 62.5 mg (a quarter of 250 mg tablet) had been begun by a neurologist for essential tremor 2-3 weeks before, although the patient had inadvertently taken a tablet per day. After drug intake she had begun to experience perspiration, nausea, vomiting, and palpitations. Additionally, her consciousness had gradually worsened and she had become increasingly sleepy. An admission ECG at the emergency department showed atrial fibrillation with a rapid ventricular response (Figure 1). As she had no heart or rhythm problems before, she was considered to have newly developed atrial fibrillation. Amiodarone treatment was initiated, following which she was converted to sinus rhythm (Figure 2). She was then referred to the cardiology department and, for altered consciousness, to the neurology department. Both departments agreed that the atrial fibrillation episode was a side effect of primidone. The patient was monitored at the emergency department for 36 hours during when no rhythm disturbance was observed; her consciousness also gradually returned to normal. She was discharged upon recommendation.

Conclusion: It is recommended to instruct patients on and warn against the side effects when primidone is first used.

It should be kept in mind that in elderly patients presenting to emergency department with rhythm disorders, particularly newly developed atrial fibrillation, drugs such as primidone which may cause sedation, confusion, and atrial fibrillation may be the culprit.

Keywords: Primidone, atrial fibrillation, sedation, emergency department



Figure 1. Atrial fibrillation in the initial ECG



Figure 2. The rhythm converted to normal sinus rhythm after amiodarone infusion

P-021

[Kardiyovasküler Aciller]

AN UNCOMMON REASON OF PARAPARESIS: THROMBOSIS OF ABDOMINAL AORTA

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Weakness in lower extremities are common in emergency departments and most of the cases includes non-serious etiologies. But still, emergency department physicians should be aware of serious cases such as abdominal aortic thrombosis which we will report one of our patient who was admitted in emergency department for a couple of hours of weakness in lower extremities. The majority of patients with aortic thrombosis are associated with arterial and cardiac pathologies.

Case: A 45 year old woman was admitted to emergency department with weakness in bilaterally lower extremities and lumbar pain. She had no important medical history except mitral valve insufficiency. Vital signs were totally normal. Physical examination revealed paraparesia in lower extremities with normal peripheral pulses (femoral, popliteal, dorsalis pedis), there was no pulsatile mass in abdomen. Other systemic physical examination

findings were also normal. ECG was obtained which showed atrial fibrillation which was not diagnosed before. Laboratory tests and head CT scanning showed no abnormalities. The first diagnosed we thought about was a pressure on spinal duct due to normally found peripheral arterial pulses. Patient underwent lumbar MRI scanning, lumbar spinal stenosis was not detected. Patient was admitted to be followed up. Eventually patient developed hypotension and tachycardia and abdominal pain, control physical examination revealed out weakness in peripheral arterial pulses in lower extremities but not in upper side. Control laboratory tests showed elevated level of creatinin, liver and cardiac enzymes, So thoraco-abdominal CT angiography was obtained and showed thrombus in left atrium and abdominal aorta. Patient was decided to undergo surgical intervention for thrombectomy so that was admitted to cardiovascular surgery. But she had cardiac arrest pre-operative interval, accepted as exitus eventually.

Conclusion: Weakness of lower or upper extremities' etologies may not be serious but we have to be aware of serious cases as emergency department physicians so we can prevent serious morbidity and mortality. Once physical examination shows bilaterally lower extremity weakness, neurologic, vascular and bone compartments of each extremity should be examined repetitively. If our patient's first examination could reveal pulse weakness, she could had CT angiography scanning earlier but unfortunately, she developed bad prognosis immediately after a couple of hours of follow-up.

Keywords: abdominal aorta, thrombus, emergency department, mitral valve insufficiency

Atrium

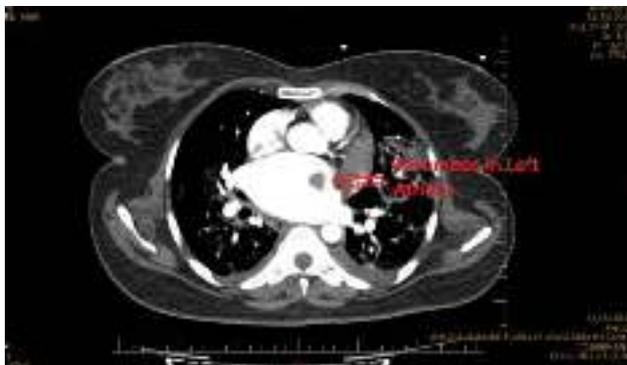


Figure 1. Thrombus in Left Atrium

Thoracic Aorta



Figure There is no contrast restriction in thoracic aorta

Thrombus



Figure 3. Thrombus in abdominal aorta reveals blood-flow obstruction

P-022

[Kardiyovasküler Aciller]

CARDIAC FAILURE DUE TO DICLOFENAC USAGE

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Introduction: Non-steroidal anti-inflammatory drugs (NSAIDs), which are anti-inflammatory, analgesic, and antipyretic agents, are commonly used and are prescribed to reduce pain, and improve function in patients with osteoarthritis, rheumatoid arthritis. Classical NSAIDs inhibit nonselective both the COX-1 and COX-2 enzymes and production of inflammatory prostaglandins and gastric mucosa protecting prostaglandins reduce. NSAIDs are associated with risks of gastrointestinal and cardiovascular toxicities. Treatment with NSAIDs may be caused adverse cardiovascular events such as heart failure and hypertension. Diclofenac, which is among NSAID, has been widely used for relief of pain. Experimental studies have shown that administration of diclofenac can lead to the development of cardiac failure. Additionally, long term use of diclofenac is associated with an increased risk of myocardial infarction. We presented a case of an 81 year-old woman occurring cardiac failure due to oral diclofenac usage.

Case: A-81 year-old woman was admitted to our emergency department complaining of two days duration of breathless and orthopnea. She had no absolutely history of cardiovascular disease. She have used oral diclofenac given because of reduce of pain of rheumatoid arthritis for two weeks. Physical examination revealed a blood pressure of 110/80 mm Hg, heart rate 110/min, rales both lung fields and lower limb edemas. Laboratory findings were normal. An ECG showed sinus rhythm at 100 beats and Left bundle branch block (LBBB). An echocardiogram performed by cardiologist showed left ventricular (LV) dilatation and global LV hypokinesis with an EF of 40%.

Conclusion: Cardiac failures can be caused by long term use of diclofenac

Keywords: cardiac failure, NSAIDs, diclofenac

AORTIC DISSECTION WITH PULMONARY EMBOLISM IN A PATIENT

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Once an intimal tear is formed, aortic dissection is a seriously condition which mortality risk increases with each passing hour. Thus, timely management of aortic dissection is essential. Most common symptom of aortic dissection is pain. Since chest pain has a wide range of differential diagnosis and aortic dissection is associated with many ischemic end organ symptoms, diagnosis of aortic dissection is challenging. Differential diagnosis myocardial infarction/ACS, pericardial diseases, pulmonary diseases, pulmonary embolism, stroke, musculoskeletal diseases, spinal cord injury and intra-abdominal pathologies.

Case: Our case is a 83 year-old female patient. The patient presented with nausea, vomiting, right upper quadrant pain and chest pain to a local emergency department. Upon evaluation d-dimer was found to be higher than the normal range and the patient was transferred to our emergency department with pulmonary embolism suspect. Presenting vitals were BP 127/71 mm Hg, pulse 106 bpm, respiratory rate 20, temperature 36,0 C(96,8 F), oxygen saturation 88 %. Bibasillary rales with diminished breath sounds on each side and epigastric and right upper quadrant tenderness on palpation but no defense was noted on physical examination. EKG showed nonspecific ST elevation. Initial laboratory tests showed 14 300/mm³ leukocytosis, high sensitive troponine T 47 mg/ dl (normal values 0-14 mg/dl) with other CBC, CHEM-7 parameters within normal range. An abdominal ultrasound showed minimal pericholestatic and perihepatic fluid, normal diameter of the abdominal aorta. An chest CT-angiography was ordered with a presumed diagnosis of pulmonary embolism. CT- angiography showed increased pericardial and pleural fluid, aortic dissection of the ascending and arch of the aorta and pulmonary embolism apically and posteriorly located on the right side. A cardiovascular surgery consultation was obtained and the patient was admitted with an emergent thoracotomy plan.

Discussion: Patients with aortic dissection who were misdiagnosed and treated with antitrombin or fibrinolytics had twice mortality compared to the patients truly diagnosed with aortic dissection. Among with ACS and pulmonary diseases, aortic dissection should be suspected in any elderly patient presenting with atypical pain.

Keywords: aortic dissection, pulmonary embolism, emergency medicine

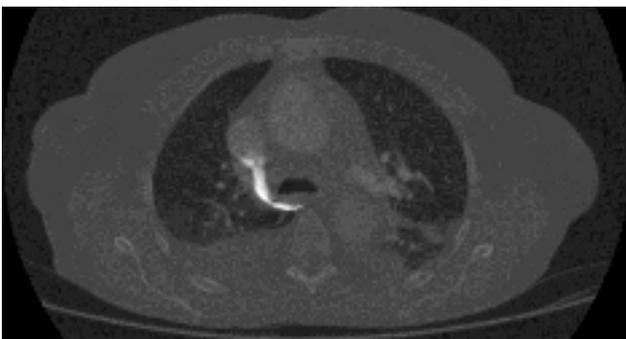


Figure 1. CT- angiography

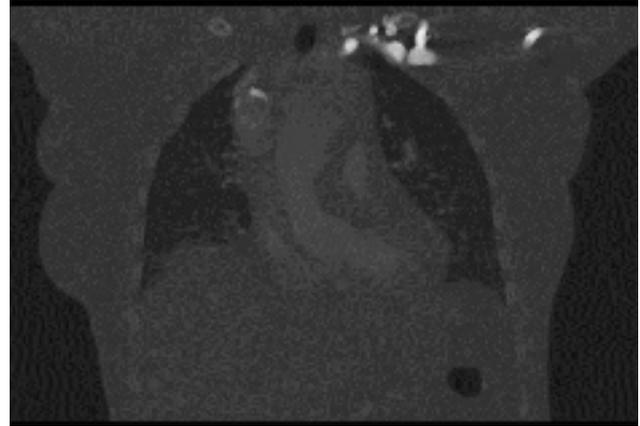


Figure 2. CT- angiography view

ACUTE AORTIC DISSECTION IN PUERPERIUM PERIOD WITHOUT RISK FACTORS

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Background and Aim: Aortic dissection in pregnancy is a rare life-threatening condition. Aortic dissection most often associated with genetic or anatomic predisposition, such as Marfan syndrome or bicuspid aorta. Women with a bicuspid aortic valve or the Marfan syndrome are at a higher risk of dissection. The relationship between pregnancy and aortic dissection is still unclear.

We present a case of nontraumatic spontaneous type A aortic dissection existing the iliac bifurcation within six days after term delivery in a previously healthy pregnant patient. We also review the clinical literature regarding the evaluation and management of a pregnant patient presenting with aortic dissection.

Case: A 36-year-old previously healthy Caucasian woman (G4P3Y3A0), presented at puerperium in 7 days after gestation to the emergency department (ED) with sudden onset of dyspnea, and chest pain. The patient did not appear Marfanoid or dysmorphic and had no significant past medical history. The patient's arterial blood pressure, was 140/80 mmHg in the left arm, and 80/60 in right arm. Blood pressure was rising intermittently during pregnancy. Cardiac rhythm was bradycardic (56 beats per min) and SpO₂ 90 % on a nonrebreather mask. There was aortic diastolic murmur and palpable pulse deficit in right arm. The 12-lead electrocardiogram revealed sinus bradycardia (56 beats per min). The chest X-ray show widening of the mediastinum, but not show any pulmonary congestion or pleural effusion. And also right heart contour is convex appearance on chest radiograph (Figure 1). The bedside qualitative troponin T was negative. The baseline complete blood count, serum creatinine and electrolytes were within normal limits. A bedside ultrasound examination showed pericardial fluid, aortic root dissection flap. Thorax and abdominal CT angiography showed aneurysmal dilatation in the ascending aorta (diameter of was 43 mm). The dissection were existing the iliac bifurcation through

thoracic and abdominal aorta. Hypertension was treated with esmolol (Brevibloc) 0.5 milligram(mg) / kg bolus, then 1 minute loading 0.05mg / kg / min to 4 minute infusion. Urgent blood preparation were performed for transfusion. She underwent an emergency repair and aorta graft replacement was performed. The patient was discharged healthy on the third day after surgical operation

Conclusion: Pregnant or puerperal patients with dyspnea warrant immediate evaluation for possible life threatening events. This case report of a pregnant patient with no risk factors for aortic dissection emphasizes the importance of differential symptoms like dyspnea and chest pain and utilizing the necessary clinical tools to further direct patient care and necessary interventions

Keywords: Aortic dissection, puerperal patients, emergency department

Fig 1,2,3



Figure 1. the chest X-ray show widening of the mediastinum, Fig.2:Transversal plane CT images of the chest showing dissection in the ascending (4.3cm) and descending aorta and Fig. 3:Sagittal plane CT images of the chest showing dissection in the ascending and descending aorta in Patient.

P-025

[Kardiyovasküler Aciller]

UNDIAGNOSED UNTIL CARDIAC TAMPONADE OCCURS: CASE REPORT

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Severe collection of fluid in the pericardial space and as well as the clinical findings such as syncope, dyspnea, shock, even death is called cardiac tamponade. Etiologies of cardiac tamponade vary such as malignancy to have the most percentage of the cases (30-60%), other etiologies include uremia, infectious diseases, anticoagulation, trauma etc. But frequently, malignancy diagnosed patients who develop pericardial tamponade do not come to physician with tamponade as the first clinical finding. We want to share our experience with a 36 year old male patient which was diagnosed as cardiac tamponade and subsequently pulmonary adenocarcinoma was the main etiology of process.

Case: 36 year old male who was a prisoner was admitted to our emergency department with insidious onset of dyspnea, chest pain for 1 week and syncope eventually. Initial physical examination showed tachypnea, hypotension, decreased cardiac

and pulmonary sound. Blood pressure was 70/40, pulse rate:140, O₂ saturation:83% initially. Laboratory evaluation showed no specific pathology except mild leukocytosis (WBC:13600), PA chest x-ray was performed and seen broad consolidation and opacity in right lung and infiltration in the middle of left lung (Figure 1). Patient's blood pressure didn't respond to 2 liters of normal saline, thus, we decided to perform IV contrasted thorax CT (Figure 2). There was an obvious pericardial and right lung was almost collapsed due to pleural effusion. Thus, patient was underwent bedside echocardiography which showed poor left ventricular filling and severe pericardial effusion. Patient's emergency need was to restore the pump function of left ventricle so that emergent pericardiocentesis procedure was performed. Eventually, he was admitted to coronary intensive care unit for follow-up. Further ICU evaluation revealed the adenocarcinoma of lung to be the main etiology of pericardial and pleural effusion which had almost caused the death of patient.

Conclusion: Cardiac tamponade is a medical emergency situation and should readily be diagnosed, be treated to improve this life-threatening pathology. Our case was a prisoner, had no serious medical history. The sum of clinical findings -dyspnea, chest pain, subsequent syncope, IV fluid resistant hypotension- was the hints of cardiopulmonary emergency such as pulmonary edema, pulmonary thromboembolism, cardiac tamponade etc. Early pericardial interventions in pericardial effusions may prevent morbidity and mortality. But undiagnosed pericardial effusion due to malignancy in our patient eventually caused clinical compromise. Such patients must be admitted to intensive care units until hemodynamic stability and prevention of recurrence are provided.

Keywords: cardiac tamponade, malignancy, pericardiocentesis

Chest



Figure 1. Chest x-ray showing broad consolidation in right lung area.

Chest CT

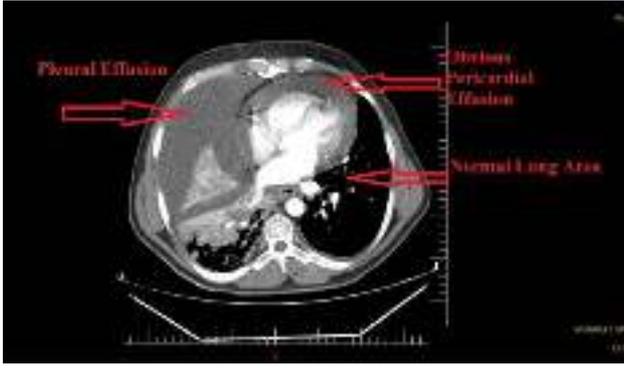


Figure 2. IV contrasted chest ct shows obvious pericardial effusion which caused tamponade.

P-026

[Kardiyovasküler Aciller]

THE IMPORTANCE OF CLINICAL SUSPECTION IN THE DIAGNOSE OF ACUTE AORTIC DISSECTION

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Acute aortic dissection (AAD) is the most common fatal condition that involves the aorta. Classically, aortic dissection presents with severe chest, back, or abdominal pain. Patients characterize the pain as ripping or tearing in nature. A timely diagnosis is more difficult in cases with atypical presentation. Acute painless aortic dissection presenting with intermittent syncope and disturbance of consciousness are rarely seen.

Here we presented a case consulted with no chest pain and with an ailment mimicking symptomatic picture of the acute cerebrovascular case which was diagnosed as type 1 aortic dissection after systematic evaluation with clinical suspicion.

58 year old female patient admitted to the emergency department with sudden onset of nausea, vomiting, lethargy, and presyncope. In her vital signs: BP80/50 mmHg, Sat O2:92, blood glucose:295 pulse rate:111 / min. and ECG was normal except tachycardia. Her laboratory finding was normal. Only D-Dimer was calculated higher than 10000. In her medical history she was using drugs for hypertension and diabetes. Vigorous volume resuscitation with normal saline was started. To exclude cardiac pathology, echocardiography was ordered because her cranial CT and MRI finding were normal and patient was still hypotensive after the infusion of 1000 cc normal saline. Spiral thoracoabdominal CT was ordered because suspicious dissection flap was seen in echocardiographic examination. Computed tomography of the chest showed an acute aortic De Bakey type I dissection (AAD). Figure 2-3. The patient was transferred to another hospital for surgery.

Conclusion: When patients do not have typical pain, AAD may not be considered initially in the differential diagnosis, which delays diagnosis. However AAD has a mortality rate as high as 1%/h during the first 48 h after the onset of symptoms if left untreated. Delayed diagnosis of painless AAD is probably responsible for the increase in hospital mortality, because of

the increased risk of aortic rupture. So the patients should be thoroughly evaluated in terms of aortic dissection taking into consideration the presence of subtle neurologic signs and symptoms like dizziness, nausea, diaphoresis, and presyncope.

Keywords: Aortic Dissection, Syncope, Chest Pain

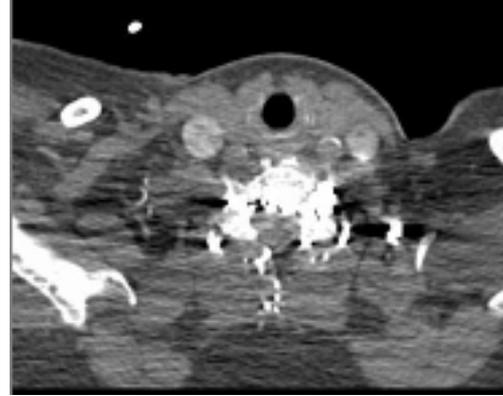


Figure 1. CT angiographic image of the dissection including the carotid artery



Figure 2. CT angiographic image of the dissection in the ascending and descending aorta

P-027

[Kardiyovasküler Aciller]

VASOVAGAL SYNCOPE DUE TO A CERVICAL MASS

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Introduction: Syncope is defined as a loss of posture with a transient unconsciousness due to decreased cerebral perfusion. Syncope is a frequently encountered medical problem constituting 3% of all emergency department applications, and 1-6% of all hospital admissions. Syncope is divided into three broad groups according to the possible causes; cardiac, non-cardiac syncope and syncope of unknown origin. Non-cardiac syncope with states including unconsciousness and conscious problems induced by a neurological reflex is studied under neuro-cardiogenic syncope

group. Vasovagal syncope is the most common form of neuro-cardiogenic syncope. In this case, it has been shown that a painful cervical mass could result in a vasovagal syncope.

Case: 52-year old male presented to an emergency department with a complaint of fainting. Detailed anamnesis of patient revealed a neck pain with anxiety, nausea, vomiting, sweating and, subsequently fainting. He was conscious, oriented, and alert at presentation. All system examinations were normal except palpable mass at left side of the neck. Arterial blood pressure was 70/50 mm/Hg on right arm, 60/40 mm/Hg on left arm; pulse was 80/minute; electrocardiogram showed a normal sinus rhythm (NSR); finger prick test for glucose was 67 mg/dl. Cranial CT was performed due to persistent confusion, nausea and vomiting, and found normal. Bedside transthoracic echo was performed by a cardiologist, and no pathology was detected. Angiography by dissection direction was evaluated as normal. Lab findings of the patient was given in Table 1. Patient history revealed that oral glucose intake with intermittent low glucose levels, and a three months history of left-sided painless cervical mass becoming painful for last one month with waiting biopsy results. Cervical USG revealed a hypoechoic LAP with dimensions of 26X18 mm, central vascularization and no echogenic hilus at posterior cervical chain. Considering the pain and anxiety of patient due to mass, symptoms of patient were relieved with benzodiazepine (midazolam) for anxiety and opiod (tramadol) for pain, and vital signs and clinical symptoms of the patient improved and discharged from emergency service.

Biopsy results came back as nasopharyngeal cancer, and radiotherapy was planned and patient was sent to another clinic for advanced investigation and therapy.

Conclusion: Syncope constitutes 1-3% of all emergency presentations and 2-6% of all hospital admissions. VVS cases are 10-40% of all syncope cases. Pathophysiology of vasovagal syncope is defined as sudden bradycardia, hypotension and transient unconsciousness as a result of vagal activation and sympathetic inhibition triggered by stimulated reticular activating system. One of responses is a decrease in blood pressure without bradycardia as a result of vasodilation. In the pathophysiology of VVS, cardioinhibitor effect with a decrease in both heart rate and blood pressure plays the major role. In our case, the importance of detailed history and physical examination was highlighted with a brief discussion on vasovagal syncope. Note that a cervical mass can cause a vasovagal syncope.

Keywords: Vasovagal Syncope, Cervical Mass, Hypotension,



Figure 1. The view of cervical mass in the inspection



Figure 2. The view of cervical mass in the inspection

Table 1. Laboratory results

Parameter	Value	Parameter	Value
Hemoglobin (mg/dl)	13,7	AST (U/L)	23
WBC (mm ³)	7740	ALT (U/L)	21
Thrombocyte (mm ³)	185000	PH	7.38
BUN (mg/dl)	1.1	PCO2 (mmHg)	37.5
Na (mEq/L)	140	PO2 (mmHg)	86
K (mEq/L)	3.4	HCO3 act	21
Glucose (mg/dl)	67	Troponin I	<0.010

P-028

[Kardiyovasküler Aciller]

THE RELATIONSHIP BETWEEN QT INTERVAL AND SEVERITY OF PAIN IN THE PATIENTS WHO ADMITTED THE EMERGENCY DEPARTMENT DUE TO TRAUMA

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Objective: QT prolongation is rarely seen after acute stress reactions such as head and extremity trauma. Although pathophysiological mechanism is not entirely clear, acute stress is thought to contribute to the inhomogeneity of ventricular repolarization and it is hypothesized that QTc dispersion changes with severity of acute stress conditions. QT interval displays the time which is from beginning of ventricular depolarization to end of ventricular repolarization. In the present study, we aimed to investigate the relationship between the pain severity and QT interval in the patients who were exposed to acute trauma.

Method: Seventy patients because of moderate and severe trauma (study group) presenting to the Emergency department, Harran University Faculty of Medicine, between May 2012 and June 2013, due to various causes (vehicle accidents, vehicle-pedestrian accidents, falling from heights, and assault) and 60 healthy person (control group) were included in the study. QT interval in each groups was calculated in both pre-analgesia and post-analgesia. Demographic and clinical characteristics and pain levels (with Visual Analog Scale) were recorded for each patients. The results were compared between the two groups. The Statistical Package for the Social Sciences version 21 was used for data analysis. The analyses were conducted using a 0.05 confidence level. Percent-ages, and medians were used in the descriptive statistics. Fisher exact test was used for categorical variables, and the Mann-Whitney U test for continuous variables.

Results: The mean age of the patients with trauma was 31.50 ± 25 , and the control group was 35.00 ± 20 . A statistically significant difference between the two groups with respect to age and sex was not observed ($p=0.103$, $p=0.183$; respectively). Pre-analgesia QT, RR and QT corrected (QTc) intervals in the trauma group were significantly different compared with post-analgesia ($P<0.001$), while a statistically significant was not observed between the two groups respect to QT dispersion (QTd). Average pre-analgesia of QT, RR and QTc values in the trauma group were also significantly different compared with control group ($P = 0.007$, $P < 0.001$, $P < 0.001$; respectively). Difference of QT values of both before ($P = 0.937$) and after analgesia ($P = 0.857$) is not statistically significant between moderate and severe pain.

Conclusion: Acute pain prolongs QT interval in the patients with trauma and after administration of nonsteroidal anti-inflammatory drugs in the patients with pain, it approaches the normal value again. According to our finding, stress due to pain resulting from trauma changes ECG. More detailed studies are, however, needed to clarify this issue.

Keywords: Emergency department, Pain, Trauma, Electrocardiogram, QT interval

P-029

[Kardiyovasküler Aciller]

MAY-THURNER SYNDROME IN EMERGENCY DEPARTMENT

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May-Thurner Syndrome (MTS) or iliac vein compression syndrome, Cockett syndrome, iliocaval compression syndrome is caused by left common iliac vein lumen due to pressure from the right common iliac artery as it crosses anterior to it. The true incidence rate of MTS is unknown and ranges from 22 to 32% according to the autopsy findings. MTS related deep venous thrombosis (DVT) accounts for only 2% -3% of all lower limb DVTs. MTS may be asymptomatic or may cause leg swelling, varicosities, DVT, chronic venous stasis ulcers, more serious complications such as pulmonary embolism or phlegmasia cerulea dolens. The goals of treatment are to reduce symptoms and the risk of complications. This case we have reported a 24-year-old, female, who had a history of cesarean section 20 days ago, presented emergency room with complaining of left lower limb pain, purpuric discoloration and edema for last 2 days. Significant physical examination findings were; 2+ edema from the thigh to the toes associated with purpuric discoloration, a tender left thigh and calf; circumference of 62 cm and 44cm respectively, her right leg; 58cm and 38cm. Ultrasound examination demonstrated an acute DVT extending from the left common iliac vein down throughout the visualized veins of the left calf. Hospitalized patient's thoraco-abdomen ct scan revealed left iliac vein, femoral vein and distal veins total occlusion due to thrombosis which supports MTS, there was no pulmoner thromboemboli. Patient underwent pharmacomechanical treatment with local thrombolysis along with inferior vena cava filter placement. Patient was discharged on enoxaparin. In a case of left limb DVT particularly in younger age group, further investigation like computer tomography angiography should be done and MTS considered as differential diagnoses for mortality and morbidity.

Keywords: Common iliac artery-vein abnormality, May-Thurner Syndrome, DVT, emergency department

P-030

[Kardiyovasküler Aciller]

TRAUMATIC ATRIAL FIBRILLATION

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Introduction: Atrial fibrillation appears secondary to many clinical conditions such as valvular heart disease, cardiomyopathy, hyperthyroid roidism, infections and etc. Trauma is known to be a rare cause of atrial fibrillation

Case: A 18 year- old man was brought by ambulance after a fall from height. He was unconsciousness secondary to severe head trauma. He was intubated. After intubation heart rate was between 150-160 beats/ minute. ECG of the patient showed rapid ventricular rate atrial fibrillation. Except heart rate, vital signs were normal. There was pulmonary contusion on chest x-ray and his FAST examination was normal. After intravenous diltiazem administration, heart rate dropped to normal range and rhytm returned to normal sinus. Atrial fibrillation did not recur

during hospital stay and the patient was discharged after one month of intensive care.

Conclusion: Traumatic atrial fibrillation is a rare clinical situation but it can be seen after chest trauma. Physicians should be aware of traumatic atrial fibrillation when they encounter a patient with chest trauma.

Keywords: chest trauma atrial fibrillation

P-031

[Kardiyovasküler Aciller]

A CASE OF INTERMITTENT WOLFF-PARKINSON-WHITE SYNDROME

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Wolff-parkinson-white syndrome (WPW) is the most common type of the pre-excitation syndromes. It can cause fatal cardiac dysrhythmias and even sudden cardiac death. Although it is most commonly known to be permanent, it can also be seen temporarily known as intermittent WPW (IWPW) syndrome.

Twenty-two years-old man came to our emergency department with the complaints of palpitation and dyspnea. The patient denied any chest pain or syncope. In the past, he had felt same symptom attacks lasting a few minutes but hadn't gone to the hospital for investigation. He had no chronic disease and denied using any medication, sympathomimetic drug or drink. His vital signs and physical examination were normal with the pulse rate of 65 bpm. His electrocardiography (ECG) revealed 65 bpm type 1 WPW syndrome. After an hour, a control ECG was taken and this time ECG showed 68 bpm normal sinus rhythm without any WPW syndrome findings. His blood tests were normal. The patient was consulted with cardiology department. An electrophysiology study (EPS) was planned and the patient was sent to home with precautions for his rhythm disturbance.

Patients with pre-excitation syndromes have an accessory pathways (APs) connecting atria to ventricles while bypassing atrioventricular (AV) node. With these APs, rapid atrial rate can be transmitted to ventricles causing cardiovascular collapse and even death. Although IWPW is the benign form of the WPW syndrome, it can still cause the same fatal consequences of the WPW syndrome. Therefore, all patients with WPW syndrome should be evaluated to identify high risk patients and if possible, EPS should be studied. In addition, IWPW syndrome should be kept in mind in all patients coming with palpitation and normal sinus rhythm.

Keywords: intermittent, wolff-parkinson-white syndrome, palpitation

P-032

[Kardiyovasküler Aciller]

RECURRENT PRESYNCOPE EPISODES IN AN ELDERLY PATIENT: PULMONARY EMBOLISM

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Introduction: Acute pulmonary embolism (PE) is a common and life-threatening disease with clinical presentations ranging from nonspecific symptoms to hemodynamically unstable state. We report a 75-year-old female patient admitted to ED with presyncope as the initial symptom and been diagnosed with PE.

Case Presentation: A 75-year-old female presented to the ED with complaints of nausea and 5 episodes of presyncope during a 3-hour period. She was operated for left femoral neck fracture 45 days ago and had been taken low-molecular-weight-heparin since the date of surgery. The patient denied any urinary or fecal incontinence, chest pain, dyspnea, hemoptysis, fever, cough, lower extremity pain or syncope. Physical examinations revealed a body temperature of 36.7°C, pulse of 87 bpm, respiratory rate of 16 bpm, blood pressure of 150/90 mmHg, and oxygen saturation of 92% on room air. Remarkable physical examination findings included diminished breath sounds bilaterally. Remarkable laboratory findings included a high sensitive troponin I 40.28 ng/L (0-40). Blood gas analysis revealed a pH of 7.40, 56.7 mmHg PaO₂, 28.4 PaCO₂, and 20.9 mmol/L HCO₃ (under the condition of a rate of 3 L/min oxygen inhalation). There were no remarkable signs on her chest radiograph and electrocardiogram revealed V1-V4 T wave inversion. Acute PE was suspected and bilateral lower extremity venous color USG and enhanced spiral chest CT were planned for the diagnosis. An enhanced CT scan revealed filling defects in the right and left superior pulmonary arteries, as well as bilateral atelectatic areas (Fig. 1). After the diagnosis of PE was determined intravenous heparin infusion was initiated in the ED and the patient was admitted to the intensive care unit. The patient was discharged from hospital 14 days after admission, with continued daily administration of 2.5 mg warfarin.

Discussion: The most frequent symptoms of PE are dyspnea, chest pain, cough, and syncope. In a clinical study that investigated clinical features of PE in elderly patients (≥75 years), syncope was more frequent in elderly whereas thoracic pain predominated in younger patients. Analysis of 335 patients with acute PE (36 had syncope at presentation) revealed that frequency of right ventricular dysfunction, saddle type embolism, and a history of previous PE was higher in patients with syncope compared to patients without syncope. Our patient did not receive thrombolytic therapy and was discharged from hospital without any complication. Presyncope in PE is a very rare clinical entity and the literature is poor on this subject. Although presyncope seems to syncope, during presyncope the patient experiences 1 or more of the prodromal symptoms of syncope, but recovers before losing consciousness. Considering that presyncope is rare and atypical symptom in PE and its duration of onset and number of attacks, the patient may easily have been misdiagnosed with cardiac or nervous system disease. In conclusion, the occurrence of presyncope as the sole initial symptom of PE in an elderly patient with no hemodynamic instability is extremely rare in ED.

Keywords: Emergency medicine, presyncope, pulmonary embolism



Figure 1. Enhanced chest CT scan revealing filling defects in the right and left superior pulmonary artery branches.

P-033

[Kardiyovasküler Aciller]

PHEOCHROMOCYTOMA: DIAGNOSIS AT DUSK

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Introduction: Pheochromocytoma (PH) is a neuroendocrine neoplasm arising from chromaffin cells of the adrenal medulla. Although it is unusual cause of hypertension (HT) accounting for at most 0.1-0.2 % of cases, it may lead to severe and potentially lethal hypertensive crisis due to the effects of the released catecholamines. This case illustrates that a rare clinical entity such as pheochromocytoma should be considered in the differential diagnosis of hypertensive crisis and acute coronary syndrome.

Case: A previously healthy 29-year-old woman presented to emergency department (ED) with signs and symptoms, including vomiting, headache, chest pain, tachycardia and hypertension. Her Glasgow Coma Scale (GCS) was 14; blood pressure was 250/150 mmHg, pulse rate was 154 bpm, oxygen saturation 93%. In her physical exam, there was pathology. Her upper and lower extremity pulses were normal and equal. We started to investigate possible causes like acute coronary syndrome, acute aortic dissection, intracranial hemorrhage (ICH), acute hypertensive encephalopathy and started treatment for hypertensive crisis as nitroglycerin and esmolol infusion. Electrocardiography was normal. Despite supportive measures the patient rapidly deteriorated. Bed-side echocardiography revealed a normal-sized heart with global hypokinesia. She sent to computed tomography (CT) of brain for ICH, and thorax plus abdomen for aortic dissection. The laboratory tests indicated enzymatic activity typical of myocardial necrosis: elevation of troponin and creatine kinase. There were no abnormalities in other routine blood tests. Her hypertension couldn't be lowered, tachycardia was increasing. The CT revealed a mass in the right adrenal gland and reported as PH after 2 hours of presentation. The patient sent to intensive care unit for further therapy and follow-up. In Turkey, alpha blocker infusion therapy is impossible due to no drug in the markets. Oral alpha blockers and other antihypertensive regimens like calcium channel blockers and sodium nitroprusside infusions tried. She died despite all supportive treatment in 20th hours.

Discussion: The case represents a diagnostic dilemma in the ED regarding the diagnosis and initial management of the patient's presentation. Acute PH crisis management requires the administration of selective α_1 -adrenergic blocking agents followed by a β -adrenergic blockade. This latter should never be started first because blockade of vasodilatory peripheral β -adrenergic receptors with unopposed α -adrenergic receptor stimulation can lead to a further elevation of BP. But in ED patients with no previous history of PH, it is hard to think it first. Whatever the clinical picture in the foreground, CT scanning is still the most useful examination for differential diagnosis. In case of hypertensive crisis which doesn't respond to classical therapy, ED doctor should think PH in differential diagnosis. Emergency surgery should be thought in these patients.

Keywords: Pheochromocytoma, Hypertensive Crisis, Pheochromocytoma Crisis Management

P-034

[Kardiyovasküler Aciller]

KOUNIS SYNDROME FOLLOWING A BEE STING: CASE REPORT

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Hypersensitivity reactions due to insect bites cause different clinical situations ranging from simple urticaria to myocardial infarction. Kounis Syndrome is an acute coronary syndrome in which mast cell activation is seen. Myocardial infarction (MI) is one of the most common causes of mortality and morbidity in the world. Following a bee sting, a 54 years old male patient was admitted to the emergency room with bee sting and dyspnea. Upon physical examination of the patient, blood pressure was 110/80 mm/Hg, heart rate was 160 beats/minute and respiratory rate was 30/minute. The first ECG of the patient showed a significant sinus tachycardia. Treatment was started with intravenous antihistamines and steroids. After twenty minute, the patient began to have chest pain. ECG was repeated and demonstrated ST wave elevation on inferior leads. Aspirin 300 mg was given. The diagnosis of acute inferior myocardial infarction was considered and primary percutaneous coronary intervention (PCI) was decided. Coronary angiography revealed 90-99% stenosis in the right coronary artery (RCA). A stent was inserted into the lesion patients.

As a result when the patient who admitted to the emergency department with bee sting complaint, Kounis Syndrome should be remembered.

Keywords: Kounis syndrome, bee sting, Myocardial infarction

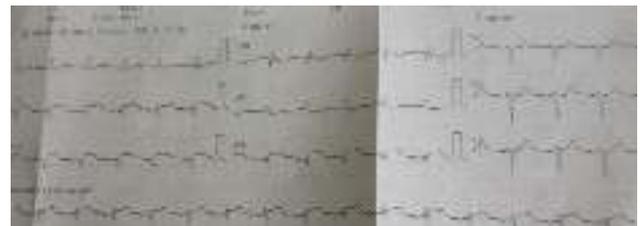


Figure 1: ECG of the patient

P-035

[Kardiyovasküler Aciller]

VAZOSPASTIC MYOCARDIAL INFARCTION: AN EVEN RARER OCCURRENCE OF A RARE ENTITY

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Introduction: Vazospastic angina (VSA) is an important functional cardiac disorder that leads to transient myocardial ischemia and is caused by sudden, intense and reversible coronary artery spasm resulting in subtotal or total occlusion. VSA is associated with cardiac conditions such as stable or unstable angina, acute coronary syndromes and lethal arrhythmias, and the patients usually present with chest pain, which might or might not be accompanied with ischemic ECG changes. Here we report a patient who suffered acute myocardial infarction (AMI) due to documented VSA with no critical coronary lesions.

Case Report: A 71 years old female presented to our emergency department with epigastric pain radiating to her back. She visited gastroenterology 10 days ago, hepatic ultrasound and stool blood test showed no pathologic results. Esophagogastroduodenoscopy was planned, but never performed. Patient also visited cardiology 3 days prior to her current ED visit; coronary angiography (CAG) was performed and reported to be normal. The patient admitted to our ED due to worsening pain. The ECG of the patient showed ST-segment elevation at leads II, III and aVF along with 0.5-1 mm ST-segment elevations at V4 to V6. Cardiology was immediately consulted and ACS treatment including Heparin 5000 U IV bolus, ASA 300 mg PO and Clopidogrel 300 mg PO, and the patient went under emergent CAG. The CAG showed no occluded vessels, but diffusely constricted vasospastic right coronary artery. 2 milligrams of Nitroglycerin was administered as an intravenous bolus and vasospasm resolved instantly. The Troponin-I level of the patient was found to be 12.67 (0-0.028).

Discussion: Acute coronary vasospasm is predominantly caused by hyper-reactive vascular smooth muscle cells and probably endothelial dysfunction. The prevalence of VSA is known to be as low as 1% to 1.5% of angina admissions. It also reported that prolonged VSA may cause acute myocardial infarction. Our patient, who suffered chest pain attacks for about ten days, most probably had multiple acute myocardial infarction episodes based on Troponin-I levels. Her last episode was also documented by an ECG. The fact that her coronary arteries showed no critical obstructive lesions and instant resolution of the spasm following the Nitroglycerin bolus supported the vazospastic MI diagnoses. The patient was discharged 2 days later with calcium channel blockers. We suggest that, the emergency physicians should be aware of the fact that a recent history of a normal CAG is not solely sufficient to rule out ACS in the ED.

Keywords: Acute coronary syndrome, Emergency department, Myocardial infarction, Vazospastic angina



Figure 1. The ECG of the patient

P-036

[Kardiyovasküler Aciller]

WELLEN'S: NEVER MISS THE T WAVE PATTERN NEVER LET THE LIFE UPSIDE DOWN

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Introduction: Wellens' syndrome was first reported in 1982, which is characterized by symmetric T-wave inversion or biphasic T-wave in precordial leads (V1-V6 but especially V2-V3) during pain-free periods in a patient presenting with chest pain. These findings reliably suggest a high-grade stenosis of the proximal left anterior descending (LAD) coronary artery. It's obvious that 75% of Wellens' patients will develop acute anterior wall myocardial infarctions (MIs) within a few weeks unless intervention is undertaken urgently.

Case: A 58-year-old male presented to the emergency department (ED) with intermittent chest pain in retrosternal region for 10 days. He described an increase with exertion and radiation to the left arm. There was no associated nausea, vomiting or back pain. He had no family history of coronary artery disease, but he had diabetes and a 32-pack-year smoking history. Vital signs were as follows: temperature 36.1°C, blood pressure 115/69 mmHg, pulse 67 beats/min, spO2 %99 and his physical examination was normal. An ECG was performed immediately during pain-free period. (Fig.1), showed normal sinus rhythm biphasic T waves in V2 and V3, and inverted T waves in V4 and V6. We obtained complete blood count, renal functions and electrolytes and found within normal limits except; blood urea nitrogen was 30 mg/dL (n:8.9-20.6 mg/dL) and creatinine was 1.36 mg/dL (n:0.72-1.25 mg/dL). The initial Troponin I concentration was 1.583 ng/ml (n:0-0.030 ng/ml). He was diagnosed as acute coronary syndrome, Wellens' syndrome and given dual anti-platelet (aspirin 300 mg and clopidogrel)

The patient was admitted to the CCU and underwent cardiac catheterization. The coronary angiography showed severe stenosis (90%) in mid-portion LAD (Fig.2) and multiple-vessel disease. The patient was advised to have immediate CABG (coronary artery bypass grafting)

Discussion: Wellens' syndrome consists of a characteristic EKG finding suggesting severe stenosis of the proximal LAD

artery. These patients are at high risk for developing anterior wall infarction and early diagnose is life-saving. Wellen's syndrome is diagnosed based on the classic T-wave findings seen on an ECG taken during the pain-free period. These T-wave changes represent reperfusion of the myocardium. The diagnostic leads for T-waves of Wellen's syndrome are V2 and V3, corresponding with a lesion between the first and second septal branches of the LAD. However, if the lesion is more proximal in the LAD, the T-wave changes will be more widely spread along the precordial leads.

Although this is not a rare phenomenon; approximately up to 20% of all unstable angina patients will have this pattern and it is extremely specific that in one prospective study 180 out of 180 patients with these ECG changes in the initial follow up were diagnosed having at least a 50% proximal LAD stenosis. We believe that the rapid diagnosis based on the specific ECG findings in the emergency room will prevent any potential MI or sudden death cases by early revascularization. So we should perform serial ECG to follow the changes closely especially in unstable angina patients which is the most crucial group for observation. Also the ECG changes between the episode of pain and pain-free period could be due to reperfusion of the ischemic myocardium. Left untreated patient are candidate for myocardial infarction, heart failure and even sudden cardiac death.

Keywords: emergency department, wellen's pattern, biphasic Twaves

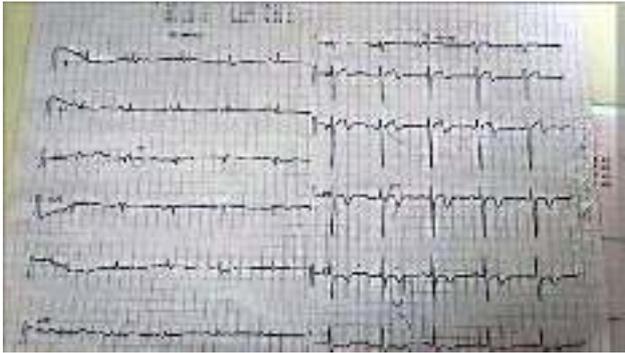


Figure 1.

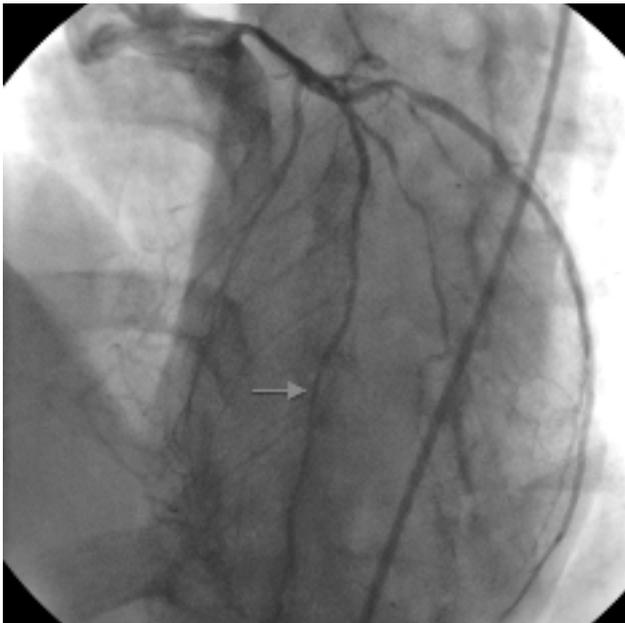


Figure 2.

A CORONARY STENT PATIENT WHO DEVELOPS RESTENOSIS 6 DAYS AFTER PCI

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Introduction: Restenosis literally means the recurrence of stenosis, a narrowing of a blood vessel, leading to restricted blood flow. This is usually restenosis of an artery, or other blood vessel, or possibly a vessel within an organ. The mechanism of restenosis after balloon angioplasty and stent is a combination of recoil, arterial vessel remodelling, and neointimal hyperplasia or thrombosis. When a stent is used and restenosis occurs, this is called in-stent restenosis or ISR. If it occurs following balloon angioplasty, this is called post-angioplasty restenosis or PARS. If restenosis occurs within a stent (also known as in-stent stenosis), it may be treated with repeated angioplasty and insertion of another stent inside the original, sometimes with a drug-eluting stent. A coronary stent patient who develops restenosis may experience recurrent chest pain (angina) or suffer from a minor or major heart attack (myocardial infarction), though they may not report it. One of the most common complications of PCI or stent is restenosis. Now we will present A coronary stent patient who develops restenosis 6 days after PCI.

Case: 65 year old male patient was admitted to the emergency department with chest pain. Pain was the style of printing and spread to the arms and neck. On admission her vital signs were; blood pressure 100/60 mmHg, heart rate 76/min, respiration rate 14/min and body temperature 36.6°C. In medical history he had a history of percutaneous coronary intervention and coronary artery stent to RCA 6 days ago. In physical examination there were no murmurs or gallops. Other physical examination findings were normal. ECG was taken from the patient with typical angina pectoris. ECG was consistent with inferior myocardial infarction (figure 1). Patient were monitored and cardiology consultation was requested. In laboratory tests the patient had elevated troponin values. Other laboratory tests were normal. The patient was hospitalized in cardiology service. Coronary angiography was performed to the patient and coronary angiography showed restenosis at the right coronary artery in the stents region. The patient underwent repeated angioplasty with a good angiographic results. Medical treatment was arranged and the patient was discharged after 3 days.

Conclusion: As a result patients presenting with chest pain are under risk even if they had a history of percutaneous coronary intervention or coronary artery stent recently. Because one of the most common complications of PCI or stent is restenosis. Such patients should be monitored, ECG should be taken quickly and cardiology consultation should be requested. Because in these patients, early diagnosis and treatment is vital.

Keywords: Restenosis, percutaneous transluminal coronary angioplasty, myocardial infarction

P-038

[Kardiyovasküler Aciller]

TRAUMATIC, STRESS-RELATED, HYPERTENSIVE PULMONARY EDEMA

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Introduction: Acute pulmonary edema can be defined shortly as an increase in the amount of fluid in lungs. Basically, it is disruption of normal gas exchange as a result of abnormal fluid accumulation in interstitium and alveolar space. It is an emergency state requiring urgent therapy and not allowing enough time to the doctor for diagnosis and a differential diagnosis. An etiological classification of acute pulmonary edema (APE) should be made due to differences in therapeutical approach of each group: 1. Cardiac: it causes an increase in pulmonary capillary pressure 2. Noncardiac: It causes a change in shape or permeability of alveolar membrane. Trauma is a rare cause of acute pulmonary edema. A case with traumatic, stress-related, hypertensive pulmonary edema was presented here.

Case: 85-year-old male patient presented to the emergency department after falling while sitting down. At presentation, Glasgow coma scale was 15 points, arterial blood pressure was 130/80 mmHg, pulse was 82/minute, blood oxygen saturation was 96%. Conscious, alert and oriented patient had a normal lung exam at presentation. Additional sound or murmur was absent. There was a pain and tenderness between 4-8th thoracic vertebrae with palpation. No pathological finding was detected on direct films. Thoracic CT was evaluated as normal regarding pulmonary or vertebral pathology. Lab findings of patient was summarized in Table 1. History of the patient revealed benign prostate hyperplasia for 15 years and anti-hypertensive medication use for 30 years. Control lung examination performed after patient developed dyspnea and suffocation showed crepitant rales all over the lung (Figure 1. Chest x ray at presentation, Figure 2 Chest x ray after 30 minutes of admission). Arterial blood pressure was 240/120 mmHg. Patient was considered as acute traumatic, hypertensive pulmonary edema, started on a therapy in emergency service, and consulted to cardiology department. Bedside transthoracic echocardiography by cardiologist revealed a %50 ejection fraction, left ventricular systolic function and wall motions was evaluated as normal. Patient was admitted to intensive care unit.

Conclusion: Pulmonary edema due to cardiac or noncardiac causes is defined as a fluid accumulation in airspaces and pulmonary interstitial area. Edema affects pulmonary function and gas exchange depending on the amount and place of fluid (interstitial and/or alveolar). Cardiogenic edema usually leads to an edema in both alveolar and interstitial areas, while noncardiogenic edema causes an interstitial edema followed by alveolar fluid accumulation. Trauma is a rare cause of pulmonary edema. Finally, it should be noted that patients presented with a trauma history could develop pulmonary edema.

Keywords: Pulmonary, Edema, Trauma, Hypertension



Figure 1. Chest x ray at presentation

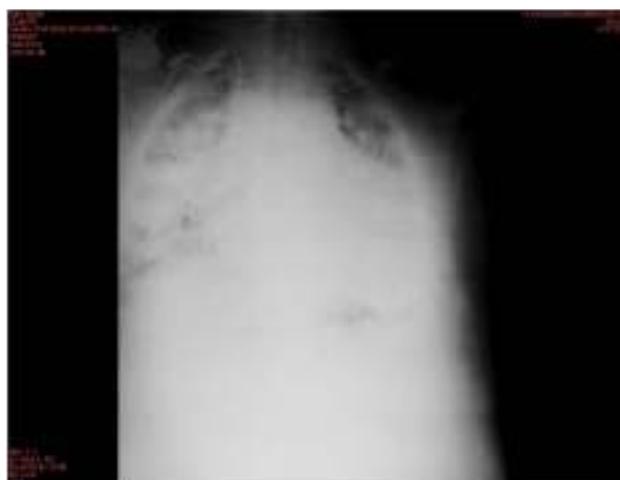


Figure 2. Chest x ray after 30 minutes of admission

Table 1. Laboratory results			
Parameter	Value	Parameter	Value
Hemoglobin (mg/dl)	10.2	AST(U/L)	23
WBC (mm3)	4600	ALT (U/L)	21
Thrombocyte (mm3)	21300	PH	7.26
BUN (mg/dl)	50	PO2 (mmHg)	49
Na (mEq/L)	143	PCO2 (mmHg)	60
K (mEq/L)	4.2	HCO act	23
Glucose (mg/dl)	118	Sat O2c	75

P-039

[Kardiyovasküler Aciller]

INDIRECT FEMORAL ARTERY INJURY AFTER GUNSHOT

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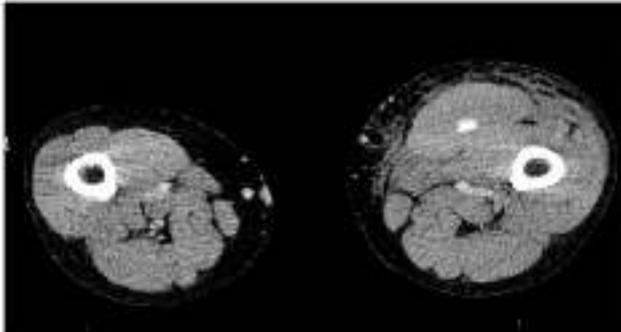
Introduction: Ballistic trauma or gunshot wound is a form of physical trauma sustained from the discharge of arms or munitions. The degree of tissue disruption caused by a projectile

is related to the size of the temporary versus permanent cavity it creates as it passes through tissue. The immediate damaging effect of the bullet is typically severe bleeding. Vascular injury should be excluded especially in extremity injuries. Herein we presented a patient with indirect femoral artery injury after gunshot.

Case Presentation: A 55-year-old man was admitted to our emergency department due to a gunshot wound. On physical examination, he had a gunshot wound at the upper femoral region with inlet and outlet orifice. On laboratory, he had 16000 white blood cell per microliter of blood and CRP 5 mg/dl (0-0,5 Normal reference range). Other blood parameters were normal. There were no fracture sign on x-ray. Tomography angiography revealed femoral artery injury (fig 1-2). The patient was admitted to vascular surgery ward. After a day performed conventional angiography revealed no leakage from the artery. The patient was followed up for three days and discharged home with advices.

Conclusion: Ballistic trauma or gunshot can cause an indirect arterial injury. Vascular injury should be excluded in these patients. Tomography angiography or conventional angiography can be used in this circumstance.

Keywords: Gunshot; Indirect Femoral Artery Injury; Tomography angiography



Figur 1. Indirect Femoral Artery Injury after Gunshot



Figur 2. Indirect Femoral Artery Injury after Gunshot

TRAUMATIC RUPTURE OF PROXIMAL DESCENDING AORTA WITH LATE MEDIASTINAL HEMATOMA PRESENTATION

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Introduction: Traumatic aortic rupture is a condition in which the aorta, the largest artery in the body, is torn or ruptured. The condition is frequently fatal due to the profuse bleeding that results from the rupture. The tethering of the aorta by the ligamentum arteriosum makes the site prone to shearing forces during sudden deceleration. Herein we present a case of traumatic rupture of proximal descending aorta with late mediastinal hematoma presentation

Case Presentation: A 43-year-old woman with the complaint of thoracoabdominal pain was admitted to our emergency department after high speed traffic accident. On initial physical examination, her vital signs were normal, alert and she had only thorocal and upper abdominal tenderness.

On laboratory, she had no pathological findings. In her initial of cranial, thoracic, abdominal computed tomography scan revealed no pathology. She had discharged home with recommendations after the first day follow up. A week later from the first admission, the patient was admitted again due to the intractable back pain. Performed thoraco-abdominal tomography scan was showed the traumatic rupture of proximal descending aorta with mediastinal hematoma (Figure 1). At the end of emergency follow up the patient was admitted to intensive care unit and underwent endovascular stenting (Figure 2).

Conclusion: Death occurs immediately after traumatic rupture of the thoracic aorta 75%–90% of the time since bleeding is so severe, and 80–85% of patients die before arriving at a hospital. Some patients may present with late mediastinal hematoma. Trauma patient may admit again with intractable back pain and in these patients, the physician keep in mind traumatic aort rupture.

Keywords: Traumatic Rupture of Proximal Descending Aorta; Mediastinal Hematoma; Thoraco-abdominal tomography



Figur 1. Traumatic Rupture of Proximal Descending Aorta with Late Mediastinal Hematoma



Figur 2. Traumatic Rupture of Proximal Descending Aorta with Late Mediastinal Hematoma



Figure 1. Electrocardiogram; sinus rhythm, DII-III, aVF, V4-5-6 T wave inversion and minimal ST-segment depression

P-041

[Kardiyovasküler Aciller]

NON-OBSTRUCTIVE HYPERTROPHIC CARDIOMYOPATHY IN PATIENT PRESENTING WITH SYNCOPÉ

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Introduction: Syncope was defined as a sudden and brief loss of consciousness associated with a loss of postural tone and a spontaneous recovery. Syncope is classified as reflex (neural origin), syncope, orthostatic hypotension and cardiac syncope. Causes of cardiac syncope are arrhythmias and structural heart disease. In this study; we aimed to present case that was brought in emergency department with syncope and diagnosed with hypertrophic cardiomyopathy.

Case: A 24-year-old man presented to the ED complaining of syncope. His vital signs and his physical examination were normal. Electrocardiogram was found normal sinus rhythm, DII-III, aVF, V4-5-6 asymmetrical T wave inversion and minimal ST-segment depression (Figure). Echocardiography showed left ventricular hypertrophy. Patients with a diagnosis of hypertrophic cardiomyopathy was admitted to the cardiology service.

Conclusion: Syncope is a common and challenging presenting complaint to the emergency department. There is still considerable uncertainty about the optimal emergency department management of syncope. The most common cause of syncope was reported as reflex syncope in younger age groups. These patients should be drawn EKG and further investigations should be planned according to the situation.

Keywords: emergency department, hypertrophic cardiomyopathy, syncope

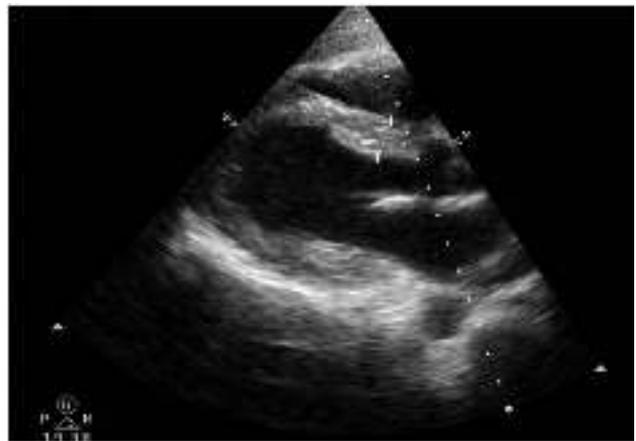


Figure 2a. ECO; increased interventricular diastolic diameter (17mm)



Figure 2b. ECO; increased posterior wall diastolic diameter (13mm)

P-042

[Kardiyovasküler Aciller]

EVALUATION OF SHORT TERM PROGNOSIS OF PATIENTS DISCHARGED WITH ELEVATED TROPONIN I FROM EMERGENCY DEPARTMENT

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Objective: We aimed to evaluate the prognosis of patients with elevated Troponin I (cTnI) within a month after discharge from Emergency Department (ED).

Methods: In the present study, we retrospectively evaluated the data of the patients with elevated cTnI who were discharged from a tertiary ED in a two and a half year period. We investigated the prognosis of patients within a month after discharge by means of medical records of the hospital's database and Social Security Institution's database. Patients whose medical records could not be retrieved, were called by phone. If phone contact was unavailable they were excluded from the study.

Results: In the study period 210,243 patients were admitted to ED. Three hundred and thirty six patients with elevated cTnI were included. About one third of the patients were readmitted to another ED within one month. Half of the readmitted patients had declared cardiac symptoms during their second visit to another ED. Their readmission rate was five times and mortality rate was one and a half times were higher than the patients discharged with normal cTnI levels.

Conclusion: In our study, readmission rate and mortality rate of patients discharged with elevated cTnI levels were higher than the patients discharged with normal cTnI levels.

Keywords: troponin I, discharge, emergency department, prognosis

P-043

[Kardiyovasküler Aciller]

KOUNIS SYNDROME, AN UNUSUAL REASON OF MYOCARDIAL ISCHEMIA

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Introduction: Although associating cardiovascular symptoms and signs with hypersensitivity and anaphylactic syndrome known for a long time, the pathophysiologic reasons and allergic angina syndrome have diagnosed in the last two decades. Kounis Syndrome is an unusual reason of myocardial ischemia. Allergic and anaphylactic reactions are the reasons of Kounis Syndrome. Although it is not a rare disease, its diagnosis is difficult and easily overlooked.

Case Report: Fifty-seven-years-old female patient was admitted Emergency Department for allergic reaction with urticarial rash on whole body. In her medical history there are hypertension, diabetes mellitus, hyperlipidemia and chronic renal failure. Her complaint was began after the injection of proton pump inhibitor at the end of hemodialysis two hours ago. In her physical examination there were uvulae edema, dispnea and common ronchus. After applying adrenaline 0,5 mg intramuscularly twice per fifteen minutes the patient complained about a chest pain. Subacute anterior myocardial infarctus was detected in her ECG (Fig. 1). The laboratory test results were BNP:4438 pg/ml (0-100), myoglobin:1482 ng/ml(14-66),

CK/MB:16 ng/ml (0,6-6,3), Troponin I:13,5 ng/ml (0-0,04), creatinine: 6,5 mg/dl (0,5-0,95). Transthoracic echocardiogram and CAG were performed by cardiologists. In the echocardiogram the mid anterior and septum were acinetetic, ejection fraction was %33. By the CAG, plaque formations in Cx artery and RCA, a lesion in LAD which doesn't cause significant stenosis. And the patient discharged on the fifth day.

Discussion: Kounis Syndrome is caused by inflammatory mediators released during mast cell activations in allergic reactions. In the severity of Kounis Syndrome; the patients sensitivity, comorbidities, the allergen concentration and the route of allergen entrance are important. Kounis' ECG changes are; ST segment changes, any degree of heart block or arrhythmias. Three variants of Kounis Syndrome are vasospastic allergic angina, allergic myocardial infarction and stent thrombosis. The type 1 variant includes normal coronary arteries without risk factors for coronary artery disease. In the type 2 variant the infarction depends on already existing atheromatous disease. The type 3 variant includes coronary stent thrombosis with eosinophils and mast cells. The patient with the type 1 variant treatment of allergic reaction may abolish symptoms and CAG may not be performed. But on the other variants CAG must be performed. In the treatment adrenaline should not be applied because of aggravating ischemia and worsening coronary vasospasm in Kounis Syndrome. Antihistaminic agents and corticosteroides can be used in the treatment. In our case the patient was in the group of type 2 variant. Although CAG performed in the early period, applying epinephrine may worsen the lesion of infarction. And in the earlier period inhibition of mast cell degranulation may be efficacious in preventing the acute coronary events of Kounis Syndrome.

Conclusion: Allergic and anaphylactic reactions are the reasons of Kounis Syndrome which is unusual reason of myocardial ischemia. Although it is not a rare disease, its diagnosis is difficult and easily overlooked.

Keywords: Kounis Syndrome, myocardial ischemia, anaphylaxis

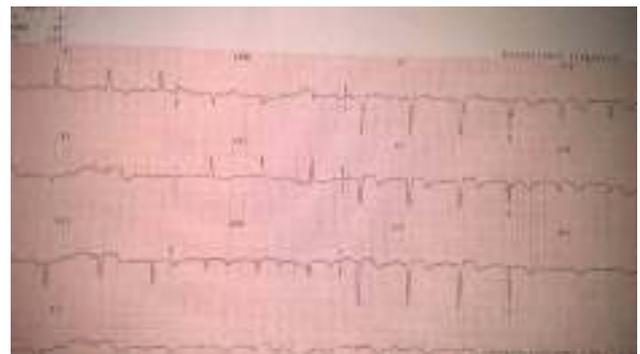


Figure 1. Subacute anterior MI, ST segment elevation on V1-V2-V3-V4 derivation

P-044

[Kardiyovasküler Aciller]

HYPOXEMIA CAUSED BY A RARE ACUTE CARDIAC PATHOLOGY**Murat Yeşilaras, Nur Zafer, Öner Özdoğan, Özge Duman Atilla, Ibrahim Toker***Department of Emergency Medicine, İzmir Tepecik Training and Research Hospital*

Introduction: Acute hypoxemia is a clinical condition frequently encountered in the ED. Acute pulmonary edema, pneumonia, COPD, pulmonary VTE are the most common pathologies associated with this situation. In this case, we presented a young patient with acute hypoxemia.

Case: A 35 years old female presented to the ED with new onset nausea and vomiting. In the medical history, she had a cardiac surgery for total repaired of ASD (atrial septal defect) fifteen days ago. On admission, she had a blood pressure of 96/46 mmHg, heart rate of 102/min, body temperature of 36°C, respiratory rate of 33/min, peripheral oxygen saturation of 84%. There were no rales, rhonchus or murmurs on cardiopulmonary examinations. She was mildly cyanotic. There wasn't any pathology on electrocardiogram. On arterial blood gases analysis, pH, PCO₂, PO₂, HCO₃ and lactate were found to be 7.603, 12.8 mmHg, 43 mmHg, 12.4 mmol/L and 4.47 mmol/L respectively. There was mildly a leukocytosis (12.7x10⁹/L). BUN, electrolytes, cardiac markers and D-dimer were normal. There was no pathology on chest x-ray. On bedside echocardiography (ECHO), EF was normal and a right structure was not dilated. Pulmonary thromboembolism was suspected and CT angiography of thorax was ordered. At first while giving IV contrast, transition was not seen on pulmonary artery (PA) in contradistinction to superior vena cava (SVC) and aorta (Figure 1). By giving additional contrast and waiting for contrast transition, there was no thromboembolism on the images. Because of this and no contrast passage on PA, we thought about right-to-left shunt and consulted the patient to cardiologist. On transthoracic ECHO, LVEF measured as %60, systolic PA pressure as 9mmHg and there was no shunt. She hospitalized to coronary care unit (CCU). In CCU, she was still hypoxemic. On contrast TTE by giving agitated saline from bilateral antecubital veins, contrast transition was directly from SVC to left atrium (Figure 2). So she operated for repairing of sinus venosus type ASD by patch and dilating SVC by pericardial patch. After operation, the patient's complains and hypoxemia regressed and she discharged from hospital.

Conclusion: The most significant sign of right-to-left shunt (RLS) is hypoxemia, but before whole pathologies that frequently found with hypoxemia, diagnosing RLS is very hard. Patent foramen ovale frequency is 30% and ASD is 6% in healthy population, but if there is no pressure disparity between right and left structure, this pathology doesn't cause any symptoms. Acute RLS can cause emerging hypoxemia or worsening of basal hypoxemia. Acute increments of right atrium pressure can cause RLS and hypoxemia. As well as increase of PA pressure at COPD patients can cause increases of RLS and worsening of basal hypoxemia. The three types of ASD, in order frequency, secundum, primum and sinus venosus. It's very hard to diagnose sinus venosus type ASD in emergency situations because of its rarity and difficulty to see the pathology on TTE. Through the agency of developing technology, tomography is more effective used for diagnosing cardiac anomalies. ASD and other cardiac

anomalies can be recognized by contrast enhanced MDCT. In this case, although CT was not high quality as that and not displayed for this diagnosis, not contrast transitioned PA made us think about right-to-left shunt with a serious degree.

Keywords: Right to left shunt, hypoxemia, contrast echocardiography



Figure 1. Pulmonary artery and aorta computed tomography angio, A: Aorta, P: Pulmonary Artery, S: Superior vena cava

P-045

[Kardiyovasküler Aciller]

MOTOR DEFICITS DUE TO EXTREMITY ARTERY OCCLUSION**Ebubekir Arslan, Ebubekir Arslan, Nurdan Acar, Engin Özakın, Mustafa Emin Çanakçı, Turgay Çağlayan, Hakan Dolgun***Eskişehir Osmangazi University Medical Faculty Department of Emergency Medicine*

Introduction: Rate of upper extremity arterial thrombosis is 10-30%. Obstruction due to embolism is almost % 80. Obstruction due to thrombosis of upper extremity arterial system is lesser than lower extremities because of collaterals and sclerotic process. Typical symptoms are pain and loss of pulse. Paresthesia and paralysis appear in late period. We report a patient with right upper extremity motor deficit due to axillary arter embolism instead of ischemic stroke.

Case: A 77 yo male patient with right side motor deficit for two days was brought to emergency department. There was 3/5 right side motor sequela and right central facial paralysis after ischemic stroke, chronic renal failure and diyabetes mellitus on medical records. On physical exam his right upper extremity was plegic and right lower extremity muscle strenght was 3/5. There was a dialysis catheter under the right clavicle. There was no significant temperature difference between upper extremities. Arterial artery pulses were not palpated and blood pressure couldn't have measured on the right upper extremity. Left upper and bilateral lower extremity pulses were normal and equal. CT-angiography was ordered on suspicion of vascular pathology. Image showed a 5 cm totally occlusion area in the right axillary artery. After emergent vascular surgery consultation, lots of subacute thrombus was found in the brachial and axillary arteries and embolectomy was performed. Post-operative brachial, ulnar and radial pulse palpated normally and right upper extremity muscle strength was 3/5 again.

Conclusion: Depending on the extremity arterial thrombosis and embolism motor deficits can develop. Especially in patients

with a history of stroke, this may lead to misdiagnosis and treatment delay. Emergency physicians should be in doubt for vascular pathology for patients presenting with lateralized motor deficit on neurological examination and catheterization. Complete vascular examination is also required.

Keywords: Extremity artery occlusion, motor deficit, emergency service

P-046

[Kardiyovasküler Aciller]

SEIZURE?ARE YOU SURE?

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Introduction: There are many causes of sudden loss of consciousness. Vazovagal syncope, seizures, cardiac problems, cerebrovascular events and trauma are the most common reasons we meet in emergency department with unconscious patients.

Case: 64-year-old woman was admitted to the emergency department with loss of consciousness. According to the attendant who brought her, the patient suddenly started to shake unconsciously with urinary incontinence for seconds and she remembers nothing about the event. She admitted to neurological clinic with dizziness four years ago and she was told there are occlusions in her brain vessels. She has no known history of any disease before except this. She wasn't taking any drug. She was conscious, oriented and cooperative. Her neurological examination was normal. Her blood pressure was 90/60 mmHg. In her twelve lead ECG there were extra QRS complexes. Her blood glucose level was 131 mg/dL and other laboratory tests were in normal limits.

She was monitored and referred to the neurological department considering she had seizure. She was offered to use levetiracetam twice a day. By the way she lost her consciousness again with urinary incontinence and in her monitor ventricular fibrillation was seen and before defibrillation, it ended and she was ok. It happened three times without hemodynamic deterioration. She was given amiodarone 300 mg iv and referred to the cardiology department and she was hospitalized by them.

Conclusion: The history is very important with clinical features to diagnose the patient. In emergency department we may have a quick conclusion with the patient's histories, but we should consider every other possibility and review all vital findings we could obtain in emergency department.

Keywords: seizure, ventricular fibrillation, ECG

P-047

[Kardiyovasküler Aciller]

UPPER EXTREMITY DEEP VEIN THROMBOSIS ASSOCIATED WITH CANCER AND CHEMOTHERAPY: TWO CASES

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Introduction: Upper extremity deep vein thrombosis (DVT) occurs much more rarely than lower extremity DVT. Cancer and chemotherapy are important risk factors for the development of

DVT. In this report, two cases receiving chemotherapy and with DVT in upper extremities are presented.

Case 1: A 38-year-old male patient presented to emergency service with the complaints of rash, swelling and pain in the inner aspect of left arm. Vital findings were normal. In physical examination, there was no remarkable finding except for erythema and edema at the size of 4x5 cm in distal lateral region of left arm (Figure 1). In his history, it was learned that he had Hodgkin's lymphoma and was administered chemotherapy (doxorubicin) 10 days ago on the same arm in another center. In upper extremity, venous system doppler ultrasonography, thrombosed appearance was seen in left superficial cephalic vein.

Case 2: A 49-year-old male patient presented to emergency service with the complaint of rash, swelling and pain increasing for the last two days in the anterior aspect of left arm. Vital findings were normal. In physical examination, there was no remarkable finding except for erythema and edema at the size of 4x6 cm in left arm medial antecubital region (Figure 2). In his history, it was learned that he has small cell lung cancer and was administered chemotherapy (cisplatin) on the same arm in another center. Treatment of patients were regulated and they were invited for outpatient clinic control.

Conclusion: In all patients diagnosed with cancer and administered chemotherapy, upper and lower extremity pain and swelling should be evaluated carefully with regard to DVT.

Keywords: Upper Extremity; Deep Vein Thrombosis; Chemotherapy



Figure 1. Erythema and edema on left arm



Figure 2. Erythema and edema in left arm antecubital region

P-048

[Kardiyovasküler Aciller]

NUTCRACKER PHENOMEN THAT IS FOUND BY CHANCE: A CASE REPORTYılmaz Zengin, Ahmet Gündüzalp, Recep Dursun, Mustafa İçer, Ercan Gündüz, Ferhat Çağırın, Abdullah Şen, Mustafa Ipek*Department of Emergency Medicine, Dicle University, Diyarbakır, Turkey*

Introduction: Nutcracker phenomenon is a tightness of left kidney vein between aorta and superior mesenteric artery (SMA) and at this level tightness in left kidney vein due to the external compression. It is described as dilatation and increasing of compression in kidney vein segment before this segment, this type is named anterior nutcracker phenomenon. Tightness in the left kidney vein may occur due to the compaction of circumaortic and retroaortic located left kidney vein between aorta and vertebra corpus. Whether nutcracker phenomenon have generally been used in the literature synonymously with nutcracker syndrome (NCS) these two terms can be separated from each other by the presence of symptoms in NCS like hematuria, orthostatic proteinuria, pelvic congestion due to the increasing of the pressure in left kidney vein. When making the diagnosis doppler ultrasonography, contrast-enhanced computed tomography and magnetic resonance imaging which are among the noninvasive imaging methods can be used. We reported a case that was detected Nutcracker Phenomenon randomly.

Case report: A 27-year-old female admitted our emergency service with complaints of pain in chest and breath difficulty. There hadn't been any illness at patient's history. Physical examination: Generality was average, she was conscious, oriented and breathing sounds couldn't be taken from left lung basal and middle zones. Other system examinations were natural. Vital diagnosis: TA: 80/50 mm Hg, pulse: 110 beat/min, respiratory rate: 18 resp/min, body temperature 38,5°C and oxygen saturation at room air was % 95. Laboratory values: WBC: 28.5 K/uL, HGB: 11,8 g/dL, HTC:% 33.5, Glucose was: 113 mg/dL. In her intravenous contrast computed tomography; pleural effusion about 59mm and showed loculation was observed at the left pleural space. There was enhancement in pleural leaves (empyema). Left kidney vein was stucked between aorta and SMA. The patient was hospitalized to thoracic surgery clinic.

Conclusion: When the patients applying emergency service are evaluated we can meet another situations quite by chance. In order not to overlook these situations, patients must be treated systematically and their system examination must be checked individually.

Keywords: left kidney vein, Nutcracker phenomenon, tightness

P-049

[Kardiyovasküler Aciller]

PERIPHERAL ARTERY ANEURYSM IN BILATERAL LOWER LIMBS: CASE REPORTAhmet Gündüzalp, Yılmaz Zengin, Mustafa İçer, Ercan Gündüz, Recep Dursun, Hüseyin Gürbüz, Mustafa Ekinci, Murat Orak*Department of Emergency Medicine, Faculty of Medicine, Dicle University, Diyarbakır, Turkey*

Introduction: Aneurysm is the expansion of artery diameter, compared to the normal diameter, %50 and over. The most common cause of aneurysm is arteriosclerosis and it can be seen due to the mycotic, syphilitic, traumatic, dissecting, or

congenital malformation aneurysm. Lower limb aneurysms are most frequently seen in the popliteal artery, rarely in femoral artery, at least in the tibial artery. Recently peripheral artery aneurysm is frequently seen depending on the increment in incidence of arteriosclerosis and common usage of invasive methods which are treatment and diagnosis purpose. The clinic of artery aneurysm depends on the location, size and course of the coexistent diseases of aneurysm. At %70 of cases it can't be understood until symptoms appears. While ischemic events are generally predominates to the table they rarely ruptures. If peripheral aneurysms don't be treated they will cause arterial thrombosis so threaten the limb and the patient's life. Rupture chance of peripheral aneurysm is less than thoracic and abdominal aneurysms. We reported a case of peripheral artery aneurysm in lower limb has been presented.

Case report: A 65-year-old male who had hypertension and coronary artery disease history admitted to emergency service with swelling that had began two months ago in the right popliteal fossa 20 days ago. He was operated in another hospital to where he had applied with the complaint of inability to walk. Because he hadn't episcrisis it wasn't known what operation he had. After operation swelling began in his right leg. Two days ago he applied our emergency service because of sutures opening. His vital signs were stable. On physical examination generality was average, he was conscious, lower limbs were hot, weren't cyanotic, distal pulses of right leg were weak. In medial side of the right knee and around it there was swelling, the sutured area, in medial part of the upper right knee opened but it wasn't infected. Laboratory tests: HGB:10.3 g /dL, HTC: %33.84. His other laboratory tests were within the normal limits. In the lower limb computed tomography angiography: From femoropopliteal junction view of partial aneurysmal thrombosis was drawn attention and in distal it reached to the normal artery diameter. Right superficial femoral artery was seen tortuously at the level of adductor canal, view of aneurysmal was which 54x51mm sizes, presumed thrombosis and without contrast transition was drawn attention. In distal popliteal artery was totally occluded. Anterior tibialis, posterior tibialis and peroneal arteries were interpreted as filling with collateral flows. He was admitted to the cardiovascular clinic with the diagnosis of peripheral artery aneurysm.

Conclusion: Peripheral artery aneurysm should be considered in patients applying emergency service with the complaint of swelling in popliteal fossa. In peripheral aneurysms early diagnosis and treatment was important for recovering of limb and the quality of for the rest of life.

Keywords: artery aneurysm, bilateral, lower limbs, peripheral

P-050

[Kardiyovasküler Aciller]

SILDENAFIL ASSOCIATED TREMENDOUS DEATHArzu Doğan, Cihan Büyüksütçü, Ferdi Kala, Didem Ay, Ünsal Karahaliloğlu*Department of Emergency Medicine, Istanbul Medeniyet University, Istanbul, Turkey*

Background: Sildenafil is a drug prescribed for male erectile dysfunction. Sildenafil's fatal cardiac effects except due to hypotension with simultaneous nitrate use have not been reported much. Sildenafil reduces blood pressure modestly via relaxing vascular smooth muscle. This reduction is insufficient to stimulate a reflex increase in heart rate. Sildenafil does not affect

the contractility but mildly vasodilates the coronary arteries. In literature there are few cases regarding negative cardiac effects of sildenafil. Here we present a case who probably took sildenafil and died due to its adverse effects on heart.

Case: A 61 years old male with complaints of palpitation and difficulty in breathing was brought to our emergency department by his friend. According to anamnesis given by his female friend he took a drug before a sexual intercourse, and 20 minutes later he became ill. He could not be able to give any information about his past medical history and medications because of his tachypnea. Although his admission vital signs were as follows; blood pressure 160/100 mm Hg, pulse 120 bpm and regular, respirations 28 / min, and body temperature 38,9°C, oxygen saturation with pulse oximetry 85%. He had a Glasgow Coma Score of 15 at the time of admission. He was dyspneic, tachypneic, diaphoretic. He had rales and rhonchi at both lungs. His electrocardiography showed only sinus tachycardia. He had been thought he had acute pulmonary edema and started on appropriate medications. After 10 minutes his situation became worse and respirations became shallow, he intubated. Simultaneously he had ventricular fibrillation. Advanced cardiac life support (ACLS) protocols were administered. When he became hemodynamically stable but still intubated he was transferred to intensive care unit. There he had attacks of ventricular fibrillation several times for 2 hours. ACLS protocols had also been continued there. But he was unresponsive to care and arrested and passed away.

Conclusion: Sildenafil citrate is widely used as a primary pharmacological treatment of erectile dysfunction in men with and without underlying cardiovascular disease. If an emergency physician face with acute cardiac compromise, he/she should be suspicious and deepen the anamnesis about use of sildenafil.

Keywords: sildenafil, death, dyspnea

P-051

[Kardiyovasküler Aciller]

DE-WINTER'S WAVES ON ANTERIOR MYOCARDIAL INFARCTION

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Introduction: Acute myocardial infarction is a major cause of death (18% of all deaths) all over the world. Mortality and morbidity rates can be decreased by early diagnosis and treatment. Typical finding on elektrokardiogram (ECG) is ST-segment elevation on anterior derivations where as atypical and non-specific findings are demonstrated. Some wave patterns like Wellens or de-Winter's which can be seen on anterior myocardial infarctions have been defined lately. We report a case with de-Winter wave pattern.

Case: A 53-year-old man presented with serious but atypical chest pain, dyspnea and vomiting for 45-minutes. His pain was appeared after effort. He has diabetes mellitus in past medical history and does not have coronary heart disease. Vital signs were as follows: arterial blood pressure 80/50 mmHg, heart rate 72 beats/min, temperature 36.8°C, respiratory rate 16 breaths/min, and oxygen saturation was 98% without oxygen supplementation. His electrocardiogram was as showed (Fig 1,2). On his bedside ultrasonography distinctive left ventricule hypokinesia has been

demonstrated and there were no signs of aortic dissection. Emergent cardiology consultation was made. There was total proximal LAD obstruction on his angiographic evaluation. Stent was established and patient was discharged home safely 9 days later. Later echocardiography showed ejection fraction of 33%.

Conclusion: Electrocardiograms must been observed carefully and newly defined electrocardiographic changes should raise high suspicion. It shouldn't been forgotten that diabetic patients present with atypical cardiac ischemic symphptoms. In this case, although patient was applied angioplasty in 90 minutes, cardiac insufficiency developed. With early diagnosis and treatment, especially patients without comorbid illnesses, mortality and morbidity rates can be decreased.

Keywords: de-Winter's waves, anterior myocardial infarction, early diagnosis and treatment



Figure 1.



Figure 2.

P-052

[Kardiyovasküler Aciller]

ENDOGENOUS ENDOPTHALMITIS SECONDARY TO ENDOCARDITIS: CASE REPORT

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Introduction: Cardiac complications are the most common complications in patients with infective endocarditis, and they can be related to significant mortality and morbidity. Inflammatory complications may occur as a result of septic emboli, and these include endogenous (metastatic) endophthalmitis, focal abscess, and vasculitis. To present a case of endogenous endophthalmitis as the primary manifestation of endocarditis, both of which were detected by transesophageal echocardiogram.

Case: A 52 year old woman with previous history of DM, aortic and mitral valves replacement, presented to our emergency department with fever and shortness of breath. In her physical examination her body temperature was 37.6°C, blood pressure 160/90 mmHg, pulse rate 90/min and peripheral capillary oxygen saturation was 98%. She was confused. There were no signs of meningeal irritation, cerebellar dysfunction or sensory deficit. Oropharyngeal and otoscopic examinations were normal.

On ophthalmic examination left conjunctival hyperemia, corneal edema, hypopyon in the anterior chamber and excess infectious reaction were present. On lung auscultation crackles were present on the right lower lobe. The patient's abdominal examination showed no pathological finding. There were no evidence of any wound infection. The patient was evaluated in terms of infection. Her chest X-ray and thorax CT showed no pathologic abnormality. No pathology was found in her urine test. On ocular ultrasound performed; vitritis detected in the left anterior chamber and the condition is evaluated as endogenous endophthalmitis. Intravitreal antibiotic injection and after vitreous sampling procedure, pars plana vitrectomy surgery was recommended. Three blood cultures were obtained from the patient for half an hour apart. The patient began taking as empirical treatment; vancomycin 1 gr iv twice a day, ceftriaxone 1 gr iv twice a day and gentamycine 80 mg iv three times a day. Because of patient's high level of INR, transesophageal echocardiography (TEE) can not be performed. In her transthoracic echocardiography there was no evidence or finding of infective endocarditis. Reevaluation of patient with TEE was recommended after patient's INR level falls under 2. The patient's coumadin treatment was stopped and she began taking clexane 0,6 cc 2x1 sc. The patient denied to receive intravitreal sampling procedure on August 4, 2014. With the ophthalmology department's recommendation the patient began taking fortified vancomycin hourly (for 4 days), fortified ceftazidim hourly (for 4 days), vigamox eye drop hourly, sikloplejin eye drop three times a day, Mydrin eye drop three times a day and Tropicamide eye drop three times a day. Intravitreal vancomycin and ceftazidim was administered. TEE revealed vegetations on the mitral valve. The patient was diagnosed with infective endocarditis caused by MRSA and she continued the existing antimicrobial treatment. Patient was discharged with healing after eight days.

Conclusion: Endogenous (metastatic) endophthalmitis is an inflammatory condition of the intraocular structures including the aqueous, iris, lens, ciliary body, vitreous, choroid and retina. A cardiac source for endogenous endophthalmitis should be considered in the presence of clinical diagnosis of bacteremia.

Keywords: Infective Endocarditis, Hypopyon, Corneal Edema



Figure 1. Hypopyon



Figure 2. TEE revealed vegetations on the mitral valve

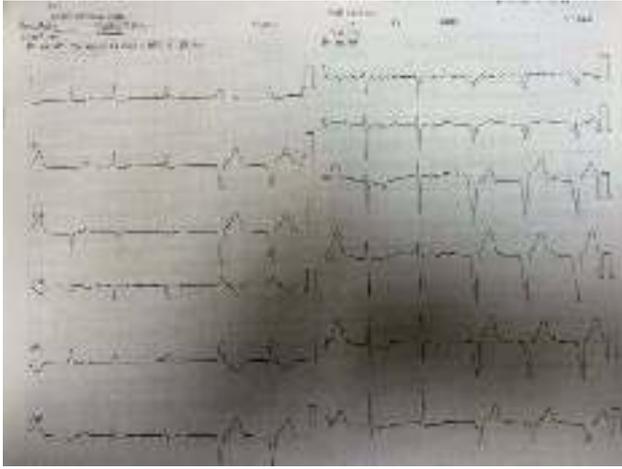


Figure 3. ECG

P-053

[Kardiyovasküler Aciller]

TRAUMATIC TENSION PNEUMOPERICARDIUM

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Introduction: Pneumopericardium means the existence of air in pericardial area. It can be developed as a second due to spontaneous or different other reasons. It is the most common trauma in etiology. It is spontaneously developed rarely seen. It is a life-threatening situation and that's why it should be monitored. In this case, pneumopericardium case that developed in a 37-year-old male patient after a sharp object injury has been told.

Case: 37-year-old male patient applied because of the chest pain that developed after a sharp object injury. The patient had no features and his blood pressure: 90/60 mm hg, heart rate: 80 bpm, respiratory rate: 18, oxygen saturation was %94. In the physical examination, voices of breath were natural, S1 S2 was rhythmic and other systemic examination are normal. The electrocardiography of patient was normal sinus rhythm and had no pathological features. No encountering any pathological findings in ecocardiography, which was made accompanied by a cardiologist, chest tomography was planned and pneumopericardium was detected. The patient was monitored and the stabilized patient was transferred to cardiovascular surgery for pericardial drainage. The patient underwent pericardial window and drainage tubes and he was taken under control cardiovascular intensive care unit. The patient with declining complaints and with regressing pneumopericardium was discarded on the third day.

Conclusion: Pneumopericardium is a rarely seen situation and is explained with air entrance to the pericardium and mediastinum. It develops with air passing through pericardial leaves due to spontaneous or secondary reasons. It can be asymptomatic or it can cause symptoms like chest pain, dyspnea, and syncope as well. It is typical to find rub (friction) or Hamman findings in the physical examination. Radiological findings are used to diagnose. Vital monitoring is done by connecting the patient to the monitors. If the patient is unstable and tension developed as pneumopericardium emergent operations are planned but some cases can be regressed.

Keywords: Tension pneumopericardium, trauma, pericardial air

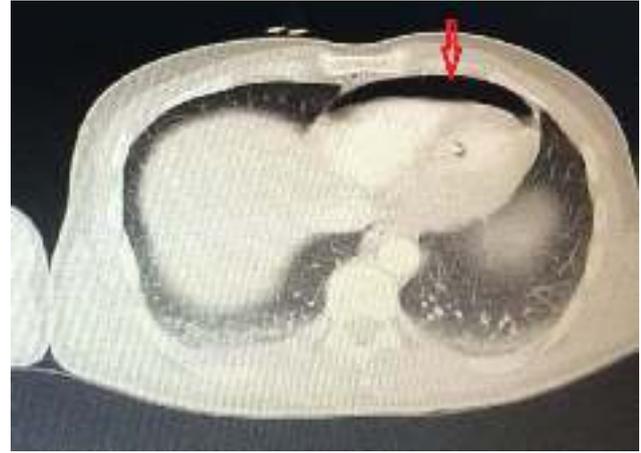


Figure 1. Chest tomography pneumopericardium

P-054

[Kardiyovasküler Aciller]

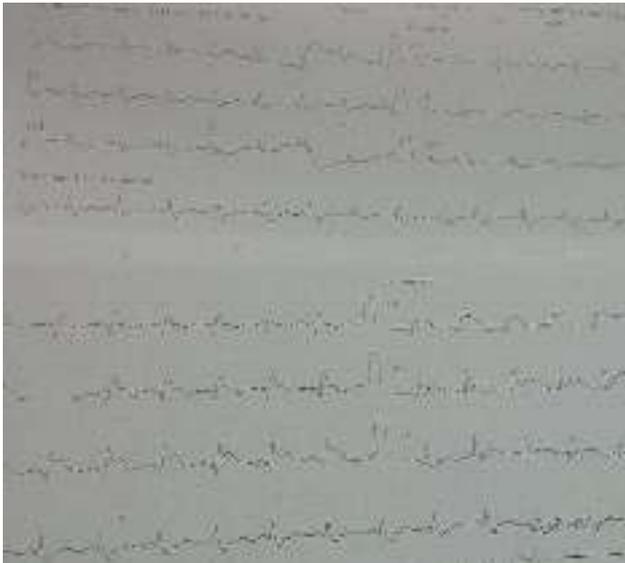
SIMULTANEOUS ST SEGMENT ELEVATION MYOCARDIAL INFARCTION AND ACUTE ISCHEMIC STROKEFatih Tutucu¹, Ömer Levent Avcıoğlu², Mustafa Alpaslan¹, Avni Uygur Seyhan¹, Abdussamed Vural¹, Oğuzhan Bol¹, Mükerrer Altuntaş¹¹Emergency Medicine Department, Kayseri Research and Training Hospital, Kayseri, Turkey²Emergency Medicine Department, Erciyes University, Kayseri, Turkey

Introduction: Simultaneous occurrence of acute ischemic stroke (AIS) and acute ST-segment elevation myocardial infarction (STEMI) is a rare entity, having a rate of 1-2%. Simultaneous occurrence can result in higher in-hospital mortality.

Case: A 54-year-old male patient was brought to the ED with altered consciousness and right-sided hemiparesis. Neurologic examination revealed dysarthria and right-sided hemiparesis. ECG showed ST segment elevations on anterior leads. Computed tomography of the brain was normal. rTPA was administered with the dose to treat the STEMI. As ST elevations on ECG were not depressed, coronary angiography was performed. It showed thrombus formation obstructing LMCA, LAD and Cx totally. Percutaneous coronary intervention could be performed for LAD only. Total blood count obtained immediately after the angiography revealed thrombocytopenia (18000 / μ L), which was 141000/ μ L on arrival. Fresh frozen plasma and thrombocyte were given to the patient. Computed tomography of the brain showed subarachnoid hemorrhage and midline shift. No brain surgery was planned, supportive treatment was applied. The patient died on the 3rd day of hospitalization.

Conclusion: This case highlights the importance of planning fibrinolytic treatment at the emergency department in case of simultaneous STEMI and AIS. Bleeding complication is another important issue in simultaneous occurrence of STEMI and AIS.

Keywords: STEMI, stroke, thrombocytopenia, cranial CT

TROUSSEAU SYNDROME IN THE ED**Murat Yücel, Aynur Acar, Halil İbrahim Çıkrıklar, Yusuf Yürümez***Department of Emergency Medicine, Sakarya University Training and Research Hospital, Sakarya, Turkey***Figure 1.** There is no hemorrhage**ECG****Figure 2.** acute anterior MI**24. hour cranial CT****Figure 3.** left middle cerebral artery infarction, subarachnoid hemorrhage and midline shift

Objective: Trousseau syndrome (i.e. migratory thrombophlebitis) is a well-described association of advanced malignancy - particularly of pancreatic and pulmonary tumours. The mechanism of this paraneoplastic phenomenon is unknown but has been linked to the late stage of these tumours at presentation, which in all reported cases to date, has precluded any form of curative intervention in these patients. Subclinical and clinical abnormalities of coagulation commonly develop in patients with advanced malignant diseases, particularly cancers of the stomach, prostate, pancreas, lung, and breast. Several of these neoplasms can produce mucin, which presumably can enter the vascular compartment to initiate the coagulation cascade. Patients with solid tumours may experience abnormal clot formation (lower-extremity deep venous thrombosis, pulmonary embolism, arterial thrombosis) as an initial or later manifestation of their malignant disease. In this case, we present a different presentation of a malignancy in the emergency department.

Case: A 54 year old male patient presented to emergency department with complaint of acute chest pain and epigastric pain. He was anxious. In his medical history, he was in hospital because of deep venous thrombosis and ischemic stroke. He was taking LMWH for 20 days. The following were observed in his physical examination: BP:100/60 mm/Hg, pulse:115/min, F:36.7, RR:19/min. The neurological examination revealed 2/5 loss of power in the upper and lower extremities. Other system examinations were normal. In laboratory test, pH:7.50, pO₂:51.0, pCO₂:29.4, sO₂:95.6, D-dimer:24387. In pulmonary CT angiography thrombi was identified in right and left main pulmonary artery. The patient was referred to the pulmonary disease department with the diagnosis of pulmonary embolism. Follow-up management, lymph node biopsy was made and the result was metastatic adenocarcinoma.

Conclusion: Especially undiagnosed malignancies present to emergency departments with different complaints. Considering paraneoplastic syndromes just like Trousseau syndrome in differential diagnosis will be useful for the long-term management of the patient.

Keywords: Trousseau syndrome, pulmonary embolism, malignancy

Pulmonary CT Anjiography

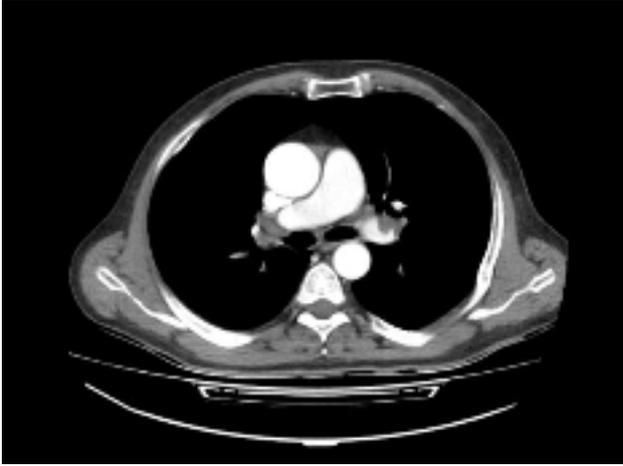


Figure 1. Thrombi is seen in right and left main pulmonary artery

P-056

[Kardiyovasküler Aciller]

A RARE CAUSE OF MASSIVE HEMOPTYSIS: AORTOBRONCHIAL FISTULA

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One rare cause of presentations to the emergency department with massive hemoptysis is aortobronchial fistula. Eighty-five percent of hemoptysis in patients with aneurysm of the descending is aortobronchopulmonary in origin. Aortic aneurysm ruptured into the pulmonary parenchyma is a clinic picture with high mortality and morbidity that leads to massive hemoptysis and requires emergency intervention. A 73-year-old man presented to the emergency department with massive hemoptysis that started with cough. Thoracic CT revealed aneurysm thought to be fistulized into the aorta, 3x4 cm in size and proximal to the descending aorta. Aortic stent-graft was performed with interventional radiology. The patient was stable at follow-ups and was discharged in a healthy condition.

This case report describes a case of aortobronchial fistula, with high mortality, presenting to the emergency department with massive hemoptysis.

Keywords: aortobronchial fistula, hemoptysis, Aortic aneurysm

P-057

[Kardiyovasküler Aciller]

DISSECTION OF THE INTERNAL CAROTID DUE TO TRAUMA

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Dissection of the internal carotid artery secondary to trauma is a rare but potentially fatal condition. Traumatic ICA dissection occurs as a result of neck trauma or overextension. The most common presentation symptom is head and neck pain. Symptoms such as stroke, Horner syndrome, cranial nerve paralysis, seizure, aphasia and dysarthria may also be seen. Carotid artery dissection

occupies an important place in the etiology of cerebrovascular events in young people.

A 30-year-old woman presented with headache, impaired speech and numbness in the left arm. At physical examination the patient was conscious, oriented and cooperative. Inappropriate affect was present. Strength in the left arm and leg was 4/5. Left facial paralysis and difficulty swallowing were present. Speech was dysarthritic. Other system examinations were normal. Diffusion MR revealed acute infarct in the right frontal and middle cerebral artery and DSA revealed dissection of the right ICA.

Dissection of the carotid artery must be considered when investigating etiology in patients presenting to the emergency department with neurological symptoms and a history of trauma.

Keywords: Dissection, internal carotid artery, trauma

P-058

[Kardiyovasküler Aciller]

A RARE CONCURRENCE: ABDOMINAL AORT ANEURYSM AND PSOAS HEMATOMA

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Introduction: Abdominal Aort Aneurysm (AAA) is life threatening condition which is relatively common. Population over the age of 65 and those with peripheral vessel disease are under the highest risk. AAA may remain asymptomatic until it is enlarged or ruptured. A growing AAA may lead to sudden and severe abdominal, back or flank pain. In this report, AAA in a patient referring with abdominal pain complaint with psoas hematoma s localization of rupture is presented.

Case: A 54 year old male patient presented to emergency service with the complaint of constant stomach pain for the last two days. He had history of hypertension and chronic renal disease. It was learned that he underwent left renal stent and femoropopliteal bypass operation previously. In physical examination, consciousness was open, patient was oriented and cooperative, and Glasgow coma scale 15. Vital findings were as follows; arterial blood pressure 100/60 mmHg, heart rate 96 beats /minute, body temperature 36.8 C and respiration rate was 15/minutes. In system examination, there was a pulsatile mass at the size of 6x6 cm in the midline of the abdomen. The results of laboratory investigations were as follows; hemoglobin 8.4 g/dL (13.5-18), hemotocrit 26.6% (42-50), mean corpuscular volume 78.5 fL (80-97) white blood cell count 17 K/uL (4-11) urea 144 mg/dL (10-48.5) and creatinine 3.37 mg/dL (0.7-1.2). A whole abdominal ultrasonography was performed, on the midline, in the proximal of abdominal aorta, AAA with the largest diameter of 65mm and surrounded by thrombosed wall was observed. Then, contrast abdominal tomography was carried out and AAA was seen along with left psoas hematoma. Cardiovascular surgery department was consulted and graft placed. Patient died on 16th day postoperatively.

Conclusion: Ruptured AAA may present with overt shock. However, in cases when hematoma is restricted retroperitoneally, vital findings may be stable.

Keywords: Aneurysm, Psoas Hematoma, Pulsatile Mass



Figure 1. 3D CT



Figure 2. Abdominal CT - 1



Figure 3. Abdominal CT - 2

P-059

[Kardiyovasküler Aciller]

A MORTAL DISEASE AT EMERGENCY SERVICE

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Objective: Infective endocarditis (IE) remains a life-threatening condition with a high mortality rate. Rheumatic heart disease and injection drug use are predisposing conditions. IE is associated with a myriad of complications, one or more of which occur in the majority of patients. Complications such as heart failure and stroke are relatively common and feared outcomes of IE; other complications such as blindness and septic arthritis are, fortunately, rare in modern practice. We aimed to remind clinical findings and complications of infective endocarditis with a case report.

Case: A 21 year old woman was brought to the emergency department with complaints of closed awareness. Patient was drug addicts and we couldn't take her medical history. At presentation SpO₂ %92, pulse 148 beat/minute, blood pressure 117/67 mmHg and fever was 38,5 C. at physical examination she was unconsciousness. Pupillary light reaction was normal. Bilateral lung sounds was coarsening. There was cyanosis at 3 th fingers of right foot. At laboratory analysis WBC: 27.44 103u/l, CRP 50 mg/L, troponin I 5.53 ng/ml, HIV positive and other parameters were normal. At brain tomography there was large hypodense lesion at right hemisphere and shift (Figure-1). At echocardiogram there was mobile mass within the left atrium (vegetation?, thrombus?, mixoma?). With clinical findings infective endocarditis was considered primarily and started vancomycin, gentamycin, fraxiparine. Patient admitted to intensive care unit (ICU) and was followed with diagnose of infective endocarditis and ischemic cerebrovascular event.

Conclusion: Infective endocarditis is a severe disease with high morbidity and mortality rate because of complications. At emergency department high risk patients with compatible clinical findings should be examined carefully in terms of infective endocarditis and appropriate treatment should be started immediately.

Keywords: Infective endocarditis, injection drug use, septic arthritis



Figure 1. Large hypodense lesion at right hemisphere and shift

P-060

[Kardiyovasküler Aciller]

A RARE CAUSE OF CARDIAC TAMPONADE: LUNG ADENOCARCINOMA

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Introduction: Cardiac tamponade is a life threatening emergency condition which must be diagnosed and treated quickly. Patients with cardiac tamponade may present with dyspnea, pleuritic chest pain, cough, tachycardia, jugular venous distension, pulsus paradoxus and in the more severe cases arterial hypotension and shock. Various conditions may be associated with this medical urgency: infections, hypothyroidism, chest trauma, collagen vascular diseases, uremia, and malignancies. Malignancy presenting with cardiac tamponade is uncommon. Here, we report such a rare presentation of lung adenocarcinoma with cardiac tamponade.

Case: A 59 year old man came to our emergency department with progressive dyspnea, fatigue, anorexia, weight loss, and nonproductive cough. He had no significant past medical history. He smoked 20 cigarettes daily for twenty years. The family history was non-contributory. On physical examination, his blood pressure was 95/60 mmHg, respiratory rate of 21 breaths per minute, temperature of 36.5 °C, and heart rate was 104 beats / minute. He had orthopnea, tachypnea, jugular venous distension, distant heart sounds, clear lungs, a regular heart rate and rhythm, no heart murmur, and an unremarkable examination of abdomen and extremities. The electrocardiogram showed sinus tachycardia and low QRS voltage. The white blood cell count was 12.2 K/uL and hemoglobin was 12.1 g/dL. The basic metabolic panel showed sodium 133 mmol/L, potassium 4.3 mmol/L, creatinine 0.9 mg/

dL, and glucose 130 mg/dL. Cardiac enzymes were normal. Chest X-ray of patient showed an enlarged cardiac silhouette and bilateral pleural effusion. On echocardiography there was a large pericardial effusion with features of tamponade, and 400 ml of hemorrhagic fluid was aspirated. Computed tomography of the chest demonstrated bilateral pleural effusion R>L and a mass lesion measuring 68x51mm in the posterior segment of right upper lobe (Figure 1 and Figure 2). Bronchoscopic biopsy from the mass revealed adenocarcinoma of the lung. The patient was hemodynamically stable and transferred to the oncology department for chemotherapy. He did not have recurrent pericardial effusions after chemotherapy.

Conclusion: S: Malignant pericardial effusion with tamponade physiology is a rare but serious and potentially life-threatening medical condition that requires fast evaluation, diagnosis and management. Cardiac tamponade might be a presentation of primary lung adenocarcinoma.

Keywords: Lung adenocarcinoma, cardiac tamponade, pericardium effusion.

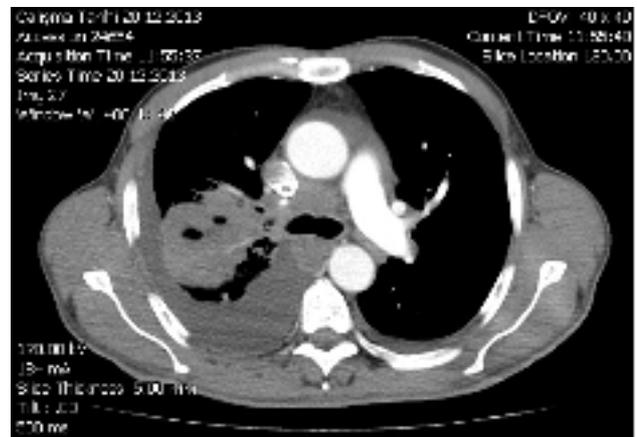


Figure 1. CT scan of the chest with mass lesion measuring 68x51mm in the posterior segment of right upper lobe and bilateral pleural effusion R>L.

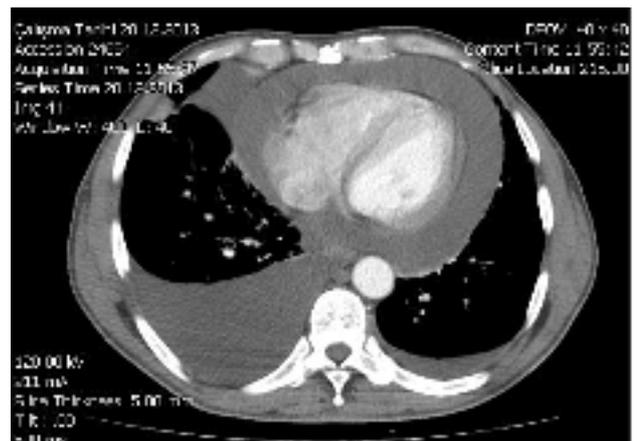


Figure 2. Chest computed tomography image demonstrating pericardial and bilateral pleural effusions.

P-061

[Kardiyovasküler Aciller]

A RARE COMPLICATION OF CLAVICLE FRACTURES: SUBCLAVIAN THROMBOSIS

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Introduction: Medial clavicle fractures are uncommon, accounting for approximately 5 percent of all clavicle fractures. Subclavian venous thrombosis is a rare complication of clavicular fractures. Vascular injuries are uncommon but are recognised as either an immediate complication due to transection of the vessel by the displaced fracture, or as a late complication, secondary to compression from abundant callus formation.

Case: We present a case of positional venous insufficiency in the upper limb as a late complication of a closed, displaced clavicle fracture, with secondary subclavian venous thrombosis formation three weeks following the injury. A 47-year-old man sustained soft tissue injury to the left shoulder following a traffic accident. His diagnosis was nondisplaced midshaft clavicle fracture and patient was discharged with medical treatment from the emergency department. Three weeks later, patient presented to the emergency department with a 3-day history of severe left upper extremity pain and swelling. Chest radiograph and venous duplex ultrasound taken on the day of the thrombosis diagnosis. Intravenous Heparin was given for 48 hours. Clavicle fracture aligned good position with surgery. Warfarin was started after the surgery. His symptoms completely disappeared after three months of treatment

Conclusion: Treatment is best performed close to the time of diagnosis and involves three steps which includes dissolving the clot, maintaining anticoagulation (stopping any new clots from forming) with a blood thinner and surgical treatment to eliminate the external compression on the subclavian vein. We think that close follow up this type of patients can prevent unexpected situations.

Keywords: clavicle fracture, thrombosis, subclavian vein



Figure 1. Nondisplaced midshaft clavicle fracture



Figure 2. Left upper extremity swelling



Figure 3. Displaced midshaft clavicle fracture

P-062

[Kardiyovasküler Aciller]

THE ROLE OF PLASMA LACTIC ACID, BNP (PLASMA B-TYPE NATRIURETIC PEPTIDE) AND BLOOD GAS PARAMETERS IN DETERMINING THE PROGNOSIS IN THE CASE OF CARDIOGENIC ACUTE LUNG EDEMA

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Background: Cardiogenic acute lung edema, especially at advanced stages, is counted among the critical mortality factors in admittances to emergency services. This study tries to gain an insight into fixing the impact of serum lactic acid, BNP and blood

gas parameters on the prognosis in the case of patient population with cardiogenic acute lung edema.

Methods: Sequential patients showing acute cardiogenic pulmonary edema symptomatology, not having a series of exclusion criteria, and admitting to Istanbul Goztepe Training and Research Hospital Clinic Emergency Unit were included into the study. 92 patients thought to have acute lung edema and 25 healthy individuals admitted to emergency services were included in the study. The patients were categorized into three groups by their phases of lung edema. SPSS was employed for the analysis of the data. Means and frequencies were calculated as usual. The differences among means were tested by non parametric tests.

Findings: The study population consisted of 49 males and 68 females. The average age for the participants included in the study was 74,91 (\pm 10,82). When the patients were assessed by their phases, those with the Phase-3 lung edema had significantly more intensive-care hospitalization rate (56,3%), cardiopulmonary resuscitation (CPR) application rate (31,3%), and mortality rate (18,8%) than other phase groups (p :0,001). When the patients' lactic acid averages were analyzed by their phases, a significant difference was found out as Phase-1 on average 1,17 (\pm 0,31), Phase-2 on average 2,57 (\pm 0,6), Phase-3 on average 5,11 (\pm 1,78) (p :<0,001). When the patients were analyzed by hospitalization in intensive-care, CPR, and Exitus, a significant correlation was observed with respect to bicarbonate, blood Ph, and lactic acid level, while no significant relation was seen at BNP level.

Conclusion: While plasma lactic acid, blood Ph, and bicarbonate level may prove beneficial in determining the prognosis for the patients with acute cardiogenic lung edema, plasma BNP level manifests no favourable effect.

Keywords: Lactic Acid, Lung Edema, BNP, Blood Gas Parameters

P-063

[Kardiyovasküler Aciller]

ACUTE MYOCARDIAL INFARCTION AFTER SNAKE BITE: KOUNIS SYNDROME

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Introduction: Kounis syndrome is an anafactoid reaction. It defines the vasospasm in the coronary arteries after the mast cell degranulation with an hypersensitivity reaction.

Case: A 66 year old man admitted our Emergency Department after a snake bite on his anterior right ankle. He had acute distress with vomiting, nausea, abdominal pain and chest pain. He was hypotensive and sinus bradycardia was seen in the ECG. After the immediate antivenom administration and positive inotropic therapy the patients clinical situation improved but his chest pain continued. The patient's cardiac biomarker levels were progressively elevated and the patient hospitalised in the coronary intensive care unit with the diagnosis of non ST segment elevated myocardial infarction.

Conclusion: This case defines myocardial infarction caused by anaphylaxis, after exposure to an allergen. Mesenteric ischemia and myocardial infarction (Kounis Syndrome) must be kept in mind with patients whom apply to the emergency departments with stomach ache and chest pain.

Keywords: Kounis syndrome, hypersensitivity reaction, acute myocardial infarction, abdominal pain, chest pain.

P-064

[Kardiyovasküler Aciller]

ATYPICAL ACUTE ARTERIAL OCCLUSION

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Introduction: Extremity pain is one of the most common emergency department presentation complaints. Although a vast majority of patients have benign conditions that do not need emergent intervention, thorough medical history and physical examination, a number of "red flags" have to be excluded in every patient. We want to present our case of atypical acute arterial occlusion.

Case: A 56 year male patient; admitted with bilateral leg pain and sense of powerlessness that lasts for 45 minutes right after sudden violent sneeze. At the same time he had no chest pain, shortness of breath or palpitation. In his medical history, there was a coronary bypass surgery caused by anterior myocardial infarction before six year ago. He was using coraspin 100mg/ day. Bilateral lower extremity motor and sensory examination were normal; there was no temperature difference and discoloration. A. Dorsalis pedis and a. poplitea pulse were bilaterally on palpation couldn't be taken and there was temperature difference between the upper limbs and lower one's. while examination with the hand-held Doppler we observed bilateral dorsalis pedis artery and popliteal artery flow through was not received. Cause of the bilateral clinical findings and a sudden increase in intrathoracic pressure, such as the story sneeze be associated with mind aortic dissection. Thoracoabdominal and bilateral lower extremity CT angiography were taken. Computed tomography: there was an intraventricular thrombus in the left ventricular apex; both below-knee popliteal artery segment and thought to be the main crural artery embolization showed that the total thrombus. The patient were admired to cardiovascular surgery for emergency embolectomy.

Discussion and Conclusion: Acute limb ischemia is defined as a sudden decrease in limb The incidence of acute arterial occlusion is approximately 1.5 cases per 10000 person per year. Acute arterial occlusion can be the result of an embolus from a proximal source lodging into a more distal vessel, acute thrombosis of a previously patent artery, acute thrombosis of a stent or graft, and dissection of an artery or direct trauma to an artery.

A careful examination of the limbs is necessary to detect sings of ischemia. The neurologic examination should assess sensation and muscle strength. Must be evaluated. The quality and character of the peripheral pulse in the affected extremity. Since the quality of the lower extremity pulse examination can vary, a hand- held Doppler should be use to confirm the Presence of dorsalis pedis doppler signals.

The six P's of acute ischemia include paresthesia, pain, pallor, pulselessness, poikilothermia and paralysis. But as in our case if the patent is admitted to the hospital earlier; we can't find the all of six P sings. Despite that we must bear in mind about acute limb ischemia.

Keywords: Arterial Occlusion, Emergency Department, Extremity Pain

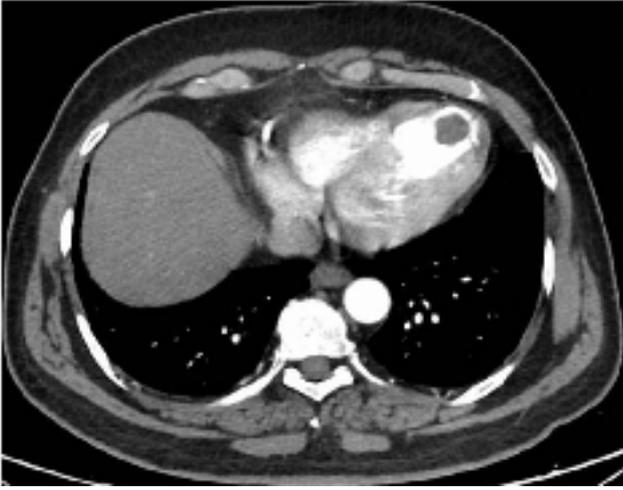


Figure 1. intraventricular thrombus in the left ventricular apex

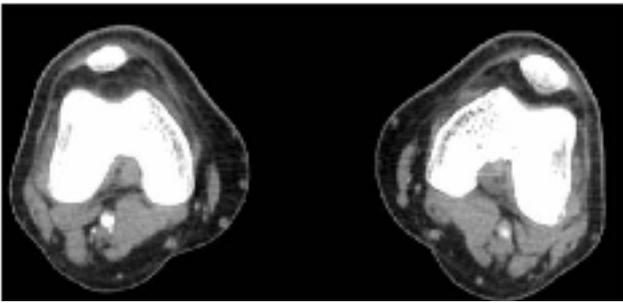


Figure 2. Bilateral Popliteal Artery Segment

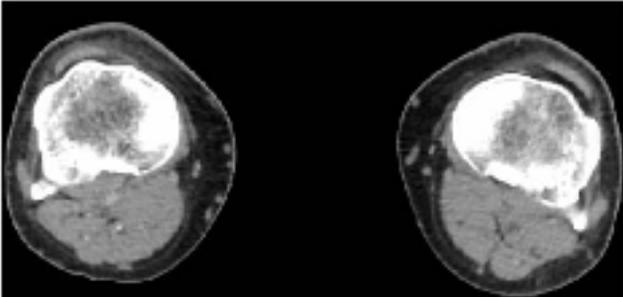


Figure 3. Main Crural Artery Total Thrombus

P-065

[Kardiyovasküler Aciller]

AORTIC DISSECTION PRESENTING WITH LEG PAIN: CASE REPORT

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Introduction: Aortic dissection can be exceedingly fatal. Most patients die before they can reach the hospital or are diagnosed in the emergency department. When left untreated %50 percent of acute aortic dissection cases die within 48 hours. Early diagnosis is very important. We present an acute aortic dissection case that presented to the emergency department with leg pain and numbness.

Case: 56-year-old female patient came to the emergency room with numbness, pain and weakness in her right leg. She expressed that the pain had begun suddenly and spread over her waist. Her medical background showed that she had hypertension and irregular use of antihypertensives. At her admittance her GKS was 15. She was conscious and in severe pain. In her vital signs, her pulse was 140/min and blood pressure was 80/40. Her physical examination revealed no palpable pulse in right lower extremity, starting from femoral artery. Other peripheral pulses were palpable. Right leg had a strength level of 4/5 in neurological examination and loss of tactile feeling in comparison to the left leg. Her other systematic examinations were normal. In her complete blood count Wbc: $7,1 \times 10^3 / \mu\text{L}$ ($4 \times 10^3 - 11 \times 10^3$), Hb: 12,2 g/dL (12-16), Plt: $128 \times 10^3 / \mu\text{L}$ ($150 \times 10^3 - 450 \times 10^3$). Electrolytes, liver and kidney function tests and INR were normal. Arterial contrast enhanced thorax and abdomen computed tomography showed intimal flap and double lumen findings indicating aortic dissection. Transthoracic echocardiogram showed that patient's ejection fraction was %65, ascending aorta was 5.5 cm, there was 1-2° transvalvular aortic failure and intimal flap was seen in suprasternal window. She was admitted to cardiovascular surgery department.

Discussion: No specific symptom or sign can identify acute aortic dissection but sudden onset tearing chest pain is its classic symptom. Other symptoms are intrascapular pain, syncope, cerebrovascular accident, weakness, numbness, tingling, pain in the extremities, abdominal pain, flank pain. Emergency physicians should suspect the diagnosis in those patients who have these nonclassical symptoms. Aortic dissection can be diagnosed by arterial contrast enhanced computed tomography in the emergency department; CT angiography is becoming the test of choice.

Keywords: aortic dissection, emergency room, leg pain



Figure 1. aortic dissection

P-068

[Kardiyovasküler Aciller]

A LUCKY ABDOMINAL AORTIC ANEURYSM RUPTURE CASE

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Introduction: Ruptured abdominal Aortic Aneurysms, Although It has been 50 years since it was first successfully repaired surgically and despite huge advances in surgery, anaesthesiology and Intensive Care field, is still a medical disaster with an high mortality and morbidity rates. In this article, A lucky case, assumed as lucky because it bled to retroperitoneum, is presented.

Case: Sixty years old male patient with the complaints of stomachache and syncope was brought by 112 service. He described a stomachache and feeling of about to faint which happened six hours ago. In his medical history he had been operated because of lumbar disc herniation 5 years ago and there were not any more significant medical history. He described a complete syncope with loss of conscious. He was seeming moderate-well. His vital signs; blood pressure: 105/70 mm/hg, Pulse: 114 beats per minute and rhythmic, Respiration: 18 breaths per minute. Pulse oxymetry measured 99% oxygen saturation. In physical examination: Pulmonary auscultation sounds was usual. There was a pulsatile mass at abdominal midline. Bilateral extremity pulses were palpated weakly. Right and left extremity blood pressure difference was not significant.

CT angiography scanning revealed a giant saccular aneurysm with 95 mm diameter in size, infrarenally located and ruptured to the right side. There were images compatible with right pararenal, paraaortic and parailiac located hematomas. Right external iliac artery and bilateral femoral arteries seemingly were occluded. And also in the inside of the right kidney, a kidney cyst of 9x10 cm in size is revealed (Figure 1).

Laboratory tests showed Hgb: 14.8 mg/dl, WBC:21000, Creatinin: 1.18 and other laboratory results were at normal ranges. Cardiovascular surgery consultation is asked and patient operated by Cardiovascular Surgery department. Patient was still in follow up in intensive care unit at his 20th day after surgery when this case report is written

Results: In ruptured abdominal aortic aneurysm cases It is well-known that delay in surgical interventions may result in death with high ratio. In this case we think that bleeding is restricted in retroperitoneal area and the affect of huge right kidney cyst that further restricting the bleeding could maintain the vital signs of the patient not much affected after six hours than the accident.

Keywords: Abdominal Aortic Aneurysms, Retroperitoneum, Syncope, Emergency department



Figure 1. Infrarenally located huge saccular aneurysm ruptured to the retroperitoneal area. Right kidney cyst with 9x10cm in size.

P-069

[Kardiyovasküler Aciller]

THE CASE OF MYOCARDIAL INFARCTUS ACCEPTED AS CONVERSION BY 112

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Introduction: Conversion disorder is frequent mental illness in our country. Unfortunately, conversion is the one of disorder that is recognised easily by physician. In this case, the patient who was presented to emergency service as conversion and diagnosed with myocardial infarction was represented.

Case: 36 years old female patient was presented to emergency service with pre-diagnosis of conversion by 112. It was found out that the patient was in collapsed following domestic debate. In medical history, the patient had diabetes mellitus and used the insulin for that reason. ECG was recorded on suspicion of emergency physician evaluated the patient. It was determined that ST elevation in leads DII and AVF and reciprocal ST depression in D1 ve AVL on ECG. The patient was monitored immediately. IV line was installed. Vital sign of the patient; BP: 90/60, temperature: 36.5, pulse: 65, respiratory rate: 18 and saturation: %96 via pulse-oxymeter. Due to hypotension, right-sided ECG was also recorded and it was found that the same changes in the right leads. IV fluid treatment and oral coraspin were applied to the patient. Following the consultation of cardiologist, the patient intervened by primary coronary angiography was treated without any malfunction and discharged from the hospital.

Results: Conversion disorder is the means that transformation of the variety of mental problems (sadness, fear, disgrace, fury) to the physical problems (etc. aphasia, weakness, paralysis, stroke, paresthesia, syncope). Although the all studies and investigation of these patients, any medical disorder can not be identified to cause the all symptoms. It is important that the physical examination of the patient who is admitted to emergency service as conversion should be considered by the emergency physician completely in time.

Keywords: Conversion, 112, Myocardial infarction, Emergency department

P-070

[Kardiyovasküler Aciller]

A CASE REPORT: HEMORRHAGIC BULLAE DUE TO SUPERFICIAL VENOUS THROMBI

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Bullae is a term used for vesicles greater than 0.5 cm. As it is usually seen in infectious diseases, it may be a part of non-infectious conditions such as allergies, eczema etc.. It may contain serous, seropurulent or hemorrhagic fluids.

Virchow triad which composed by changes in blood flow(stasis), changes in vessel wall and coagulation anomalies, is the principal etiologic mechanism in thrombosis. Venous thrombi may grow, causes emboli or become organized or recanalized. Whenever thrombi organizes, inflammation and granulation tissue occurs at that site. We have ability to check these steps with doppler USG.

In this case, we will talk about a patient presented with swelling on right foot and a hemorrhagic bullae.

69 years old male patient applied to our emergency department with ecchymosis and swelling on right foot. It began 4 days ago with redness and swelling on thumb of right foot. After that, it spread out to the whole foot with ecchymosis and discharge with bad odor. The patient had stable vital signs and no fever on presentation. He also doesn't have comorbidity or medication in his prior medical history. In physical examination; there was 4cm-wide hemorrhagic region with discharge on medial dorsum of the thumb and 4*4 cm hemorrhagic bullae and diffuse erythema and swelling peripherally. All of his fingers were ecchymotic. His distal pulses were bilaterally equal, and other systemic examination had no specific finding. The patient evaluated as complicated soft tissue infection and consulted to infectious diseases and hospitalized. Because of suspected thrombi in lower extremity doppler USG, MRI venography performed to the patient. As a result, superficial venous thrombi in right thumb identified and proper antibiotherapy and recurrent debridements assured cure without interventional radiology.

Keywords: thrombi, bullae, emboli

P-071

[Kardiyovasküler Aciller]

SPONTANEOUS FRACTURE OF THE CATHETER OF VENOUS ACCESS PORT: CASE REPORT

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Introduction: Long-term chemotherapy treatment of malignite patients and with the aim of parenteral nutrition expansion of using implantable venous access port, the number of complications related to catheterization relatedly increasing. These complications are generally occur as: deep vein thrombosis, arterial puncture, hematoma, pneumothorax, catheter migration, dislocation, port infections, catheter obstruction and skin ulceration. Breaking of subclavian venous is very rarely seen complication. In this case, it will handle the subclavian catheter

chemotherapy which remains in the right heart chambers and embolized pulmonary artery while removing it.

Case: A 35 years male patient admitted with the complaint of breakage of chemotherapy port while removing it. He stated that he didn't have any additional complaints. Patients Blood Pressure 108/77mmhg sat o2 %99 Respiratory Rate: 12 per min Pulse:86 per minute Fever:36.7°C. In physical examination no pathology about lungs and heart are detected. Patient's electrocardiogram was normal. In Thorax CT the one tip of port was in right artium and the other was in the pulmonary artery. Lobaratory test were normal. Anticoagulant therapy was started to perform for the patient. (5000 IU bolus, 20000 IU 24 hours infusion) The object which was in the heart of patient was removed by the forcipal catheter with the angio. With 2 days following after operation, patient was discharged by arranging medical treatment which complications not developing.

Conclusion: Breakage of chemotherapy port is not common case. The complications like deep vein thrombosis, catheter obstruction, pneumothorax, catheter infection, ulceration of the skin, hematoma. catheter migration commonly seen with the patients chemotherapy port is inserted. While removing long time stayed chemotherapy catheters from the chemotherapy patients, it should be controlled that all the catheter is removed.

Keywords: spontaneous fractur, venous, implantation, catheter broken



Figure 1. Broken cathete in the right pulmonary vein (Arrow)

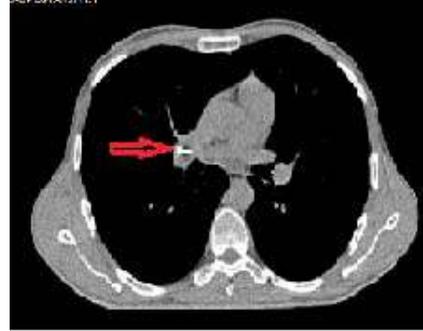


Figure 2. Broken cathete in the right pulmonary vein (Arrow)

P-072

[Kardiyovasküler Aciller]

OBSTRUCTIVE PROSTHETIC VALVE THROMBOSIS

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Obstructive prosthetic valve thrombosis (OPVT) is a serious complication of mechanical prosthetic heart valves which is often associated with the inadequate anticoagulation therapy. The available treatment options are thrombolytic therapy or surgery.

We present a case of thrombosis of a mechanical prosthetic mitral valve.

A 53-year-old man was syncope after retrosternal chest pain. He was cardiopulmonary arrest when the emergency medical services arrived to the emergency department. There is nobody from his family therefore we couldn't know his medical history. There is a vertical incision scar on his sternum. His cardiac ritm was ventricular fibrillation. The patient underwent cardioversion 8 times and amiodarone was given. When the return of spontaneous circulation there are wide QRS in his ECG. After discussion with his family, we learned he had mitral valve replacement surgery 27 years ago, myocardial infarction 2 years ago and has used warfarin. On cardiac auscultation, there wasn't any sound of prosthetic valve. Laboratory tests showed that his INR was 1.52. He was consulted to the cardiology and cardiovascular surgery. He underwent angiography. There was no critical stenosis of his coronary artery. His prosthetic valve was obstructed by a thrombus. He underwent thrombolytic therapy in coronary intensive care. He died on the tenth hour of the treatment.

Either emergency physicians or cardiologists mostly pay attention to coronary artery diseases and neglect valvular heart diseases.

Keywords: Obstruction, prosthetic valve, thrombosis

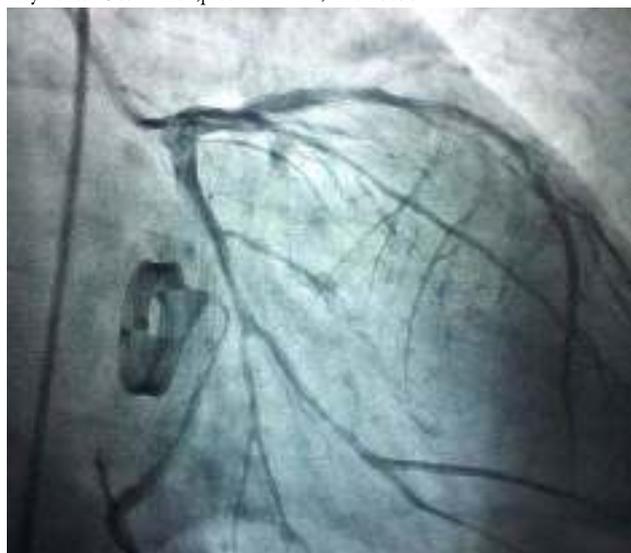


Figure 1

P-073

[Kardiyovasküler Aciller]

ACUTE MYOCARDIAL ENFARCTION PRESENTING WITH LOWER QUADRANT PAIN

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Introduction: A significant proportion of patients admitting to the emergency department with chest pain are diagnosed as acute coronary syndrome. With early diagnosis and timely execution of thrombolytic therapy or interventional transactions, mortality and morbidity are positively affected and patients'

hospital stay is reduced. Markers with early diagnosis and high exclusive ability are needed for early diagnosis of AMI in patients with atypical chest pain and non-diagnostic ECG.1

Case: Our 71-year-old male patient admitted to our emergency department with blunt left lower quadrant pain for 2 days. The pain had never fully relax and would leave him groggy. The patient had diagnosis of hypertension, diabetes mellitus, chronic renal failure and diverticulosis; mesenteric ischemia, ileus, abdominal aortic aneurysm and dissection were presumptive diagnosis. ECG was rhythmic with regular 72 beats per minute but troponin-I value was detected as 18,000 and the patient underwent coronary angiography. 90% RCA occlusion was detected.

Discussion: Appropriate triage of ACS patients in the emergency department in the early stages is very important regarding execution of advanced treatment such as thrombolytic therapy and acute percutaneous transluminal coronary angioplasty in a timely manner.2 Thrombolytic agents used in combination with aspirin and heparin within the first six hours following the onset of AMI symptoms is known to reduce mortality over 50% in the hospital and significantly increase long-term survival rate.3 Therefore, appropriate triage of ACS and the importance of early detection of AMI are further increased. Approximately one third of patients with AMI have atypical chest pain and nearly half of that have non-diagnostic ECG, so there is a need to resort to other tests for diagnosis of AMI in these patients. Recent studies showed that acute coronary syndrome might present with right shoulder and right arm pain, left shoulder and left arm pain, neck, jaw and epigastric pain. Though rarely, as in our case, patients may also present with lower quadrant abdominal pain. Differential diagnosis of ACS should be kept in mind in all abdominal pains.4

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Keywords: Acute Myocardial Infarction, Left Quadrant Pain

P-074

[Kardiyovasküler Aciller]

A BASKETBALL FAN WITH PNEUMOMEDIASTINUM

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Pneumomediastinum is a condition in which air present in the mediastinum. It can result from physical trauma or other situations that lead to air escaping from the lungs airways or bowel into the chest cavity. We describe in our case a patient with pneumomediastinum after cheering in a high school basketball match. A 18 years old male patient was admitted to emergency department with chest pain, sore throat and hoarseness. In the same day he had a cheering history in a basketball match. He had no medical history. When he arrived; blood pressure: 116/72

mmHg, pulse:82/min, respiratory rate: 14/min, fever:36,5°C and saturation O₂:%96. On physical examination; bilateral breath sounds and upper airway examination were normal and there was relaxed abdomen, defence and rebound was absent, cardiovascular exam was normal no additional sound, no murmur. Glasgow Coma Score was 15, pupillary reflex was normal and symmetrical also he was oriented, cooperative, We examined chest X-ray and determined pneumomediastinum (Figure 1). His laryngeal and pharyngeal endoscopy was normal. The patient's chest computed tomography showed that free air in the mediastinum (Figure 2). Patient was admitted to the thoracic surgery department. His in hospital follow up, the upper gastrointestinal endoscopy was made and found no problem. He was discharged from the hospital when his complaints dropped. There are lots patients coming to the emergency department with chest pain and hoarseness. We should remain in our minds; pneumomediastinum can occur without trauma.

Keywords: Basketball, pneumomediastinum, emergency department



Figure 1.



Figure 2.

ACUTE PANCREATITIS DURING PREGNANCY: A CASE REPORT

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Introduction: Acute pancreatitis (AP) is a rare event in pregnancy, occurring in approximately 1 in 10 000 pregnancies. It usually occurs during the third trimester or early postpartum period. More than half cases of acute pancreatitis during pregnancy are secondary to biliary stones or sludge, other causes are idiopathic, alcohol use, hyperlipidemia, hyperparathyroidism, trauma, various medications and fatty liver of pregnancy in order of frequency. Recently, studies were found maternal mortality below 1%, perinatal mortality between the 0-18%.

Case: A 21-years-old primipara woman, at 36-week and six-day gestational age, was referred to our emergency service for an acute abdominal pain with vomiting and nausea during about 2 week. Her gynecologist had said her complaints were not associated with pregnancy and had suggested her to go university hospital for investigation of her complaints. Physical examination revealed blood pressure 110/70 mmHg, pulse 70 beats/min, fever 36,5 °C, oxygen saturation %99 and tenderness at both upper quadrants. There was no pathology finding at other system examinations. Her laboratory studies showed Ca: 7,9 meq/L, total protein: 6.0 g/dl, albumin 2.9 g/dl, GGT: 140 U/l, ALP: 256 U/l, LDH: 305 U/l, amylase 226 U/L, lipase 906 U/L, hemoglobin 9,1 mg/dl, leukocyte 10.970/mcLtr pathologically. Ranson score was 1 and the estimated mortality risk was calculated as %1 (Table 1). Abdominal ultrasonography revealed an intrauterine live fetus and millimeter-sized hyperechoic foci in the lumen of the gallbladder. Intrahepatic bile ducts and common bile duct were found ordinary. Pancreas could not be evaluated due to gas superposition. Patient was consulted to obstetrics and gynecology department and they noted that there wasn't any obstetric pathology. Gastroenterology suggested to take magnetic resonance cholangiopancreatography (MRCP) and beginning of acute pancreatitis treatment. The patient was taken to the emergency intensive care unit and was followed up for 2 days. After 2 days patient's amylase was 226 U/L and lipase was 906 U/L and her complaints resolved. Patient was consulted to gastroenterology department again and delivered to gastroenterology service.

Conclusion: Although AP during pregnancy is rare, it has been reported the high maternal and fetal mortality rate, and multidisciplinary approaches is brought to the forefront in the literature. Despite these data, intensive care follow up and treating conservatively considered as an important option for patients specified low-risk according to Ranson criteria.

Keywords: Acute pancreatitis, Emergency Intensive Care, Pregnancy emergencies

Table 1. Ranson Criteria for Severity of Acute Pancreatitis

ADMISSION	48. HOUR
Age > 70 Years	Haematocrit decrease >10%
White Cell Count > 18000/mm ³	BUN increase >2 mg/dL
LDH >400 IU/L	Calcium <8 mg/dL
AST > 250 IU/L	Base deficit >5 meq/L
Blood Glucose > 220 mg/dl	Fluid sequestration >4 L

AST: aspartate aminotransferase; BUN: blood urea nitrogen; LDH: lactate dehydrogenase.

P-076 [Acil Tıpta Kritik Bakım]

THROMBOLYSIS IN ED VERSUS CCU IN ACUTE STEMI- A COMPARATIVE STUDY ON DOOR TO NEEDLE TIME (DTN)

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Objective: Early restoration of coronary perfusion with thrombolysis or percutaneous coronary intervention is the main mode of regaining perfusion to ischemic myocardium. The earlier the procedure is completed the greater the benefit in saving the myocardium and restoring its functions. The aim of the study is to compare the Door-To-Needle (DTN) time in acute ST Elevation Myocardial Infarction (STEMI) for thrombolysis in Emergency Department(ED) with that of in coronary care unit (CCU)

Methods: A retrospective, descriptive study of DTN time was conducted in ED Al Khor Hospital, Hamad medical corporation Qatar, for patients with acute STEMI in both thrombolysis sites, the CCU and the ED for the period from April 2005 until December 2011 to determine the effect of thrombolysis site transfer on the DTN time, duration of hospitalization and mortality of patients with STEMI. The medical records of patients with an acute STEMI diagnosis from April 2005 until December 2011 were reviewed to retrieve; demographic data of the patients, the site of thrombolysis (CCU or ED), the duration of symptoms until reaching the hospital and the time of thromolytic therapy, duration of hospitalization and the prognosis of the patients during hospitalization. The DTN time, the Symptom-To-Needle (STN) time, patient’s mortality and morbidity data and the length of hospital stay were analyzed to find if there were any differences between the two groups. This study was approved by the Institutional Ethical Committee of Hamad Medical Corporation, Doha, Qatar.

Results: A total of 302 patients with acute STEMI were screened out of which 211 were eligible for thrombolysis. Fifty-eight patients were thrombolized in the CCU (two females only and the rest are male patients), 153 patients were thrombolized in the ED (three females and the rest are male patients). Ninety-one patients were excluded from the study. The mean ages of the patients in the CCU and ED groups were 46.1±9.5 and 47.3±7.9 years respectively. The DTN time was reduced to 17 minutes in the ED patient group compared to 33.5 minutes in the CCU patient group, representing more than 50% reduction in DTN time with a P value of <0.0001, while the symptom to door (STD) time was similar in both group with 120 minutes. Mean duration

of hospitalization (days) did not differ significantly between the CCU and ED groups (5.3±1.8 and 5.7± 2.1; P value=0.155). Myocardial infarction type was categorized as anterior and non-anterior in both groups. Anterior MI was present in 29 (50%) patients in the CCU group compared to 66 (43%) patients in the ED group, while the non-anterior MI was in 29 (50%) patients in the CCU compared to 87 (57%) patients in the ED group.

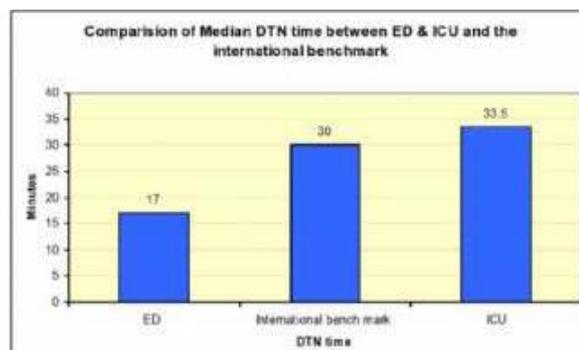
Conclusion: Thrombolysis site transfer from the CCU to the ED was associated with a significant reduction in median DTN time from 33.5 minutes in the CCU to 17 minutes in the ED with more than 50% reduction in median DTN time. Thrombolysis can be effectively done in emergency department with the proper implementation of clinical guidelines and of the medical and nursing staff.

Keywords: Emergency Department (ED), Door-To-Needle (DTN) time, ST elevation Myocardial infarction (STEMI), Symptom-To-Door (STD) time

Table 1. Demographic and clinical profile of ED and CCU patient groups

Variable	ED N=153	ICU N=58	P-Value
Age (years) Mean ±SD Median (Range)	47.31±7.99 47 (25-63)	46.05±7.47 46 (27-73)	0.395
DNT(minutes) Mean ±SD Median (Range)	22.20±18.11 17 (3-168)	54.59±64.09 33.5 (7-394)	<0.0001
STD(minutes) Mean ±SD Median (Range)	149.37±110.67 120 (30-540)	179.52±166.13 120 (20-630)	0.262
Hospitalization days Mean ±SD Median (Range)	5.72±2.05 5 (0-16)	5.30±1.84 5 (1-13)	0.155

ED; Emergency Department, ICU; Intensive care unit, SD; Standard deviation, DTN= Door-To-Needle time, STD=Symptoms-To-Door time



Comparison of the median DNT time of the ED and ICU patient groups with the international benchmark. DTN; Door-To-Needle, ED; Emergency Department, ICU; Intensive Care Unit.

P-077 [Acil Tıpta Kritik Bakım]

CHOLECYSTITIS PRESENTED WITH ALTERED MENTAL STATUS: A CASE REPORT:

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Introduction: Sepsis can be defined as systemic inflammatory response syndrome against infection. Although many infections can be cause of sepsis, intraabdominal sources and infections of circulation system are most commonly encountered infectious foci. Generally, sepsis is a clinical process with high mortality, in which diagnosis could be missed. It has been emphasized that sepsis may progress with subtle findings; thus, it is recommended that sepsis should be remembered in any clinical deterioration during hospital stay, initiating active treatment promptly.

By this case report, we aimed to stress sepsis by presenting a case which presented with severe metabolic acidosis and altered mental status and diagnosed as sepsis due to acute cholecystitis.

Case: A 33-years old woman presented to our emergency department with altered mental status and vomiting. The patient was conscious with lethargy and limited cooperation while she had no lateralization finding and Kernig-Brudzinski sign and nuchal rigidity were negative on physical examination. Blood pressure and temperature were measured as 100/60 mmHg and 37.3°C. In laboratory evaluations, following findings were observed: pH, 7.01; pCO₂, 36; pO₂, 88; HCO₃, 9.1; BE, -20.1; lactat, 4; CPR, 250 mg/L (↑); AST, 107 U/L (↑); ALT, 532 U/L(↑); GGT, 61 U/L(↑); LDH, 729U/L (↑); Tbil, 1.57 mg/dl (↑); Dbil, 0.31 mg/dl(↑); Glucose, 123 mg/dl, Urea,35 mg/dl, Creatinine,1.44 mg/dl(↑); K, 5.8 mmol/L; INR, 2.1. Poisoning with drug or another factor was questioned; however, no related-history could be obtained and tox-Drug test was considered to be negative. The patient underwent brain CT and brain MRI and diffusion MRI, all which were interpreted as normal. As the patient was consulted to neurology, internal medicine and infectious diseases departments, neurology consultant didn't suggest any neurological pathology but internal medicine consultant recommended hospital admission because of metabolic acidosis. However, the patient developed fever during follow-up. Thus, the patient was reassessed by infectious disease and antibiotic therapy was initiated for sepsis. On the abdominal CT scan with contrast enhancement, it was seen that "gallbladder was hydropic with multiple stones at varying sizes and edematous wall had adhesions to surrounding tissues" (Figure 1, 2). By these findings, the patient was considered as cholecystitis and sepsis due to cholecystitis. On the day 3 during follow-up, the patient responded to medical therapy was scheduled for elective surgery; however, the patient underwent semi-elective surgery as she had recurrent fever with no response to medical therapy. It was found out that empyema and 2 gallbladder stones (as largest being 45x42 mm and smallest being 38x33 mm in size) were removed (figure 3) in the surgery.

Conclusion: It should be kept in mind that acute cholecystitis and resultant sepsis may present with severe metabolic acidosis and altered mental status, although acute cholecystitis can present with atypical complaints.

Keywords: Cholecystitis, Altered Mental Status, acidosis



Figure 1.

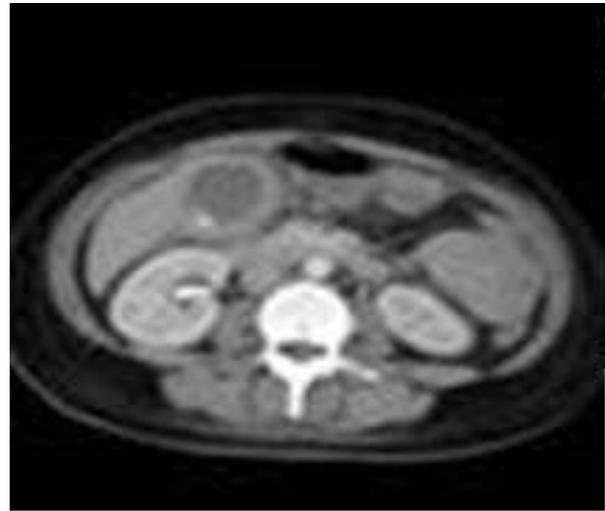


Figure 2.



Figure 3.

P-078

[Acil Tıpta Kritik Bakım]

NEAR DROWNING IN A PATIENT WITH EPILEPSYÖzgür Duran¹, Fulya Yılmaz Duran², Süha Serin¹, Ertaç Özeroğlu², Gülden Özerk¹¹Department of Emergency Medicine, Bozyaka Training and Research Hospital, İzmir, Turkey²Department of Anesthesiology and Reanimation, Bozyaka Training and Research Hospital, İzmir, Turkey

Introduction: Drowning is defined as a death by suffocation after submersion in a liquid, near drowning is survival at least temporarily after aspiration of fluid into the lungs. Secondary

drowning is death or serious clinical deterioration following near drowning after a period of relative wellbeing. It is not due to neurological causes, respiratory sequelae of inhaled foreign material or secondary infection. We report a patient with epilepsy who seemed to recover fully from near drowning.

Case: A 27 year old man with a history of epilepsy for 15 years had a tonic-clonic seizure while swimming in the sea, was admitted to emergency room. He was submerged for about one minute then taken to the side of the sea. He was unconscious at emergency room. He was transferred to intensive care unit. His Glasgow Coma Scale was E4M6V5. Respiratory rate: 25 breaths/minute, temperature: 36.6°C, blood pressure: 118/63 mmHg, pulse rate: 110 beats/minute. He was consulted by neurology doctors. Patients who has been taking 1000 mg/day of valproic acid (VPA) for epilepsy, didn't use his medication for the last 2 months. 10 mg diazepam IV was applied for the control of the seizure at stat. VPA 1000 mg/day was started for treatment again. He was discharged to neurology clinic after two days follow-up in ICU.

Conclusion: In cases of near-drowning effective CPR should start as soon as possible, oxygen should be provided during the transport, if possible these patients should be followed in intensive care unit. Although there are so many scoring systems to be used in patients admitted to emergency department with drowning or near-drowning, Glasgow Coma Scale is the most known scoring system should be safely used in prognosis.

Keywords: near drowning, Glasgow Coma Scale, epilepsy

P-079

[Acil Tıpta Kritik Bakım]

DYSPNEA IS NOT ALWAYS PULMONARY THROMBOEMBOLISM IN PREGNANT WOMEN ABSTRACT

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Introduction: Cardiovascular diseases are the leading cause of maternal morbidity and mortality in the current obstetric practice. Pregnant women with cardiac diseases have poor prognosis impending the presence of associated thrombi, and infective endocarditis.

Case: Thirty-one years old pregnant woman in the 33st week of twin pregnancy, gesta 2, para 1 was admitted to the Emergency Service for sudden onset dyspnea. The symptoms were; dyspnea which began two days ago, tachypnea, orthopnea, and tachycardia. General condition of patient was poor, in vitals BP:123/97 mmHg, HR:127/min, RR:38/min, SaO₂:90. ABG: pH: 7,184, pO₂:116, pCO₂:15,2, HCO₃: 5,8, BE:-22, SaO₂:97, Lac:10,6, Her ECG is compatible with sinus tachycardia. And also S1,T3 +, P mitrale + were identified. Bedside ECHO was made by cardiology and LVEF:50, RVEF: 35-40, MR: 1-2°, AR: 1°, TR: 2-3°, TAPSE: 12, sPAP: 100 mmHg, right atrial dilation detected. In blood analysis; WBC:18.49, Hb:15.8, Htc:47.5, INR:3.6, Plt:44000, Glucose:88, BUN:30, Cre:1.36, Na:136, K:5.8, Cl: 100, Ca:8.9, CRP:8.04, AST:2646, ALT:1205, ALP:254, GGT:16, T.Bil:2.90 D.Bil:1.67, İ.Bil:1.23 and D-Dimer level above 4580 µg/L. These symptoms consistent with pulmonary thromboembolism. The patient who were consulted with Chest

Diseases, Obstetrics and cardiovascular surgery because of urgent C/S and embolectomy. The Angio Thoracic CT scans were obtained for treatment and direction of follow-up. The results of CT was coherent with bilateral dilatation of pulmonary artery and there is no filling defect, that's showing embolism. Symptoms of severe right heart failure accompanied to multiple valve disease and terminate the pregnancy was decided. The patient hospitalized by Obstetrics for emergency C/S.

Conclusion: In our patient, sudden onset dyspnea and signs of acute right heart failure, which suggests PTA firstly, but filling defect which showing PTA was not detected. Bilateral dilatation of pulmonary artery and signs of ECHO compatible with multiple valve disease. In all cases of pregnancy associated with cardiovascular diseases, early recognition of cardiovascular disease is crucial, as well as correct diagnosis and referral to a tertiary centre equipped for a multidisciplinary approach of specialists experienced in high-risk pregnancies and deliveries in order to prevent maternal mortality.

Keywords: Acute dyspnea, valve disease, pregnancy



Figure 1. Enlargement of right ventricle

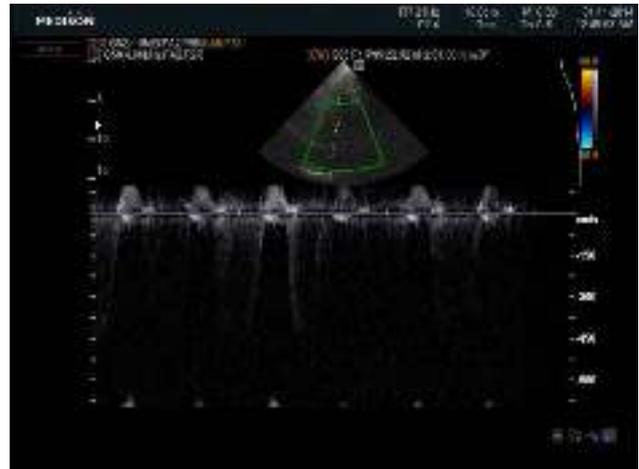


Figure 2. Increasing the pulmonary artery pressure showing by bedside echo.

P-080

[Acil Tıpta Kritik Bakım]

A RARE CAUSE OF HIGH ANION GAP METABOLIC ACIDOSIS

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Introduction: Metabolic acidosis occurs when the body produces too much acid, or when the kidneys are not removing enough acid from the body. Metabolic acidosis is typically classified as having a normal anion gap (AG) or a high AG.

Case: We report a case of high anion gap metabolic acidosis in a 74-year-old male who presented with a history of low extremity paresia, generalised weakness and mild dysarthria for ten days. Physical examination and vital signs was unrevealing, except for takipnea. In arterial blood gas, pH was 7.18, P CO₂ was 40mm Hg, bicarbonate level 14.6 mEq/L (14.6 mmol/L), anion gap was 22 mEq/L (22 mmol/L), Lac: 1.2mmol/l. Chemistry tests showed a high level of K: 10 mEq/L, ketone level was negative. The patient has been examined for the causes of high anion gap metabolic acidosis. In biochemistry panel, glucose (175), creatinin (1.42) and BUN levels (50) were insignificant. There was no story of Methanol, ethylene glycol, ethanol ingestion, no sign of infection or salisilat poisonig.

Conclusion: The patient's medical record had spironolactone and ACE inhibitor prescription. The high anion gap metabolic acidosis associated with hyperkalemia assumed to be caused by using daily spironolactone

Keywords: High anion gap acidosis, Spironolactone

P-081

[Acil Tıpta Kritik Bakım]

THE BENEFICIAL EFFECTS OF AGOMELATINE IN EXPERIMENTAL MODEL OF SEPSIS RELATED ACUTE KIDNEY INJURY

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Background and Objective: Sepsis related acute kidney injury (AKI) is one of the serious complications of sepsis. It develops in the early stages of sepsis and increases mortality. There are still problems in early diagnosis and treatment stages of AKI. The aim of the study is the evaluation of agomelatine efficacy which is generally known for its positive effects on depressive and anxiety disorders in sepsis related AKI by using septic rats.

Material and Methods: The sepsis model was created with cecal ligation and puncture (CLP) technic. The rats were separated into four groups as each composed of 8 rats. First one is normal group, the second is the sham-operated group, and third is the CLP and saline group. The fourth one is CLP+ agomelatine group which was administered 20 mg/kg. agomelatine intraperitoneally (i.p). After 24 hours, kidney and blood samples were analyzed with histopathological and biochemical technics.

Results: It is found that there were reductions on TNF- α , MDA, BUN, creatinine levels and histological kidney scores in sepsis related AKI treated agomelatine group compared with

non-treated sepsis related AKI group (Table 1). Besides, it is shown that agomelatine treatment ameliorated the morphological damage of sepsis on renal and tubular tissues.

Conclusion: S: In this study, it is suggested that agomelatine has good efficiency on sepsis related AKI. It was shown with histological and biochemical results in experimental model. It is believed that antioxidant and pro-inflammatory effects of agomelatine is responsible from this improvement on kidneys.

Keywords: Agomelatine, sepsis, AKI, CLP

Table 1. The MDA, TNF- α , BUN and creatinine levels for all 4 groups

	Normal Group	Sham operated Group	CLP and saline Group	CLP and 20 mg/kg agomelatine Group
MDA (nM)	65.3 \pm 3.2	71.2 \pm 3.5	218.9 \pm 7.5 **	212.5 \pm 6.5 ##
TNF- α (pg/ml)	21.07 \pm 1.9	22.8 \pm 2.14	274.5 \pm 7.9 **	119.9 \pm 5.8 ##
Plasma BUN content (mg/dl)	24.7 \pm 1.2	21.6 \pm 1.5	55.01 \pm 3.2 **	37.8 \pm 3.6 #
Plasma creatinin content (mg/dl)	0.35 \pm 0.02	0.37 \pm 0.03	0.79 \pm 0.03 *	0.56 \pm 0.05 #

Results were presented as mean \pm SEM. * p<0.01, ** p < 0.000 (different from normal and sham-operated groups); ##p < 0.000, # p< 0.05 different from CLP and saline Group.

P-082

[Acil Tıpta Kritik Bakım]

THE VALUABLE EFFECTS OF POTENT ANTIOXIDANT CURCUMIN IN CISPLATIN INDUCED LIVER AND KIDNEY INJURY

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Background and Objective: Cisplatin (CIS) is a potent anticancer drug that uses commonly. The toxic effects of CIS limit its usage. In the present experimental study, it is aimed to evaluate effects of curcumin (CUR) on CIS induced hepatotoxicity and nephrotoxicity.

Material and Methods: The rats were separated into three groups as each composed of 7 rats. First one is control group, the second is the CIS (6 mg/kg, i.p) + saline group, and third is the CIS (6 mg/kg, i.p) + CUR (100 mg/kg i.p) group. CIS was given at single dose and CUR was given for 3 days. After 3 days, kidney, liver and blood samples were analyzed with histopathological and biochemical technics.

Results: In CIS+ CUR group, there was decline in levels of BUN, ALT and compared with CIS group. Besides, SOD and GSH levels were found increased as compared with CIS group (Table 1 and 2). The ameliorating effects of CUR were presented with histopathological findings.

Conclusion: CIS has serious toxicity on kidney and liver and oxidative stress play an important role on toxicity. In the current study, the deleterious effects of CIS on kidney and

liver via oxidative stress were presented. It is indicated that CUR has beneficial impact on CIS induced hepatotoxicity and nephrotoxicity besides, it is suggested that CUR may be an option for CIS treated patients to protect possible toxicity.

Keywords: Curcumin, kidney injury, liver injury, nephrotoxicity, hepatotoxicity, oxidative stress

Table 1. The evaluation of serum BUN and kidney tissue GSH, MDA and SOD values

Groups	BUN (mg/dl)	GSH (Kidney) (nmol/g tissue)	MDA (Kidney) (nmol/g tissue)	SOD(Kidney) (U/mg protein)
Control	18.1 ± 1.7	11.7 ± 1.3	104.7 ± 4.9	0.09 ± 0.009
Cisplatin+saline	77.2 ± 8.1 **	8.06 ± 0.94 #	173.7 ± 10.2 **	0.03 ± 0.006 **
Cisplatin+curcumin	45.9 ± 2.8 *	13.6 ± 1.01 †	138.1 ± 6.9 *	0.05 ± 0.009 †

** p<0.000 (different from control), *p<0.01 (different from Cisplatin+saline) # p<0.001 (different from control), † p<0.05 (different from Cisplatin+saline)

Table 2. The evaluation of serum ALT and liver tissue GSH, MDA and SOD values

Groups	ALT (Liver) (IU/L tissue)	GSH (Liver) (nmol/g tissue)	MDA (Liver) (nmol/g tissue)	SOD (Liver) (U/mg protein)
Control	24.07 ± 4.6	4.6 ± 0.6	26.8 ± 3.6	0.30 ± 0.02
Cisplatin+saline	83.7 ± 12.5 **	2.9 ± 0.4 #	62.1 ± 6.03 **	0.12 ± 0.01 ##
Cisplatin+curcumin	50.5 ± 5.7 *	5.05 ± 0.3 †	35.2 ± 5.1 †	0.23 ± 0.03†

** p<0.001 (different from control), *p<0.05 (different from Cisplatin+saline) # p<0.01 (different from control), † p<0.01 (different from Cisplatin+saline) ## p<0.000 (different from control)

P-083

[Acil Tıpta Kritik Bakım]

AN UNCOMMON CAUSE OF HEMORRHAGIC SHOCK: POLYARTERITIS NODOSA WITH RETROPERITONEAL HEMORRHAGE

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Introduction: Abdominal pain is one of the most challenging symptom in emergency departments. However, patients with rheumatological diseases rarely present to the emergency departments with life-threatening conditions manifested with abdominal pain.

Case Report: We report a 25-years-old male who presented to emergency department (ED) with right flank pain, nausea, vomiting accompanied by less severe and gradually increased generalized abdominal pain. His flank pain was constant and had started suddenly approximately 3 hours ago. Past medical history, social and family features were noncontributory except urolithiasis, which was diagnosed two months ago.

At the initial presentation, his blood pressure was 108/74 mmHg and vital signs were within normal ranges otherwise. On physical examination he had generalized abdominal tenderness, right upper quadrant guarding and right costovertebral angle tenderness.

Initial workup revealed a leucocyte count of 23.900, a hemoglobine of 9.66 g/dl, and a platelet count of 877.000. Although electrolytes, BUN, creatinine and coagulation tests were within normal ranges; liver functional enzymes were mildly elevated.

After the first hour of ED admission, the patient had become confused, tachycardic and hypotensive, who required multiple boluses of normal saline. Thereupon the vital sign changes,

contrast enhanced computed tomography (CT) used to scan abdominal vascular pathologies. The CT scan revealed right perirenal, pararenal and retroperitoneal hematoma that started from inferior of the liver and extended through pelvis. The patient was hospitalized and non-operative follow up was established after his vital signs went normal, thus he did not require an urgent surgery. A diagnosis with spontaneous kidney rupture was established, because of underlying polyarteritis nodosa and referred to the rheumatology department.

Conclusion: Although non-traumatic spontaneous renal or perirenal hemorrhages are infrequently reported entities, it is crucial for clinicians in the ED to be aware of this entity because of avoiding life-threatening conditions.

Keywords: Abdominal Pain, Polyarteritis Nodosa, Retroperitoneal Hemorrhage,

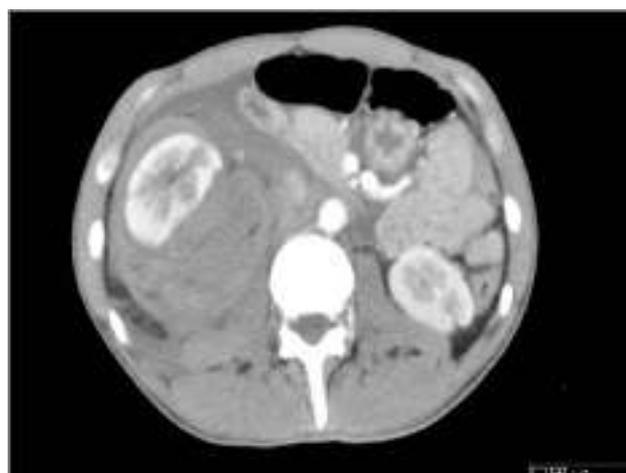


Figure 1. Perirenal Hemorrhage CT Image 1

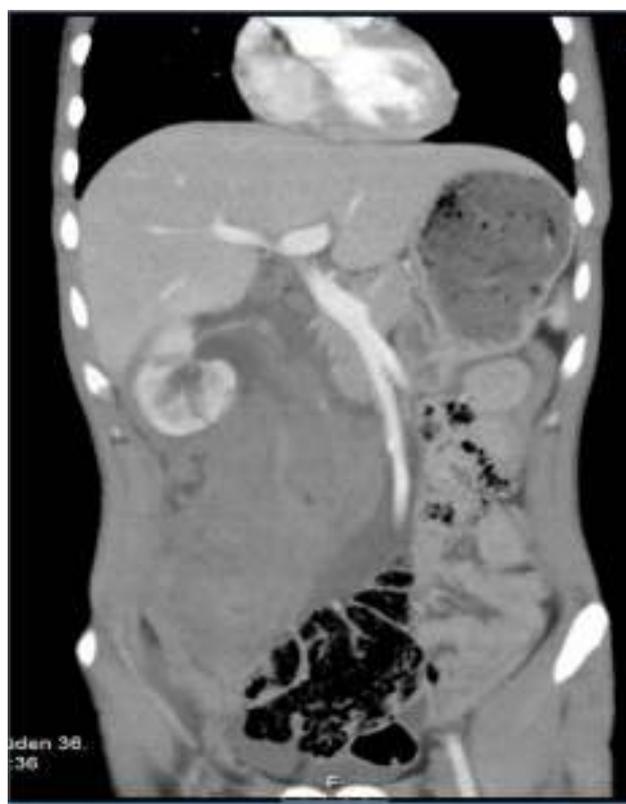


Figure 2. Perirenal Hemorrhage CT Image 2



Figure 3. Renal angiography image

P-084

[Acil Tipta Kritik Bakım]

JEJUNAL PERFORATION AND SPLENIC ABSCESS DUE TO BILIARY STENT MIGRATION

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Introduction: Endoscopic biliary stent implantation is the most effective treatment in obstructive jaundice caused by benign or malignant pathology of liver, pancreas or biliary tract. The long-term complications of endoscopic biliary stent are less predictable and more difficult to diagnose and manage. The most common long term complication is biliary stent migration (%6). There is no case about jejunal perforation and splenic abscess due to biliary stent migration in literature. This case presents an unusual and rare complication of migration.

Case Report: Twenty-three-years-old male patient was admitted Emergency Department for abdominal pain lasting for a week. In medical history, the surgeon detected a mass in the pancreatic head that was diagnosed as rhabdomyosarcoma during cholecystectomy, two years ago. The obstructive jaundice was detected because of mass and endoscopic biliary stent was performed 4 months ago. In the physical examination abdominal tenderness, rebound and defense were detected. The patients WBC:20300, CRP:10, sedimentation:53, ALP:220, GGT:192 indicate the presence of infectious case. On the abdominal X-ray (Fig. 1) an abnormal localization of stent was seen on the left upper quadrant. Abdominal CT was performed; jejunal perforation (Fig. 2A) and splenic abscess formation (Fig.2B) was seen caused by biliary stent migration. Interventional radiology and general surgery departments were not performed surgical procedures. The patient was followed by 11 days under IV antibiotic therapy. In the control abdominal CT; the abscess

formation regressed and the patient discharged in good condition with oral medication.

Discussion: The early complications of biliary stent treatment are pancreatitis (%29), hemorrhage (%23), cholangitis (%18) and perforation (%6). The most common long-term complication is biliary stent migration (%6). The risk of migration depends on various factors like stent sizes, materials and designs. For example shorter stents tending to migrate proximally and larger stents distally in benign disease. Stents are generally classified into two groups – plastic and metal stents. Due to surrounding tissue grows through the interstices of the stent produces fixation the migration of self expandable metal stents (SEMS) occurs rarely. Plastic stents are cheaper, and easier to remove but have higher risk of migration. In two series reviews, rates of spontaneous stent migration have been reported %6 and %5,9. In the early studies the risk of proximal stent migration %3,1 - 4,9; distal stent migration %3,6. The only risk factor associated with distal stent migration is papillary stenosis. The most damaged area in migration is deudenum and the common complication is perforation (%92). Various mechanisms have been postulated in perforation as incorrect placement, mechanical force of the tip of the stent or incorrect length and inflexibility of stents. The other complication of migration are intraabdominal abscess, sepsis, appendicitis, fistula formation (enterocutaneous, colovesical) and necrotizing fasciitis. A migrated biliary stent, symptomatic or not, should be removed immediately. And aggressive surgical treatment must be chosen. But in this case due to patients comorbidity conservative therapy was chosen.

Conclusion: The most common long term complication of endoscopic biliary stent is biliary stent migration and these rare complication should be keep in mind in emergency department.

Keywords: biliary stent, migration, jejunal perforation, abscess



Figure 1. Abnormal localization of stent



Figure 2A. Jejunal perforation



Figure 2B. Splenic abscess formation

P-085

[Acil Tipta Kritik Bakım]

AN ANALYSIS OF THE EFFICACY OF TERLIPRESSIN AND EPHEDRINE IN A HEMORRHAGIC SHOCK MODEL

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Objectives: This study aimed to investigate the effects on survival and basic haemodynamic parameters of ephedrine and terlipressin with standard ringer lactate solution on an

experimental haemorrhagic shock model associated with liver injury.

Methods: A haemorrhagic shock model was created by removing approximately 65% of the median and left lateral lobes of the liver. Throughout 90 mins, monitoring was maintained in respect of mean arterial pressure, pulse, survival and arterial blood gases. The obtained data were compared statistically.

Results: The survival rates at the end of 90 mins were 3/9 (33%) in the terlipressin group, 1/9 (11%) in the ephedrine group and 0 in the other groups. No statistically significant difference was determined between the terlipressin and ephedrine groups in respect of survival. Terlipressin and ephedrine alone were found to be superior in terms of survival compared to the ringer lactate and control groups. When tissue perfusion was considered in the comparison, the mean arterial pressure of the terlipressin treatment group was over 40mmHg, whereas the ephedrine group showed the course to be below 40mmHg.

Conclusion: In the light of the findings obtained in this experimental model, it can be concluded that in the management of cases of haemorrhagic shock when blood pressure falls to dangerous levels, terlipressin and ephedrine can be administered to increase perfusion.

Keywords: experimental, hemorrhagic shock, terlipressin, ephedrine

P-086

[Acil Tipta Kritik Bakım]

POSTTRAUMATIC DELAYED TENSION PNEUMOCEPHALUS: CASE REPORT

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AIM: Tension pneumocephalus is a problem that requires emergent intervention for the fact that it can lead to sudden increase in intracranial pressure. In this study we present a case of late tension pneumocephaly which threatened the life of the patient.

Subject: A 25-year-old man was admitted to our emergency unit with severe headache after being involved in a fall. He had a disturbance in consciousness, hence another cranial computerized tomography was taken which revealed subdural, intraventricular and intraparenchymal tense air that caused high pressure on the brain and intracranial areas including the posterior fossa. The patient was operated on urgently and the tense air was evacuated.

Results: Tension pneumocephalus results from the entrapment of intracranial air due to a check valve system. It behaves like an intracranial space occupying mass and threatens life. Therefore it should be distinguished from simple pneumocephaly. Intracranial air may be situated in the epidural, subdural, subarachnoid, intraparenchymal or intraventricular spaces. The air is most frequently seen in the frontal area and rarely in the posterior fossa. The diagnosis can easily be made by computerized tomography (CT). Whilst simple pneumocephaly needs no treatment tension pneumocephaly should promptly be evacuated. Evacuation of the air under high pressure results in dramatic and fast recovery. In this study we aim to contribute to the treatment procedures of tension pneumocephaly, by presenting an extensive case in the subdural, intraparenchymal, and intraventricular areas.

Keywords: Head Trauma, Delayed Tension Pneumocephalus

P-087

[Acil Tipta Kritik Bakim]

EXHALED NITRIC OXIDE AS A MARKER IN ARDS AND ITS PROGNOSTIC VALUE**Kamel Abdelaziz Abdalla***Cairo university*

Introduction: Elevated levels of nitric oxide (NO) are detectable in the exhaled breath of patients suffering from a number of inflammatory lung diseases. Measurement of exhaled NO provides an exciting opportunities for the study of critically ill ventilated patients as its inherent non-invasive nature, in turn represents minimal risk to both patient and personnel collecting the sample.

Aim: To study the level of exhaled NO in patients with acute respiratory distress syndrome (ARDS) undergoing mechanical ventilation and comparing those patients with a control group of ventilated subjects.

Material-Methods: Thirty ARDS patients included in the study collected over a period of nearly two year. Patients enrolled in the study were assessed for the presence of ARDS according to the North American European Consensus Conference (NAECC) definition of ARDS. On the other hand, thirty control subjects were studied after induction of anaesthesia and tracheal intubation. NO analyzer currently used in this study is based on a sensitive chemo-luminescence technique. A full hemodynamic and, and lung injury severity score (LISS) were performed, and measurement of exhaled NO was carried out for both groups. Patients below 18 years and those started NO inhalation or sodium nitroprusside and nitrate as part of treatment, as well as smokers were excluded from the study. All participants were subjected to full clinical assessment, along with routine laboratory tests including blood gas tension profile, chest X ray and APACHE11 score recorded for all ARDS patients. The protocol and procedures were approved by the Ethics Committee of our hospital as long as the procedure was non invasive and was done while patients were haemodynamically stable and a written informed consent was obtained from the patientand/or next of kin.

Results: The most common cause of ARDS in the current study was sepsis (14 patients), whereas patients had pneumonia as a cause of ARDS represented by (8 patients). The LISS in the ARDS group was 3.34 ± 0.3 and the mean exhaled NO concentration was 12.13 ± 3.4 ppb in patients with ARDS,while it was 5.5 ± 2.7 ppb in control subjects. There was significant difference in exhaled NO between the two groups. In the current study, there was no correlation between exhaled NO concentration in ARDS patients and LISS ($r = 0.25$, $p = 0.4$) or PaO₂/FIO₂ ratio ($r = 0.28$, $p = 0.3$), and also the pulmonary vascular resistance (PVR) in ARDS group showed no correlation to exhaled NO, ($r = 0.12$ $p = 0.3$). ARDS patients divided into two subgroups, the mean exhaled NO concentration was 17.3 ± 5.3 ppb in survival subgroup whereas it was 6.5 ± 2.3 ppb in non survival subgroup (12 patients), being significantly high in survival subgroup ($p = 0.01$).

Conclusion: Our study highlight on the level of measured exhaled NO in ARDS patients, aiming for taking it as marker. However, in spite of a significant difference between its level in ARDS patients if compared to control subjects, there was no correlation to LISS Also there was a significant difference in

survival subgroup of ARDS if compared to non survival group that might reflect impression about the relation between the exhaled NO level and the outcome.

Keywords: Nitric oxide (NO) - Acute respiratory distress syndrome (ARDS) - Lung injury severity score (LISS).

P-088

[Acil Tipta Kritik Bakim]

OUTCOME OF CRITICALLY ILL HYPERGLYCEMIC STROKE PATIENTS ADMITTED TO THE INTENSIVE CARE UNIT**Kamel Abdelaziz Mohamed Abdalla, Ahmad Saad***Cairo university*

Introduction: It has been suggested that admission hyperglycemia is a marker of extensive brain damage. Despite these observations, studies that have examined the relationship between glucose levels and the outcome after stroke in diabetic and nondiabetic patients have reported conflicting results.

Aim: We evaluated data on stroke patients admitted to the intensive care department to estimate the influence of hyperglycemia on the short-term mortality in both diabetic and nondiabetic patients.

Patients and methods: A total of 100 consecutive adult patients with stroke admitted to the ICU were studied over a period of 28 months. The patients were followed up for 28 days until discharge from the hospital or until death, whichever occurred first. The patients were divided into three broad groups, on the basis of fasting blood glucose or random sugar and HbA1c to rule out undetected diabetes patients.

Results: There were no significant differences in the stroke subtype or the baseline stroke severity between diabetic (group 3) and hyperglycemic (group 2) patients. Also, there was no significant association between the stroke severity and the glycosylated hemoglobin level in group 2 and group 3 ($r = 0.26$, $P = 0.4$; $r = 0.19$, $P = 0.31$; respectively). With regard to an excellent outcome of stroke, which was measured by the modified Rankin scale (0–1), there was no significant difference between group 2 and group 3. The unadjusted risk ratio was 1.85 (95% confidence interval 0.52–4.41) for group 2, whereas it was 1.25 (95% confidence interval 0.7–4.3) in group 3. Nondiabetic patients with hyperglycemia had a 1.6 times higher relative risk of in-hospital 28-day mortality than diabetic patients. There were four nonsurvivors (11%) out of 36 patients in the control nondiabetic (group 1), whereas eight (26%) of 31 patients died in group 2, which was statistically significant when compared with group 1 ($P = 0.02$). However, six nonsurvivors (18%) of 33 in group 3 when compared with group 2 was statistically significant ($P = 0.04$).

Conclusion: Our current study showed that nondiabetic patients with hyperglycemia had a 1.6 times higher relative risk of in-hospital 28-day mortality than diabetic patients. Stress hyperglycemia predicts an increased risk of in-hospital mortality after ischemic stroke; thus, we should not underestimate the potential harm, as patients with the highest admission glucose levels would have most likely been treated earlier and more aggressively

Keywords: diabetes mellitus, hyperglycemia, stroke

P-089

[Acil Tıpta Kritik Bakım]

NEW ANTICOAGULANTS CAUSE BLEEDINGIlhan Uz, Ercüment Umdü, Enver Özçete, Funda Karbek Akarca, Selahattin Kıyan

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Introduction: Stroke can be defined as any vascular injury that reduces cerebral blood flow (CBF) to a specific region of the brain, causing neurologic impairment. The onset of symptoms may be sudden or stuttering and may result in transient or permanent loss of neurologic function. Approximately 80% of all strokes are ischemic, caused by an occlusion of the cerebral vessel. It afflicts over 700,000 patients per year, with an in-hospital mortality of almost 15% and a 30-day mortality of 20% to 25%. Approximately one third of all ischemic strokes are thrombotic.(1)

Case: 50 years old woman. She referred to our emergency department (ED) with oral and rectal bleeding. On her medical history, she was hospitalized in neurology clinical; for twenty days. The reason of her hospitalization was her ischemic stroke. She had no other medical problem. Her vital parameters were normal. On physical examination; she had right hemiplegia and dysarthria was still present. Atrial fibrillation (AF) was determined on electrocardiogram. Hematochezia and gingiva bleeding were present. On the blood tests; except the international normalized rate (INR) level, the other systems tests results were normal. The INR level of the patient was 5,2. And also; we learned that; Xarelto (rivaroxaban) was started as a new medication while she was discharging from the hospital. For her high INR levels; we prefer to give fresh frozen plasma (FFP) with this medication; her INR levels got normal and her bleeding stopped. In long time medication; we stopped Xarelto and acetylsalicylic acid (ASA) and instead, low molecular weight heparin (LMWH) was started. After we controlled her bleeding, she was discharged.

Discussion: Target-specific oral anticoagulants have become increasingly available as alternatives to traditional agents for the management of a number of thromboembolic disorders. To date, the direct Factor Xa inhibitor rivaroxaban is the most widely approved of the new agents.(2) The magnitude of gastrointestinal risk is still unclear because of paucity of literature. Current risk-stratification models are incomplete and cannot be used solely to predict future risk. (3),(4) Despite standardized tests (PT-INR) and better definition of therapeutic objectives, oral anticoagulation still leads to a significant number of hemorrhagic events. The risk scores account for age, gender, associated cancer, weight, history of digestive tract bleeding or stroke, and comorbidity (recent myocardial infarction, hematocrit<30%, serum creatinine > 15 mg/l, diabetes). (5),(6) There is no specific antidote for these new anticoagulants. When bleeding requires conventional approaches.(7),(8)

Conclusion: Patients, who has anticoagulant therapy after ischemic stroke have risks for bleeding problems. New anticoagulant agents are safer but; for the risks factors are not well assessed for bleeding; the bleeding can occur anytime. For not consisted of these anticoagulant agents antidotes; this bleedings can be life-threatening.

Keywords: Anticoagulant therapy, bleeding, rivaroxaban

P-090

[Acil Tıpta Kritik Bakım]

FACTOR X DEFICIENCY COMPLICATED WITH GASTROINTESTINAL HEMORRHAGE: CASE REPORT:Gül Pamukçu Günaydın¹, Ferhat İçme¹, Ramazan Avcu¹, Alp Şener¹, Fatih Tanrıverdi², Ayhan Özhasenekler²¹Ankara Atatürk Training and Research Hospital²Yıldırım Beyazıt University Faculty of Medicine

Introduction: Factor X deficiency is a bleeding disorder. It is one of the rare factor deficiencies. It may be acquired or congenital. Acquired factor X deficiency can be a result of severe liver disease, vitamin K deficiency, anticoagulant drugs. We present a case of Factor X deficiency that presented with gastrointestinal hemorrhage.

Case: 65 year old female patient was admitted to emergency room with complaints of fatigue and black coloured stool. She expressed that she had been feeling tired for the past 2-3 days and her stool turned to black 1 day ago. Her medical background showed that she had factor X deficiency and anemia. In her vital signs the patient's pulse was 110/min and blood pressure was 90/70. Her Glasgow Coma Scale was 15. Melena was found in rectal examination. Other system's examinations were normal. Her laboratory tests revealed Wbc: $4,1 \times 10^3 / \mu\text{L}$ ($4 \times 10^3 - 11 \times 10^3$), Hb: 6,5 g/dL (12-16), Hct: %21,8 (36-45), Plt: $181 \times 10^3 / \mu\text{L}$ ($150 \times 10^3 - 450 \times 10^3$), Inr: 2,2 (0,8-1,2). Liver transaminases, kidney functions and serum electrolytes were normal. Upper gastrointestinal bleeding was considered. In the light of the patient's factor X deficiency, gastroenterology and hematology departments were consulted. Patient was given 3 vials of prothrombin complexes (cofactor 500IU/20mL®), and 2 units of erythrocyte suspension. Patient was discharged after her vital signs and hemoglobin levels remained stable after 24 hours.

Discussion: Patients with factor X deficiency can present to emergency room with hematuria, epistaxis, easy bruising, intracranial bleeding, gastrointestinal hemorrhage. Infusion of fresh frozen plasma is sufficient to treat most hemorrhagic episodes. Human prothrombin complex concentrates can also be used to increase factor X levels.

Keywords: factor X, gastrointestinal hemorrhage, prothrombin complex concentrates

P-091

[Afet Tıbbı]

RAPIDITY OF EMERGENCY SERVICES AND ASSOCIATED FACTORS IN SARI İMAM KHOMİNE İ EDUCATIONAL HOSPITAL, 2012Farzad Bozorgi¹, Abolghasem Laali², Seyyed Mohammad Hosseini Nejad¹, Hamed Amini Ahidashti¹, Mahsa Mahdavi³, Razieh Fallah⁴¹Assistant Professor, Department of Emergency Medicine, Mazandaran University of Medical Sciences, Sari, Iran²Resident of Emergency Medicine, Department of Emergency Medicine, Mazandaran University of Medical Sciences, Sari, Iran³General Practitioner⁴BSc in Nursing, Amol 17 Shahrivar Hospital, Mazandaran University of Medical Sciences, Sari, Iran

Background and Purpose: Waiting time to receive appropriate services in emergency departments is considered as an important indicator for evaluating hospitals. Triage is the most important and the first stage of patient's management at the time

of arrival to hospital emergency department. This study aimed at determining the length of waiting time to receive treatment and diagnostic services and related factors within 5 level triage system in Imam Khomeini Hospital in Sari.

Material-Methods: This cross-sectional study was done in Imam Khomeini Hospital of Sari in December 2012. The subjects included 365 individuals who were selected through Morgan table. Waiting time for receiving treatment and diagnostic services for each patient was calculated by researcher from medical records of the patients and the triage sheet and entered in data collection forms. These forms contained two sections. The first part included demographic data and the second part contained information on the emergency department service delivery. The statistical analysis was performed in SPSS V.16

Results: The mean time of first consultant by physician was 6.4 + 7.2 mins, the mean time to receive the first nursing service was 14.9 + 14.4 mins, and the mean time to determine the patients' status was 136.6 + 143 mins. There was a significant relation between the working shift and the mean time of first consultant by doctor and determination of the patients' status. The same relation was also found for triage level.

Conclusion: This study indicated a good level of service provided by emergency department of Sari Imam Khomeini Hospital.

P-092

[Afet Tıbbı]

SOMA MADEN KAZASINDAN KURTARILAN VE AMBULANSLA HASTANELERE NAKLEDİLİP TEDAVİ GÖREN HASTALARIN İNCELENMESİ

Ayhan Korkmaz

Manisa İl Sağlık Müdürlüğü

Giriş: Günümüzde dünya enerji gereksiniminin % 26'sı kömür ile karşılanmaktadır. Kömür dünyada 50 kadar ülkede üretilmekte olup en büyük kömür üreticisi ülkeler; Çin, ABD, Hindistan ve Avustralya'dır. Türkiye ise dünya kömür rezervinin yüzde 0,2'sine sahiptir ve linyit üretiminde 35 ülke arasında 4. sırada yer alırken, taş kömürü üretiminde 50 ülke arasında 44. sıradadır.

Ülkemizde yaşanan iş kazalarının %10,4' ü madencilik sektöründedir. 1983-2013 yılları arasındaki 30 yıllık periyotta büyük maden kazaları sonrasında toplam 647 adet can kaybı meydana gelmiştir. 13 Mayıs 2014'te Soma Kömür İşletmeleri A.Ş.'ye ait Eynez Ocağı'nda meydana gelen kazada ("Soma Faciası") meydana gelen 301 can kaybı, son 30 yılda meydana kalan kazaların toplamının neredeyse yarısıdır (% 47).

Gereç ve Yöntem: Manisa İli Soma İlçesi Eynez Maden ocağında toplam 2948 işçi çalışmaktaymış. Özel bir şirkete ait olan madende, vardiya değişimi sırasında gerçekleşen kaza anında yeraltında 787 işçi bulunmaktaymış. Bunlardan 301 madencimiz ex olurken 486'sı sağ olarak kurtarıldı. Sağ kurtarılan ve hastaneye ambulansla sevk edilen 147 madenci, yaş grupları,aldıkları tanılar ve hastanede kaldıkları süreler göz önüne alınarak retrospektif olarak incelenmiştir.İstatistik analizler SPSS 15.0 paket programı kullanılmıştır.

Bulgular: Soma maden faciası sonucu yaralanan madencilerin 17'si (%11.6) 19-25 yaş arasında, 26'sı (%17.7) 26-30 yaş arasında,47'si (%32) 31-35 yaş arasında, 33'ü (%22.3) 36-40 yaş

arasında,17'si (%11.6) 41-45 yaş arasında,5'i (%3.4) 46-50 yaş arasında ve 2'si (%1.4) ise 51 yaş üstündedir.

Hastaneye nakledilen 147 kişinin genel sağlık durumu iyi olup 142'si (%96.6) maksimum 24 saatlik gözlem sonucu taburcu edilmiş olup, sadece 5 kişi (%3.4) bir hafta ve üzerinde hastanede takip ve tedavi altında kalmıştır.

Sonuç: Çalışmamızda Soma maden kazasında yaralanan 147 madenci değerlendirildi. Madenden sağ olarak çıkan hastaların tümü sekelsiz iyileşmiş olup hastanelere nakledilen vakaların %96.6'i sadece O2 tedavisi ile taburcu edilmiştir. Yapılan değerlendirmede, yangına dayalı maden kazalarında HEP ya da HİÇ kuralının işlediği görülmüştür.

Bu tarz kazalarda yaşam beklentisini etkileyen faktör, tıbbi müdahaleden ziyade maden içinde alınan önlemler ve olguların ocaktan mümkün olan en kısa sürede çıkarılması olduğu saptandı.

Keywords: Maden kazaları, Teknolojik afetler, İş Kazalarında Kurtarma Organizasyonu

YARALANAN HASTANEDEN KALAN SÜRESİ

GÜN	SAYI	%
0-1 GÜN	141	956
2-7 GÜN	4	51
8-30 GÜN	2	91

YARALANAN YAŞ GRUBUNA GÖRE DAĞILIMI

YAŞ GRUBU	SAYI	%
19-25	27	%12
26-30	26	%18
31-35	47	%32
36-40	33	%22
41-45	17	%12
46-50	5	%3
51 ÜSTÜ	2	%1

Soma kazası



P-093

[Acil Servis Yönetimi]

A GENERAL OVERVIEW ON THE BUSY AGENDA IN EMERGENCY SERVICES: WHY EMERGENCY SERVICE?

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Abstract: This research has been carried out to determine the emergency service customs of the patients.

Material and Methods: The study has been carried out on patients who applied to emergency service between 1/1/2014 and 1/10/2014 and those who participated in the study on voluntary basis.

This gender neutral study targeted patients aged 16 and older. Education coordination and ethics committee approvals were obtained. Patient selection was realised through randomized method and rankly amongst the patients approved by the responsible researcher or assistant researcher. A 26 question-survey has been conducted to these patients that applied to Kayseri Training and Research Hospital and Bursa Şevket Yılmaz Training and Research Hospital. In these surveys, patients were requested manuel replies to multiple-choice questions regarding their coming patterns to emergency servise, their complaints, chronic illnesses, medicine(s) they take, whether they benefit from family practice system or not, the number of applications to emergency service and family practice centers in last one year, why they choose emergency service, the first thing they do when they get ill, whether they are aware of the triage system or not, and lastly, their emergency service satisfactions.

Results: The survey included 172 patients in total; 92 from Kayseri and 80 from Bursa. 16,4 percent (n=27) had turn out to come to emergency service by ambulance, and 83,6 percent (n=138) by their own capabilities. The most frequent complaint became stomachache with the ratio of 21, 8 %. The most often chronic disease was hypertension with 17 per cent. 25 (32,1 per cent) of the 71 patients with chronic diseases was using single medicine, while 16 (22,5 per cent) was using double medicines, and 10 (14,08 per cent) was using triple medicines. While 74,5 per cent replied aware of his/her family doctor, they had rather applied to emergency service.

It has been concluded that 53,9 per cent of the patients preferred emergency service due to the ability of quick examination, while 29,1 per cent of the patients' preferance was linked to easy accession. Replies to the question on what do patients first make when they get ill identified that only 2,4 per cent (n=4) would apply to the relevant polyclinic and that 18,2 per cent (n=30) would resort to family doctor, while the remaining 79,4 per cent (n=131) would apply to emergency service. 77 per cent of the patients was unaware of the triage system. While 51,5 per cent (n=85) of the patients replied that they awaited others' turn to get examined, 48,5 per cent (n=80) replied that they got examined out of turn. 94,5 per cent (n=156) of the patients replied that the emergency service satisfied their needs, and that they would come again.

Discussion: In recent years, emergency services have become the most busy departments of the hospitals. This intensity might be reduced by ascertaining the basic patient-rooted motivations. Awarenesses of the patient groups that apply to emergency services might be raised.

Conclusion: The questionnaire has revealed the fact that, patients mainly prefer emergency service, since they have a rapid access to quick diagnosis and examination opportunities even they await others' turn. Although a substantial amount of the patients know the name of their family doctor, it was established that, in last one year, they rather preferred to apply to emergency service.

Keywords: Triage, emergency service, patient behavior,

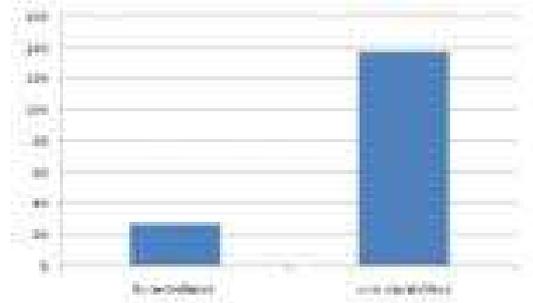


Figure1. How did you come to the emergency service ?

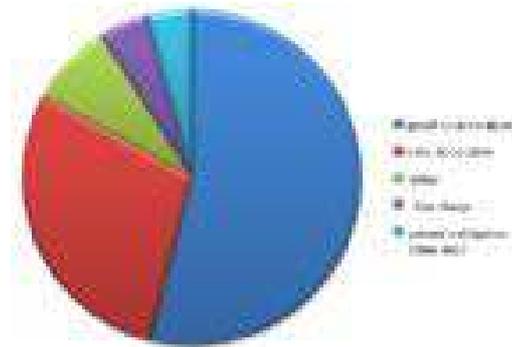


Figure 2. Why did you choose the emergency service ?

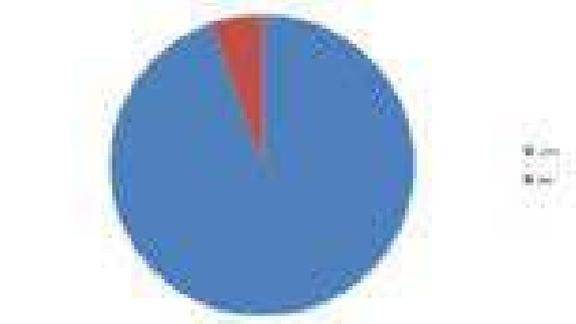


Figure 3. Are you satisfied of emergency service ?

P-094

[Acil Servis Yönetimi]

JEJUNUM TORSION AND WARFARIN OVERDOSE: A DEADLY DUO

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Introduction: Intestinal torsiyon (IT) is a rare and life-threatening condition. Its annual occurrence varies from 1.7 to

5.7/100 000 of the population. IT is identified as a fulfill twisting of a loop of intestine around its mesenteric fastening site. IT can arise at miscellaneous sites in the gastrointestinal tract, including the stomach, small intestine, cecum, transverse colon, In this case the authors reported a warfarin overdose patient with jejunum torsiyon which was end up with massive internal bleeding.

Case: A sixty-year-old female patient admitted to the emergency department with abdominal pain. The pain was ongoing for two days. She had no history of abdominal surgery. Her last bowel movement was two days ago. She was using coumadin for mitral valve replasment and patient's vital signs were stable. Abdominal defense and rebound findings were detected on physical examination. Patient's blood biochemical analysis were normal but INR value of the patient was 12,6. Due to no pathology detected on abdominal direct x-ray graphy and ultrasound, patient's abdominal computed tomography was requested. On computed tomography mesenteric heterogeneity and jejunal haematoma was observed (Figure-1). The patient was taken to surgery immediately.

Conclusion: For patients taking warfarin, it should be keep in mind that, these patients prone to unexpected bleeding due to bleeding tendency with intestinal torsions and life-threatening conditions could occur rapidly.

Keywords: jejunal torsiyon, warfarin overdose, jejunal haematoma



Figure 1. Mesenteric Heterogeneity and Jejunal Haematoma

P-095

[Acil Servis Yönetimi]

THE NEW BLOOD TRANSFUSION INDICATION: POLYCYSTIC OVARIAN SYNDROME

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Introduction: Emergency department (ED) visits for vaginal bleeding by women of reproductive age are common. Polycystic ovarian syndrome (PCOS) is a frequent condition associated with dysfunctional uterine bleeding. We presented a case of PCOS-related menorrhagia induced anemia manifesting with low hemoglobin (Hb) level of 3.6 g/dl.

Case: A 25-year-old female was referred to ED because of lethargy and fatigue which was worsened during the last six months. Vital parameters of the patient was normal except

tachycardia (125 beats per minute). She has described PCOS-related menorrhagia for a four years. Because of pregnancy complications are the most common cause of abnormal vaginal bleeding in women of reproductive age, we sent the patient laboratory values including serum b-hCG. Serum b-hCG was negatif. White blood cell counts (WBC) 4900 cells/mm³, Hb 3.6 g/dl, hematocrit 10.7%, mean corpuscular volume (MCV) 54 fl, platelets 138.000/mm³, and red cell distribution width 8%. Serum Vitamin B12 and folate levels were within the normal ranges. Rectal examination revealed no blood. On peripheral blood smear anisocytosis, significant hypochromia, and microcytosis were present. Certain serum parameters are given in Table 1. She was immediately trans-fused with three units of red blood cells. The patient's symptoms including tachycardia, debilitation, fatigue and respiratory distress resolved on the following day.

Conclusion: Abnormal ovulatory usually results in menorrhagia and intermenstrual bleeding. Nonovulatory cycles of the PCOS may be the reason of irregular and heavy vaginal bleedings. It must be remembered that these patients admit to ED with severe anemia and its symptoms.

Keywords: polycystic ovarian syndrome, vaginal bleeding, anemia

Table 1. Certain serum parameters of the patient.

Serum Parameters	Value
Total iron binding	373 ug/dl
Iron binding	354 ug/dl
Transferin	3,9 %
Iron	9 ug/dl
Ferritin	2 ng/ml

P-096

[Acil Servis Yönetimi]

FOR WHOM THE DESERT BELL TOLLS: HEATSTROKE OR STROKE

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Introduction: Heat stroke is a fatal illness with the plate-mark presentation of core body temperature greater than 40°C and impaired level of consciousness. Mortality has been reported to be as high as 50%, and the illness is often misdiagnosed in the Emergency Department (ED). In this case report, the authors reported a 46-year-old male patient who admitted to ED with syncope and diagnosed with heatstroke induced cerebellar stroke.

Case: A 46-year-old man is found having a syncope on a hot summer day. The paramedics state they found him in a Syria-Turkey border crossing. They established an intravenous of normal saline prior to arrival and obtained a finger-stick glucose of 136 mg/dl. On arrival in the emergency department (ED), his temperature was 41.1 oC (106 oF), and the other vital signs were normal. He was moaning and flailing his arms and legs at staff. Depending on the patient's clinical status, supportive treatment may include administering supplemental oxygen, establishing adequate intravascular access, restoring intravascular volume with intravenous isotonic crystalloid solution, placing a bladder

catheter to monitor urine output. After treatment the patient was afebrile and conscious and as his general symptoms improved after 2 hours. The patient stated that he walked 45 kilometers in the summer heat to cross the Syria-Turkey border and then lost consciousness. Ataxia was detected on patient's physical examination. Patient's laboratory values were in the normal range and normal sinus rhythm was detected on patient's ECG (electrocardiography). Due to patient's neurological symptoms continue despite treatments, he was taken to the brain tomography. There was no pathological findings on the patient's tomography, so for differential diagnosis, brain magnetic resonance imaging (MRI) was requested. MRI showed an acute cerebellar infarct in the left posterior inferior cerebellar artery territory (Fig-1). Hence, for this patient, in the absence of possible stroke time determination, we could not provide tPA thrombolysis. The patient was given aspirin (300 mg orally) and consulted with neurology. He was admitted to the intensive care unit.

Conclusion: Heat stroke is distinguished from other heat illnesses by a loss of thermoregulation, tissue damage, and multi-organ failure. Classically, these patients present with hyperpyrexia and central nervous system dysfunctions. It must be kept in mind that, heat stroke increases the incidence of stroke, and for this reason investigations must be shaped in the light of this information.

Keywords: stroke, heatstroke, cerebellar infarct

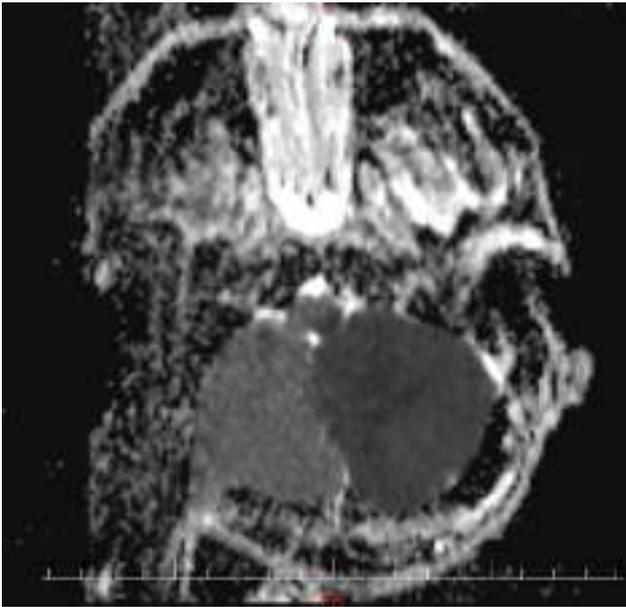


Figure 1. MRI showed an acute cerebellar infarct in the left posterior inferior cerebellar artery territory

P-097

[Acil Servis Yönetimi]

NEUROLOGICAL WARFARIN SYMPTOMS

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Introduction: Spinal epidural hematoma (SEH) is an uncommon disease. They are considered spontaneous when occurring following minimal or no trauma, without evidence of vascular malformations, tumors, or iatrogenic procedures. In this

case report, the authors reported a 84-year-old female patient who admitted to emergency department (ED) with neck pain and numbness in both arms who was diagnosed with SEH.

Case: A 84-year-old woman with history of deep vein thrombosis (DVT) admitted to ED with neck pain and numbness in both arms. Patient had urinary incontinence and she was using warfarin for a 1 year. Patient's vital signs were stable and other system examination was normal. Patient's right upper extremity muscle strength was determined 4/5 and both lower extremities were plegia. Sensorial defect was determined at thoracic 1-2 dermatome level. The INR level of the patient was 2,92 and the other laboratory results were normal. Due to normal brain computed tomography (CT) appearance was seen, the contrast enhanced cervical and thoracic magnetic resonance imaging (MRI) was requested. On patients MRI, there was a bleeding on C3-4 epidural space which was hyperacute appearance (Figure-1). The patient was taken to the emergency decompression operations by neurosurgeon. Due to neurological findings persisted after post-operative period, advance physical therapist preparation was started as a provider of patient care.

Conclusion: Spontaneous onset SEH in patients with anticoagulation therapy is a neurological emergency therefore early diagnosis, discontinuation of anticoagulant and urgent surgical decompression is recommended to allow neurological recovery.

Keywords: spinal epidural hematoma, warfarin



Figure 1. Hyperacute Bleeding at the Level of the Cervical (C3-4) Spine

IATROGENIC BLADDER PERFORATION

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Introduction: Bladder rupture is usually associated with the history of trauma, malignant disease, anatomic obstruction, catheter use and neurogenic bladder. Patient's history and physical examination findings; acute abdomen, abdominal distention, oliguria, anuria, abdominal pain, kidney failure and ascites provides consideration of the diagnosis of bladder perforation. Iatrogenic bladder perforation is a rare reason of the bladder perforation. The most important detail in diagnosis is suspicion of emergency physicians. A patient was admitted to our hospital with the history of abdominal swelling, pain and history of caesarean section (c/s) 4 days ago. We offered this case with the diagnosis of bladder perforation.

Case: 41-year-old female patient was admitted to the emergency department with complaints of abdominal swelling, pain and lack of defecation, difficulty in urination. Vital records have been stable. Physical examination was normal, only the abdomen was distended. The patient has a history of c/s four days ago. Complaints have been increased after caesarean sections. Abdominal computed tomography showed diffuse abdominal free fluid. Laboratory test results; urea: 145, creatinine: 5.28; na: 118, chlorine: 92, pH 7.28, HCO₃: 10. Results made we thinking about acute renal failure. Foley catheter was attached. 1000 cc urine output was observed. Patient has been evaluated by general surgery, gynecology and obstetrics, urology units. Paracentesis was organized for the terms of etiology of ascites. Sample was consistent with urine. Cystography made in terms of emergency service, the results showed the transition of opaque material into the abdomen. The patient was diagnosed with bladder perforation and admitted to the urology clinic with the operational objectives.

Conclusion: Bladder perforation after c/s is dependent on many variables; previous c/s history, a history of pelvic surgery, fetal presentation, a large baby are the risk factors. In the diagnosis stage after clinical suspicion of laboratory association retrograde cystoscopy, analysis of ascites fluid (urea, creatinine values in terms), kidney failure symptoms are the most important step in determining the patient's clinical course. The line treatment; antibiotics, hydration, purified from urine content of the peritoneal cavity during the operation and repair of the perforation consists of a source. As an emergency physician; fast analysis of history, clinical and laboratory trio, increases the chances of early intervention and treatment.

Keywords: abdominal pain, bladder perforation, caesarean section

EVALUATION OF PATIENTS APPLIED TO EMERGENCY ROOM WITH PENETRATING TRAUMA

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Aim: We aimed in this study to present the data of patients applied to our emergency department with penetrating trauma.

Materials and Methods: Cases that applied to Harran University Emergency Department with penetrating trauma were retrospectively evaluated. The age, gender, type of trauma, patients come to the center of the distribution, ex patients according to the causes of distribution, interventions made in the emergency department, the department the patient stay and results were recorded.

Results: We evaluated 635 patients applied to our emergency department with penetrating trauma 582 (%91.65) of them were male, and the mean age was 25,72±32,07 yr. In all age groups penetrating trauma-exposed males were more commonly affected than women. The most common cause of the injury was firearm injury 368 (% 57.95) Most of the cases were discharged from emergency department as cured (%62,83). The hospitalization ratio was %37.16, and the mortality rate was % 3.93.

Conclusion: The most common group exposed to penetrating trauma were young adult males. We believe that this study is important because of its contribution to the epidemiologic data of penetrating traumas in our country.

Keywords: Penetrating trauma, Demography, Emergency Department

Table 1 and 2.

Table 1: The distribution of patients according to age and gender

Patients	The number of patients	The mean age
Gender		
Male	582	25
Female	53	32.07
The type of injury		
Gunshot	368	35.8
Stab	214	27.5

Table 2: Distribution of the patients related to treatment

Discharge from ED	399
Medication	141
Wound care treatment	146
Observation	20
Hospitalization	236
Operational treatment	111
Discharge from hospital treatment	125
Operational	5
Observation	5
Total	635

EVALUATION OF THE EFFECTIVENESS OF BEDSIDE POINT-OF-CARE ULTRASOUND IN THE DIAGNOSIS AND MANAGEMENT OF DISTAL RADIUS FRACTURES

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Background: Orthopedic injury is a frequent cause of emergency room visits. In adults, one of the most commonly detected injuries is distal radius fracture (DRF). DRF constitutes an average of 1/6 of fractures treated in the emergency department. Radiography is often used in determining the type of fracture and treatment to be applied. Revealing the characteristics of the fracture with standard posteroanterior, lateral and oblique direct radiographs are required. If sufficient information cannot be acquired with direct radiographs, computed tomography (CT) may be used for better evaluation of fracture fragments and articular surface. Radiation exposure is a concern with CT and plain radiographs, especially in children whose tissues are more radiosensitive compared to adults. Alternative imaging techniques should be considered to help reduce radiation exposure especially for children. Despite the standard use of direct radiography in the evaluation of orthopedic injuries, point-of-care ultrasound (POCUS) is being increasingly used for diagnosis. Musculoskeletal POCUS was shown to be of significant advantage in the radiation-sensitive pediatric population, in the pre-hospital environment, in pregnant patients and to reduce exposure of serial direct radiographs in fracture reduction [4,5]. Especially in children, cartilage fragments of epiphyseal region can be evaluated by ultrasound without using standard radiographic techniques and radiation exposure. Unlike CT and magnetic resonance imaging, as dynamic examination is performed with ultrasound, muscle, tendon and joint functions can be evaluated simultaneously, also comparative examination with contralateral extremity can be performed. The aim of the study was to compare the effectiveness of point-of-care ultrasound (POCUS) with direct radiography in diagnosis and management of the patients with distal radius fractures (DRF).

Methods: In this study, patients between ages 5 to 55 years admitted to the emergency department with low energy upper extremity trauma with suspected DRF were evaluated with POCUS and direct radiography by emergency physicians (EPs) trained in either musculoskeletal (MSK) imaging or x-ray interpretation of DRF. The EP performing the POCUS exam was blinded to the x-ray results.

Results: A total of 83 patients with DRF were included in the study. There were 18 (22%) females, and 65 (78%) males enrolled in the study. Mean age was 13 ± 14 years for males, and 15 ± 13 years for females. Compared with direct radiography, POCUS yielded 98% sensitivity, 96% specificity, 98% positive predictive value, 96% negative predictive value and 98% accuracy of the test in detecting fractures. POCUS yielded 96% sensitivity, 93% specificity value in detecting linear fractures; 78% sensitivity, 98% specificity in detecting torus-type fractures and 100% specificity and sensitivity for detecting fissure fractures. Specificity and sensitivity of POCUS in the decision for reduction were 100% and sensitivity was 98%, specificity was 100% for splint application.

Conclusion: In our study, it was shown that POCUS could be applied easily by EPs trained in MSK POCUS imaging with success in diagnosing DRF and determining the correct fracture type and required treatment methods.

Keywords: distal radius fracture, ultrasound, direct radiography



Figure 1. Epiphyseal line and linear fracture can be easily seen in the ultrasonographic image of an 17 years old male patient

Table 1. Comparison of the types of fractures determined by point-of-care ultrasound (POCUS) with direct radiograph1

	No fracture n (%)	Fissure n (%)	Linear n (%)	Fragmated n (%)	Torus n (%)	Total n (%)
POCUS	28 (33.7%)	5 (6%)	32 (38.6%)	2 (2.4%)	16 (19.3%)	83 (100%)
Direct radiography	28 (33.7%)	5 (6%)	29 (34.9%)	2 (2.4%)	19 (22.9%)	83 (100%)

n= number; %= percentage



Figure 2. Postero-anterior and lateral direct radiographs of the same patient shown in Figure 1

Table 2. Comparison of the properties of radius fractures according to the point-of-care ultrasound (POCUS) with direct radiography

	POCUS n (%)	Direct radiography n (%)
Angulation	11 (20%)	10 (18%)
Step-off	21 (38%)	21 (38%)
Fractures including epiphyseal line	1 (2%)	1 (2%)
Extension of the fracture into the joint space	2 (4%)	2 (4%)

n= number; %= percentage



Figure 3. Angulation and step-off can be seen in distal radius of a 27 years old male patient on longitudinal ultrasonographic image

Table 3. Comparison of the treatment options determined according to the findings of the point-of-care ultrasound (POCUS) with direct radiography

	Elastic bandages n (%)	Splint n (%)	Reduction + splint n (%)	Surgical treatment n (%)	Total n (%)
POCUS	11 (13.5%)	38 (46.9%)	31 (39.5%)	1 (1.2%)	81 (100%)
Direct radiography	10 (12.3%)	39 (48.1%)	31 (39.5%)	1 (1.2%)	81 (100%)

n= number; %= percentage

Case: 18 yearold male patient was admitted to the emergency department with only neck pain which occurred in the work place after neck compression by a wood material. There was no neurological deficit in the evaluation. Physical examination was unremarkable. His general condition was good. Blood pressure: 120/80 mmHg, body temperature: 36.4, heart rate: 88/m's, respiratory rate: 12 GCS: 15. In the cervical CT scan at thelevel of the cervical vertebrae 2, there was a lineer fracture in the corpuselements However, there was no dislocation and angulation. In the radiological assessments "hangmantype 2" fracture was detected. With attaching philadelphia type collar he was followed.

Conclusion: This case rarely come out against us. Conservative treatment in patients with ou tneurological symptoms are meant to serve as a goodoption.

Keywords: hangman fracture, neck pain, emergency medicine



Figure 1. hangman fracture(type-2)

P-101

[Acil Tıpta Görüntüleme]

HANGMAN FRACTURE

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Objectives: The hangman's fracture and traumatic spondylolisthesis of axis are termsused to explain a specific C2 posterior column fracture. Although true mechanism of hangman'sfracture is hyperextension and distraction of upper cervical spine with severe cordinjury, traumatic axis pediclefractures are caused by extension and compression of upper cervical spine usually with less probability of cordinjury



Figure 2. Hangman fracture(type-2)

P-102

[Acil Tıpta Görüntüleme]

FAHR DISEASE

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Objectives: Fahr's is a familial disease which characterized with presence of wide and progressive calcifications in basal ganglia, cerebellar nucleus and deep cortical anatomical structures. Calcifications may be shown by computerized tomography provided for another reason. The clinic manifestations of the disease are variable but commonly progressive mental disorder, tremor, ataxia, dysarthria, convulsion, Parkinson-like symptoms and neuro-psychological disorders may be seen. This kind of cases could be mimicking subarachnoid hemorrhage on admission to emergency. There latered conditions which may cause to Fahr's Disease are anoxia, radiation, systemic disorders, toxins, disorders of calcium metabolism and encephalitis.. Here, we presented a patients with headache which were diagnosed as Fahr's Disease.

Case: 45 year-old male patient was admitted our clinic with complaints of headache continued for 1 year. The patient's pain was showed propagation taken from head to neck. His headache was respond to analgesics. Neurological examination was natural, personal and family history was unremarkable. Biochemical analysis Ca, parathyroid hormone (PTH), thyroid and liver function tests were normal. Brain CT scans; In bilateral cerebellar dentate nucleus, bilateral thalamus, bilateral basal ganglia and bilateral centrum semiovale hyperdense areas of calcification were observed. As a result of the examination to the patient was diagnosed with Fahr's disease. For Headaches were treated symptomatically. Fahr's disease patient was discharged with recommendations for follow-up.

Conclusion: When bilateral diffuse calcifications found in cranial CT and If we can not connect to any etiological factors of pathology, in the differential diagnosis of Fahr's disease should consider. In these cases usually detected incidentally, the underlying etiologic factors such as of hypoparathyroidism can be

treated well, we must be thoroughly examined in the underlying pathology. In the future Extraparasympathetic signs, progressive mental damage, epilepsy, Parkinson's disease and cerebellar symptoms can be occurred Even if these cases are asymptomatic, long-term follow up is necessary.

Keywords: Fahr disease, Intracerebral calcification, Radiological view



Figure 1. Bilateral symmetric calcifications in basal ganglia and thalamus

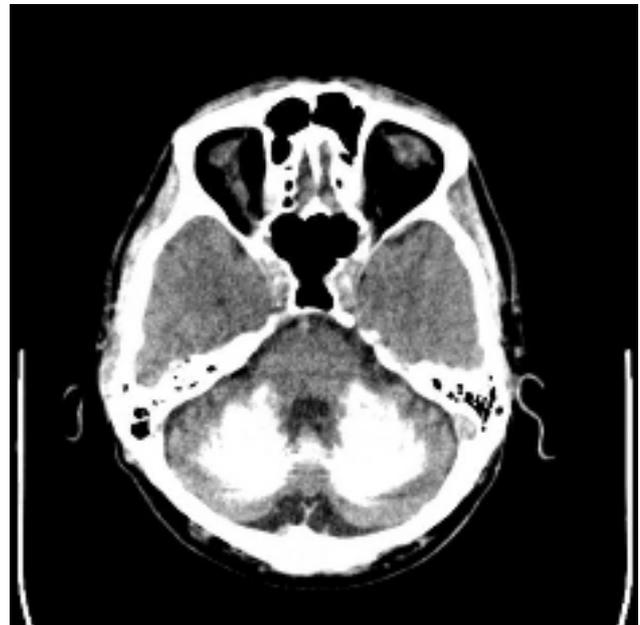


Figure 2. bilateral cerebellar calcification

MENETRIER DISEASECihan Bedel¹, Sefa Türkoğlu³, Hatice Aslı Bedel², Erkan Duman¹¹Suleyman Demirel University Faculty of Medicine, Emergency Department, Isparta, Turkey²Akdeniz University Faculty of Medicine, Pharmacology Department, Antalya, Turkey³Suleyman Demirel University Faculty of Medicine, Radiology Department, Isparta, Turkey

Objectives: Menetrier's disease is an uncommon condition of unknown etiology. It is characterized with giant hypertrophic mucosal folds of the stomach and associated with loss of protein from the mucosa. In this case we want to draw attention to Menetrier disease in a patient who was presenting with abdominal pain, weight loss, swelling of the feet.

Case: 62-year-old female patient admitted to the emergency department with complaints of abdominal pain, swelling in the feet, weight loss which had been for 2-3 months. On examination, there was tenderness in the epigastric region, rebound and the defense did not. Pain was stubborn character but not cramping. She has hypertension disease, she did not have any other systemic disease or not using any drug. Although not receive any treatment, she had a history of peptic ulcer. Physical examination she was cachectic, bilateral pretibial edema 2+/2+, the other examination was normal. His general condition was good. Blood pressure of 140/90 mmHg, body temperature: 36.4, heart rate: 72/min, respiratory rate 16, GCS: 15. Laboratory tests: hemoglobin: 10.6gr/dl, albumin: 2.1 g / dl, total protein 4.2 mg / dl, There was no free air in the patient's chest radiograph. In abdominal computed tomography rugal folds in the stomach corpus and fundus was found thickening. The scene was consistent with Menetrier disease. She was hospitalized in the gastroenterology service with a diagnosis of hypoproteinemia and Menetrier.

Conclusion: Menetrier's disease is observed often from 30 to 60 years of age in adult men (75%). Inpatients are the most common symptoms epigastric pain, weight loss, vomiting, gastrointestinal bleeding and diarrhea. Menetrier's disease is a rare disease, although in the presence of heavy hypoproteinemia any cause. A patient with hypoproteinemia and abdominal pain, Menetrier disease should be kept in mind

Keywords: Menetrier, abdominal pain, emergency medicine



Figure 1. rugal fold marked thickening of the gastric corpus and fundus

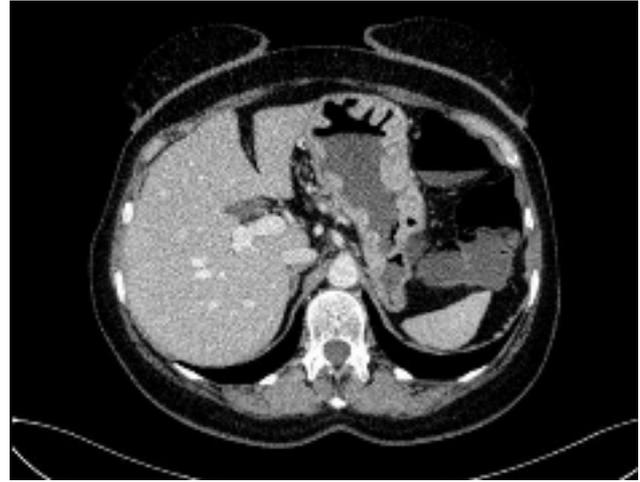


Figure 2. Rugal folder marked thickening of the gastric corpus and fundus

COELIAC ARTERY COMPRESSION SYNDROMECihan Bedel¹, Sefa Türkoğlu², Gürsel Çetinkaya², Tuna Parpar²¹Suleyman Demirel University Faculty of Medicine, Emergency Department, Isparta, Turkey²Suleyman Demirel University Faculty of Medicine, Radiology Department, Isparta, Turkey

Objective: Celiac artery compression syndrome, also called median arcuate ligament compression syndrome, causes gastrointestinal ischemia secondary to compression of the proximal portion of the celiac artery just beyond its origin by the median arcuate ligament of the diaphragm. However abdominal pain and weight loss may be symptoms of median arcuate ligament syndrome, also known as celiac artery compression syndrome or Dumbarton syndrome. It typically develops in healthy young and middle-aged individuals. The diagnosis requires the exclusion to other causes of upper gastrointestinal pathology. A young patient who was admitted to our clinic with abdominal pain complaint was found to have celiac artery compression syndrome.

Case: 27-year-old male patient admitted to the emergency department with complaints of abdominal pain, nausea, weight loss which had been for 2-3 months. On examination, there was tenderness in the umbilical region, rebound and the defense did not. Although analgesic treatment, Postprandial abdominal pain did not have passed for 6 hours. Although not receive any treatment, she had a history of peptic ulcer. Physical examination she was cachectic and the other examination was normal. His general condition was good. Blood pressure 140/90 mmHg, body temperature: 36.4, heart rate: 72/min, respiratory rate 16, GCS: 15. Laboratory tests: WBC 11,200 / ul, AST 30 U / l ALT: 18 U / l total bilirubin: 0.58 direct bilirubin: 0.12, alkaline phosphatase 101 U / l. There was no free air in the patient's chest radiograph. Ultrasonography was normal. Abdominal computed tomography was: The median arcuate ligament compressed of the celiac trunk ostia. The patient was admitted to general surgical service for further evaluation and treatment.

Conclusion: A patient presented to the emergency department, who is young-middle age, weak, men, has a postprandial abdominal pain especially celiac artery compression syndrome should be kept in mind

Keywords: abdominal pain; celiac artery, emergency medicine

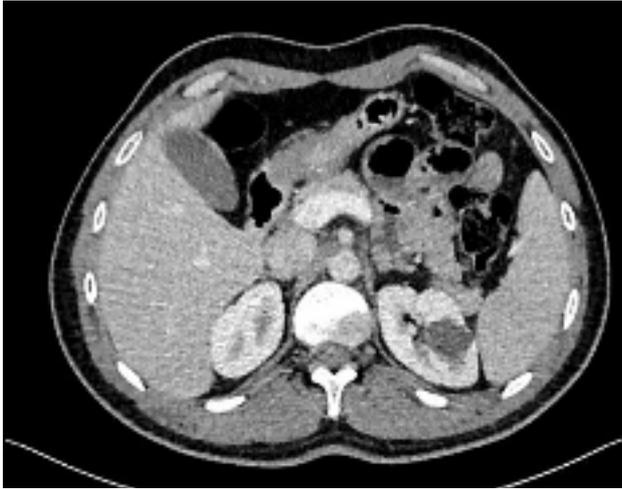


Figure 1. The median arcuate ligament compressed of the celiac trunk ostia



Figure 1. a heterogeneous lesion area approximately 1x1.5 cm in size consistent with inflammation around the opacities in descending colon adjacent mesenteric fat plans

P-105

[Acil Tıpta Görüntüleme]

AN UNUSUAL CAUSE OF ACUTE ABDOMINAL PAIN: PRIMARY APPENDAGITIS EPIPLOICA

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Objective: Primary appendagitis epiploica (PAE) is a rare disease due to torsion or spontaneous thrombosis of the central draining vein of the colon and causes acute abdominal pain. PAE is a self limiting disease and it doesn't usually require surgical intervention. But it can mimic conditions such as appendicitis, diverticulitis, cholecystitis that definitely need surgical interventions or aggressive medical treatment. Because of this, the correct diagnose of PAE is very important in order to prevent unnecessary surgical interventions or hospitalisations. In this paper, we present a patient that examined because of acute abdominal pain and then diagnosed with PAE.

Case: 32 year old male patient was admitted to the emergency department with fever, sudden abdominal pain, nausea, vomiting. The pain character stabbing and sharp. The violence had increased steadily in hours and had secured a spot in the left lower quadrant abdominal. There was no nausea, vomiting, diarrhea, or high fever with pain. On physical examination, especially at a point in the left lower quadrant was severe tenderness and defense. His general condition was good. Blood pressure 140/90 mmHg, body temperature 37.4, heart rate: 92/min, respiratory rate: 20 GCS: 15 Laboratory tests: hemoglobin 16.2 g / dL, hematocrit 48%, WBC 13,900 / ul, Preliminary diagnosis of diverticulitis in patients abdominal CT: there were a heterogeneous lesion area approximately 1x1.5 cm in size consistent with inflammation around the opacities in descending colon adjacent mesenteric fat plans. Radiological findings were compatible with PAE. The patient was admitted to general surgical service for further evaluation and treatment.

Conclusion: PEA, presenting with nonspecific abdominal pain and physical examination and laboratory findings in patients with acute abdominal pain that is questionable is a disease that should be kept in mind.

Keywords: Apendajitis epiploica, abdominal pain, emergency medicine

P-106

[Acil Tıpta Görüntüleme]

RARE CAUSE OF ACUTE ABDOMEN: SPLENIC ARTERY ANEURYSM RUPTURE

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Objective: Splenic artery aneurysm is the most seen aneurysm type of the splanchnic artery layer and has the third frequency after the aortic and iliac artery aneurysms within the abdominal aneurysms. It has clinical importance because of the bleedings that can result with mortalities. Approximately over 75% of cases can result with mortality early diagnosis is very important. In this article, we wanted to present with you a patient who presented with abdominal pain detected rupture of SAA.

Case: 55 years old female patient was admitted to the emergency department with sudden onset of abdominal pain. The pain character stabbing and sharp. Violence has increased steadily in hours. There was no nausea, vomiting, diarrhea with pain. On physical examination, diffuse abdominal tenderness and sensitivity showed signs of peritoneal irritation. There was no history of abdominal trauma Her general condition was medium, she had cooperative orientation. Blood pressure 80/50 mmHg, body temperature: 36.4, heart rate: 112/min, respiratory rate: 20 GCS: 15 Laboratory tests: hemoglobin: 8.1 g / dL, WBC 12,500 / ul, the other values are normal. Bleeding profile values was normal. Abdominal CT; in the anterior lower pole of the spleen, 6mm in diameter was detected in the contrast-enhancing areas. Detected in the near area, there was dense liquid content. The scene was consistent with splenic artery aneurysm rupture. There was diffuse abdominal hemorrhagic mass. Patients were operated on emergency general surgery.

Conclusion: Despite the fact that usually asymptomatic, may result in high rates of mortality due to complications with the SAA early diagnosis is important.

Keywords: Splenic artery aneurysm, rupture, abdominal pain



Figure 1. in the anterior lower pole of the spleen, 6mm in diameter were detected in the contrast-enhancing areas.



Figure 2. in the anterior lower pole of the spleen, 6mm in diameter were detected in the contrast-enhancing areas.

P-107

[Acil Tıpta Görüntüleme]

KIENBOCK'S DISEASE

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Objective: Kienbock's disease may be described as avascular necrosis of the lunate with consequent morphologic and biomechanical changes. Midcarpal pain is the usual presenting symptom. Intense pain in the midcarpal area with passive dorsiflexion of the third finger may be observed. Pain in the radioscapoid interval is usually associated with carpal collapse. It begin slowly, may increase the effect in the weeks and months. Resting pain is an important finding. Kienbock disease usually affects the dominant wrist of men aged 20-40 years. The primary methods of nonoperative treatment are immobilization and anti-inflammatory medications. In this case we aimed to present a man with Kienbock's disease who presented to emergency department with non-traumatic wrist pain

Case: 27 year old female was admitted to the emergency department complaining of wrist pain. He had no trauma history. His pain deteriorated last two years. X-ray of the right wrist of patient demonstrated sclerosis, cystic appearance and

irregularity in lunate bone. Irregularities, loss of volume and diffuse low-intensity appearance were observed in lunate bone on T1-weighted MR images. T2-weighted fat-saturated MR images demonstrated diffuse hyperintensity in the same area which is suggested bone-marrow edema. These findings were determined as the changes with related osteonecrosis of the lunate bone. Restings planned and antiinflammatory treatment were given to the patient. The patient was consulted to the department of orthopedics and traumatology. Patient refused operation. Pain, swelling and limitation of ROM of the patients improved after 3 weeks

Conclusion: Kienböck's disease should be into account in the differential diagnosis of patients having pain, swelling and limitation of ROM in wrist.

Keywords: Kienbock's disease, pain, emergency medicine



Figure 1. Sclerosis, cystic appearance and irregularity in lunate bone



Figure 2. Osteonecrosis of the lunate bone.

CHILAITIDI SYNDROMECihan Bedel¹, Gürsel Çetinkaya², Tuna Parpar², Erkan Duman¹¹Suleyman Demirel University Faculty of Medicine, Emergency Department, Isparta, Turkey²Suleyman Demirel University Faculty of Medicine, Radiology Department, Isparta, Turkey

Objective: Chilaiditi syndrome is a rare syndrome, which is generally asymptomatic. Chilaiditi syndrome is a condition arising from interposition of hepatic flexure or small intestine between liver and diaphragm intermittently or constantly. This syndrome is usually asymptomatic and diagnosis is usually made radiological and named as Chilaiditi sign. However, this depends on the situation as nausea, vomiting, abdominal pain, gas distention, intermittent intestinal obstruction, respiratory distress and other complaints may occur when symptomatic syndrome is defined as Chilaiditi syndrome. In our case we aimed to Chilaiditi syndrome who presented with abdominal pain

Case: 80 year old male patient was admitted to the emergency department with sudden abdominal pain, nausea, vomiting and constipation. The pain was cramp style. Pain was localized to the right hypochondrium and did not show propagation. On physical examination, There was no abdominal tenderness and defense, in auscultation bowel sounds were in the right lower lung zone. His general condition was good. Blood pressure 140/90 mmHg, body temperature: 36.4, heart rate: 82/min, respiratory rate: 20 GCS: 15. Laboratory tests: hemoglobin: 9.9 g/dL, WBC 7,500 / pl. On abdominal X-ray in the descending colon and transverse colon had gas dense. On chest radiographs there was a air image between the diaphragm and the liver. Abdominal CT showed column displace to hepatodiaphragmatic region. There was no immediate pathology. Abdominal pain disappeared with fluid replacement and enema. The Patient was discharged with General surgery clinic control

Conclusion: Chilaiditi syndrome is an unusual disorder. Usually it is asymptomatic but in some patients it may be symptomatic and surgical treatment may be necessary. Hence Chilaiditi syndrome should be thought in differential diagnosis of abdominal pain.

Keywords: Chilaiditi syndrome, abdominal pain, emergency medicine



Figure 1. Column displace to hepatodiaphragmatic region.

SPONTANEOUS ISOLATED DISSECTION OF THE SUPERIOR MESENTERIC ARTERYCihan Bedel¹, Gürsel Çetinkaya², Sefa Türkoğlu², Hasan Ali Ekşili², Erkan Duman¹¹Suleyman Demirel University Faculty of Medicine, Emergency Department, Isparta, Turkey²Suleyman Demirel University Faculty of Medicine, Radiology Department, Isparta, Turkey

Objective: Isolated spontaneous dissection of the superior mesenteric artery (SMA) with out aortic involvement is a rare event. Diagnosis may have been difficult in the past, but recent advances in imaging modality and knowledge of mesenteric arteries disease have rendered diagnosis easy. The etiology of spontaneous SMA dissection is hypertension arteriosclerosis, fibromuscular dysplasia, congenital connective tissue disorders, trauma, iatrogenic. A true isolated SMA dissection is a relatively rare clinical cause of abdominal pathology. The natural history of the disease is also unclear and depends on each case. Most patients present with acute epigastric pain, which is considered to be caused by the dissection itself or intestinal ischemia. Other common symptoms are nausea, vomiting, melena, and abdominal distention. In this case we aimed to present a man with dissection of the superior mesenteric artery who presented to emergency service with abdominal pain.

Case: 55 years old male patient was admitted to the emergency department with complaints with sudden onset of abdominal pain, nausea and vomiting. The pain character stabbing and sharp. Pain started in the epigastric region and spread to the whole abdomen. Violence had increased steadily in hours. Inpatients had known history of hypertension and used antihypertensive drugs. He didn't have any other disease and not using any other drug. On physical examination, diffuse abdominal tenderness and sensitivity showed signs of peritoneal irritation. There was no history of abdominal trauma. Her general condition was medium, she had cooperative orientation. Blood pressure: 190/100 mmHg, body temperature 37.4, heart rate: 112/dk, respiratory rate: 20 GCS: 15. Laboratory tests: hemoglobin: 14.2 g/dL, WBC 29,700 / ul, platelets: 94.000/pl, creatinine 1.35 g/dL, sodium 137 mmol/L, potassium 3.63 mmol/L AST 78 U/L ALT: 82 U/L total bilirubin: 1.25 mg/dl direct bilirubin: 0.51 mg/dl lipase: 11 U/L, alkaline phosphatase 89 U/L. Abdominal CT was requested with preliminary diagnosis of mesenteric ischemia. Abdominal CT; After 5 cm from the superior mesenteric artery ostia, there were dissection in 4 cm length, distal branches were observed to be normal. General surgery was consulted. The patient was admitted to general surgical service for further evaluation and treatment.

Conclusion: The superior mesenteric artery dissection, presenting with nonspecific abdominal pain and physical examination and laboratory findings in patients with acute abdominal pain that is questionable is a disease that should be kept in mind.

Keywords: dissection, superior mesenteric artery, emergency medicine

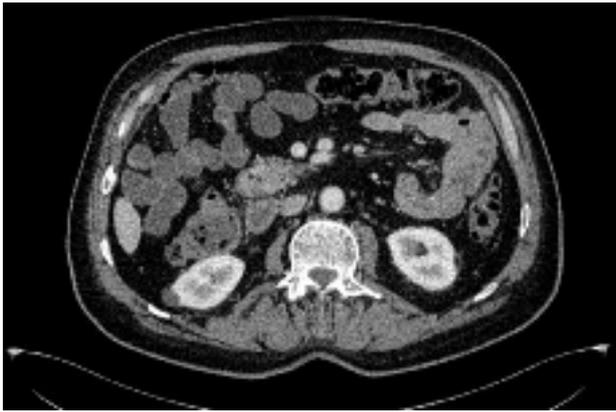


Figure 1. After the superior mesenteric artery ostia, there were dissection



Figure 2. After the superior mesenteric artery ostia, there were dissection

P-110

[Acil Tipta Görüntüleme]

SUPERIOR MESENTERIC ARTERY (WILKIE'S) SYNDROME

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Objective: Superior mesenteric artery (SMA) syndrome is a rare clinical condition caused by compression of the third portion of the duodenum by the SMA. Vomiting associated with significant weight loss, epigastric pain, and postprandial discomfort are main symptoms. There are medical and surgical approaches to treatment. In our case we aimed to Superior mesenteric artery (SMA) syndrome who presented with abdominal pain.

Case: 21-year-old male patient admitted to the emergency department with complaints of abdominal pain, nausea, weight loss which had been for 2-3 months. On examination, there was tenderness in the umbilical region, rebound and the defense did not. Although analgesic treatment, postprandial abdominal pain did not have passed for 6 hours. Although not receive any treatment, she had a history of peptic ulcer. Physical examination she was cachectic and the other examination was normal. His general condition was good. Blood pressure 130/90 mmHg, body temperature: 36.7, heart rate: 72/min, respiratory rate 16, GCS: 15. Laboratory tests was normal. There was no free air in the patient's chest radiograph. On the patient's pain does not exceed. The patient's ultrasound normal. Contrast-enhanced

abdominal computed tomography: Duodenum Part 3 were trapped between superior mesenteric artery, veins the aorta. Scene was consistent with Superior mesenteric artery (Wilkie's) syndrome. Patients was admitted to general surgical for further evaluation and treatment

Conclusion: Superior mesenteric artery syndrome is a rare condition which presenting with epigastric pain, nausea and vomiting. Reason can not be found, in patients presenting to the emergency department with complaints of abdominal pain, nausea and vomiting Superior mesenteric artery syndrome in the differential diagnosis should be kept in mind.

Keywords: superior mesenteric artery syndrome, abdominal pain, emergency medicine



Figure 1 Duodenum Part 3 were trapped between superior mesenteric artery, veins the aorta

P-111

[Acil Tipta Görüntüleme]

SIGMOID COLON VOLVULUS

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Objective: Colonic volvulus, specifically sigmoid volvulus, is the third leading cause of large-bowel obstruction after carcinoma and diverticulitis in Western countries. Clinical manifestations are abdominal pain, distention, constipation and vomiting. The coffee bean sign is a classic conventional radiographic finding of sigmoid volvulus. Sigmoid volvulus requires early recognition and treatment. A combination of emergent on surgical decompression and elective sigmoid resection has the lowest mortality rate (5-10) among the therapies. If there is evidence of bowel gangrene, urgent resection carries a much higher mortality rate of 50%-70%. We reported a case of sigmoid volvulus in a 85 year old male presented with abdominal pain and distension.

Case: 83 year old male patient was admitted to the emergency department with sudden abdominal pain, nausea, vomiting and constipation. The pain was cramp style. On examination abdomen was distended and wide spread tenderness, rebound and defense. Blood pressure 140/90 mmHg, body temperature: 36.4, heart rate: 82/min, respiratory rate: 20 GCS: 15. An abdominal radiograph showed dilated intestinal loops with air-fluid levels. Laboratory tests: WBC 9000 / pl, creatinine 1.44 mg / dL. Abdominal radiograph of the patient had in the dilated bowel loops and air-fluid levels. Radiological findings is suggestive of sigmoid volvulus, the diagnosis was confirmed

at abdominal CT and additional pathologies were excluded. In patient suggesting volvulus there are no signs ischemia and necrosis, urgent colonoscopy was performed detorsioned. He provided stool out put and then patient was admitted to the general surgery patients

Conclusion: Sigmoid volvulus is an important condition that immediate diagnosis and must be treated. Endoscopic decompression should be the first choice for suitable patients. Surgical treatment is inevitable if ischemia, gangren or perforation is present or if endoscopic decompression fails.

Keywords: Sigmoid colon volvulus, abdominal pain, obstruction, emergency medicine



Figure 1. Sigmoid colon volvulus

P-112

[Acil Tıpta Görüntüleme]

NUTCRACKER SYNDROME

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Objective: Nutcracker syndrome is a vascular compression disorder, and refers to the compression of the left renal vein between the superior mesenteric artery (SMA) and aorta. As a result of this pathology, symptoms and signs such as hematuria, proteinuria, renal venous hypertension, left flank pain occur. In our case we aimed to Nutcracker syndrome who presented with flank pain, nausea, hematuria.

Case: 22-year-old male patient was admitted to our emergency department with a complaint with flank pain, nausea, hematuria. On examination, he had umbilical region and costovertebral angle tenderness, rebound and defense did not. Physical examination she was cachectic and the other examination was normal. His

general condition was good. Blood pressure 140/80 mmHg, body temperature: 36.4, heart rate: 80/min, respiratory rate 16, GCS: 15. Laboratory tests; urine test: hematuria +3 proteinuria +2. There was no free air in the patient's chest radiograph. On the patient's pain does not exceed. The patient's ultrasound normal. In contrast-enhanced abdominal computed tomography: the left renal vein was trapped between the superior mesenteric artery and the aorta and there were proximal dilatation. Scene was consistent with Nutcracker syndrome. The patient was admitted to the internal medicine service for further evaluation and treatment.

Conclusion: In emergency service patients who presenting with symptoms of flank pain and hematuria, Nutcracker syndrome in the differential diagnosis of renal colic should be kept in mind

Keywords: Nutcracker syndrome, flank pain, hematuria, emergency medicine



Figure 1. Compression of the left renal vein between the superior mesenteric artery (SMA) and aorta

P-113

[Acil Tıpta Görüntüleme]

PNEUMATOSIS INTESTINALIS

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Objective: Hepatic portal venous gas in adults is a rare clinical entity. Pneumatosis intestinalis is a pathology characterized by many pneumatic cysts in the gut wall that is associated with the damage in the gut wall because of necrosis. In this article, a case that had hepatic portal venous gas and pneumatosis intestinalis related to a mesenteric ischemia is presented

Case: 80 year old male patient was admitted to the emergency department with sudden abdominal pain, nausea, vomiting and constipation. The pain was cramp style. On examination abdomen was distended and widespread tenderness, rebound and defense. He had a history of chronic renal failure, he had known any other disease. His general condition was bad. Blood pressure 100/60 mmHg, body temperature: 36.4, heart rate: 62/min, respiratory rate: 13 GCS: 15. Laboratory tests: hemoglobin: 10.3 g / dL, hematocrit 31.5%, WBC 8,900 / pl, platelets: 237.000 / pl, glucose: 124 mg / dL, urea 147 mg / dL, creatinine 6:52 mg / dL. Patient abdominal ultrasonography in the intrahepatic bile duct, portal vein in the walls had air. Preliminary diagnosis of mesenteric ischemia abdominal CT was requested. Abdominal CT: there was air in the distal branches of Superior mesenteric arteries and portal system. There was air values of bowel loops in the Wall. Scene was consistent with pneumatosis intestinalis.

Patients was admitted to the general surgical service for further examination.

Conclusion: This radiological image was extremely rare and associated with high mortality of attention to possible reasons and rapid intervention to prevent mortality rate is recommended

Keywords: pneumatosis intestinalis, abdominal pain, emergency medicine



Figure 1. Air in the portal system and bowel loops in the wall.

P-114

[Acil Tıpta Görüntüleme]

HYPERDENSE BASILAR ARTERY SIGN AS AN EARLY SIGN OF ISCHEMIC STROKE

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Introduction: Hyperdense basilar artery is the sign when hyperattenuated basilar artery is observed in acute occlusion of basilar artery on nonenhanced computed tomography. It's a true neurointerventional emergency and patients may develop unconsciousness and death if left untreated.

Case: A 53 year old woman presented to emergency department after sudden loss of consciousness and cardiovascular collapse. Her medical story significantly consisted prosthetic mitral valve replacement with atrial fibrillation. She had a brief period of vertigo and had a sudden dizziness and after several minutes she developed agonal breathing. An emergency medical service team brought the patient to ED with bag valve mask support.

At admission, patient had pulseless electrical activity and after 2 minutes of chest compression, she regained pulse. Patient's international normalization ratio was 1.61. Because she had brief neurologic signs after collapse, a non-contrast enhanced computed tomography of the head performed and hyperdense basilar artery was noticed with a density of 83 Hounsfield Unit (HU). Basilar stroke due to basilar artery thrombosis was suspected and diffusion-weighted magnetic resonance imaging showed hyperintensity from mesencephalon and pons to bilateral basal ganglions.

During radiologic imaging and ED stay, patient failed to regain consciousness without spontaneous breathing and was

on ventilator. Since our hospital lacks a dedicated stroke unit, patient didn't receive thrombolytic and was transferred to another hospital's intensive care unit due to inavailable of hospital beds.

Discussion: Hyperdense basilar artery is the earliest sign on CT and its' presence is highly descriptive of occlusion. Typical blood in arteries in unenhanced CT scans has a density of around 40 HU effectuated by flowing unclotted blood. When a thrombus forms, occluding erythrocytes and debris behind cause a rise in hemoglobin and attenuation rises to approximately 80 HU. Hyperdense artery sign was first described in middle cerebral artery but other sites for possible HDA include carotid, basilar, anterior and posterior arteries. Although hyperdense basilar artery is a predictor of poor outcome, its' presence is not a contraindication for intravenous or intraarterial thrombolytics. Early medical intervention favors better outcomes.

Keywords: basilar artery, thrombosis, brain stem infarction

CT



Figure 1. Noncontrast computed tomography of head showing hyperattenuated basilar artery with density of 83 Hounsfield Unit

MR

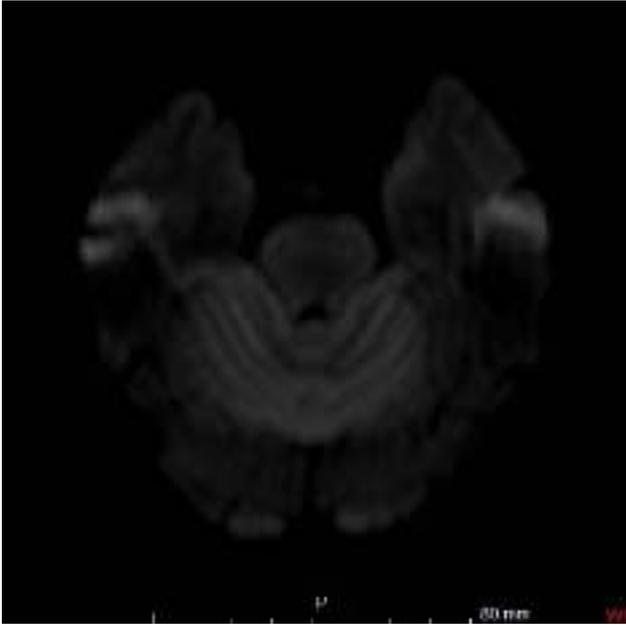


Figure 2. Diffusion weighted magnetic resonance of brain showing hyperintensity from mesencephalon and pons to bilateral basal ganglions.

stent was inserted. Urine culture yielded *Proteus Mirabilis*. The patient was discharged with his own wil after a week.

Discussion: Emphysematous Pyelonephritis is rare infection of urinary tract. It was first described in 1898 by Kelly and MacCallum. It's commonly seen in diabetic women. Gas in the renal parenchyma, collecting system and perinephritic tissues is pathognomonic of emphysematous pyelonephritis. The most common causative organisms are *Esherichia coli* (60%), *Klebsiella* (20%), *Citrobacter* (10%), *Enterococcus* (10%) and *Proteus* species (10%). The CT scan is mandatory for the diagnosis. Emphysematous Pyelonephritis is divided into four based on the extent of gas on CT by Huang and Tseng. Class 1 and 2 have a best prognosis. Administered of intravenous antibiotics and insertion of percutaneous catheter drainage are done in mild cases. In severe case are often warrants a nephrectomy. Mortality rate was 15-20%. A high index of suspicion is very important in the diagnosis.

Conclusion: Emphysematous Pyelonephritis is a serious clinical condition with a significant mortality. In particular, it should be considered in diabetic patients who detected complicated urinary tract infection.

Keywords: Emphysematous Pyelonephritis, diagnostic imaging, urinary tract infection

P-115

[Acil Tıpta Görüntüleme]

AIR IN THE KIDNEY: A CASE REPORT OF EMPHYSEMATOUS PYELONEPHRITIS

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Introduction: Emphysematous Pyelonephritis is a severe necrotizing infection of kidney resulting in gas formation in the renal parenchyma, collecting system or perinephric tissue. We presented a case of emphysematous pyelonephritis diagnosed on computerized tomography (CT).

Case Report: A 48 year old man presented to the emergency department with left flank pain. He had had history of diabetes mellitus, nephrolithiasis and right nephrectomy related with nephrolithiasis. On admission, his vital signs were stable and glucostick was high. Physical examination revealed costovertebral angle tenderness without rebound and guarding. The initial laboratory test showed a leukocytosis of 6.800/ul, hemoglobin of 12.4 g/dl, serum glucose of 1031 mg/dl, urea of 89 mg/dl, creatinine of 2.9, natrium of 113 mmol/L and potassium of 4.5 mmol/L. On arterial blood gases analysis, pH, PCO2, PO2, HCO3 and base deficit were found to be 7.36, 28.7, 77.3, 15.9 and -10.9 respectively. Urinalysis showed 3+ erythrocyte, 3+ leukocyte and 3+ glycosuria. Non-contrasted computerized tomography (CT) of abdomen was performed. CT revealed an approximately 2cm stone in the lower pole of the left kidney, left ureteral dilatation, gas within the left parenchymal and pelvicalyceal system (figure 1). Also, there were appearances of the air-fluid and 8 cm space occupying lesion in the urinary bladder (figure 2).

The patient was admitted to the hospital with diagnosis of emphysematous pyelonephritis. Intravenous antibiotic (ceftriaxone 2 g BID) was started on the same day and a left JJ

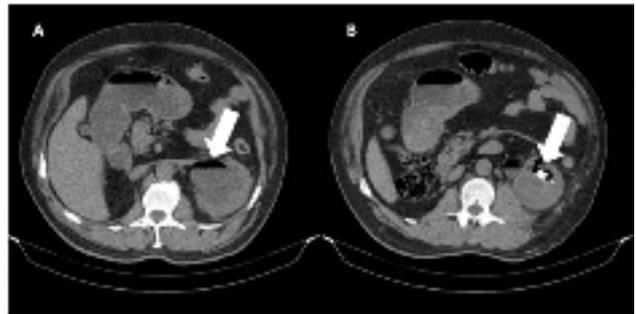


Figure 1.



Figure 2.

RETROSPECTIVE ANALYSIS OF WHOLE-BODY MULTISLICE COMPUTED TOMOGRAPHY FINDINGS TAKEN IN TRAUMA PATIENTS

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Objective: Using Whole-Body Multislice Computed Tomography (MSCT) excessively or with irrelevant indications can be seen in many centers. The aim of this study was to analyze retrospectively the MSCT findings in trauma patients admitted to the emergency department.

Materials and Methods: Records of the patients who have applied to the emergency department due to blunt trauma in a 12 month period and whose whole body MSCT images have been taken, were evaluated using the "Nucleus Medical Information System". A total of 210 cases over eighteen years were included in the study.

Results: Of these 210 patients, 161 were male and 49 were female. Age range was 19-79 years, and the mean age was 38.4 ± 15.4 years. The most frequent type of trauma was traffic accidents in 61.4%, falling down from the height in 22.4%, and motorcycle accidents in 11.4% of patients. Of the patients, 25.2% were discharged from the emergency, while 73.8% were hospitalized. Two patients (1%) died in the emergency department. At least one CT findings associated with trauma was present in 61.4% of our patients. Pathological findings in MSCT were most frequently detected in the head and face (35,3%) and thoracic (28,6%) regions, respectively (Figure 1). The most common finding in the head and face region was fractures. In 28.6% of the patients, abnormal findings were found in the thoracic region. The most common pathological findings in the thoracic region were pulmonary contusion and rib fractures. Genitourinary system was the region where pathological findings were the least (1,5%) A significant relationship was detected between trauma type and spinal MSCT result ($p < 0.001$). In a large percentage of the patients, MSCT findings were normal in the abdominal region and genitourinary system. Vertebral fractures were most frequently detected in the thoracolumbar region.

Conclusion: In our study, our rate of negative CT was found to be 38.6%, which is a higher ratio compared to other studies conducted on this topic.

Keywords: emergency, trauma, whole-body multislice computed tomography

Figure 1. Distribution of the MSCT findings according to body parts

Table 1. Data of trauma patients with MSCT scan

		n	%
Gender	Male	161	76,7
	Female	49	23,3
Arrival time	08:00-11:59	27	12,9
	12:00-17:59	68	32,4
	18:00-23:59	83	39,5
	24:00-06:00	32	15,3
Type of trauma	Traffic accidents	129	61,4
	Falling down from the height	47	22,4
	Blunt	5	2,4
	Motorcycle accidents	24	11,4
	Other	5	2,4
Type of intervention	Surgery	86	41,0
	Conservative	124	59,0
Outcome	Discharge	53	25,2
	Admission	155	73,8
	Died	2	1

THE DIAGNOSTIC VALUE OF TWO-POINT COMPRESSION LOWER EXTREMITY ULTRASOUND AND RIGHT VENTRICULAR DILATATION IN THE DIAGNOSIS OF PULMONARY EMBOLISM

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Objective: The objective of this study was to determine the diagnostic performance of right ventricular dilatation and two-point compression ultrasound of lower extremity for DVT by emergency physicians in patients with suspected pulmonary embolism.

Materials and Methods: We performed a prospective observational study using a sample of ED patients suspected pulmonary embolism between May 2012 to July 2013 in the ED of a tertiary care facility. Before the initiation of the study, the local ethics committee approved the protocol. Informed consent was obtained from all patients. During the study period 122 patients were included to the study. Exclusion criteria: 1. Cardiopulmonary arrest 2. Pregnancy 3. The patients who multislice chest CT-angiographic evaluation of can not be done for any reason 4. The patients with known chronic pulmonary hypertension 5. Suboptimal CT-angiography. Wells score, D-dimer, troponin T levels and demographic characteristics were recorded in all patients. Participants had point-of-care focused cardiac ultrasound evaluating right ventricular strain (defined as right ventricular to left ventricular ratio ≥ 1) and bedside 2-point compression ultrasonography for the detection of proximal lower extremity deep venous thrombosis (Figure). All CT angiography studies were interpreted by a senior radiologist within the institution.

Results: The mean age of the study population was 56 ± 1.8 years and 47% of them were male. 41 patients had the final diagnosis of PTE (28 patients had the diagnosis with CTA and 13 patients had the diagnosis with high probability ventilation/perfusion (V/Q) scan).

Right ventricular dilatation was detected in 17 (13.9%) patients, a direct visualization of clot in the lower limbs was present in 11 (9%) patients, and vein was incompressible in 11 (9%)

patients. Sensitivity, specificity, PPV and NPV of right ventricular dilatation to detect PTE were 29% (95% CI: 16.15-45.54) and 93% (95% CI: 86.17 -97.94), PPV 70 % (95% CI: 44.05 - 89.58) and NPV 72 % (95% CI: 62.80 - 80.66 -) respectively. In the appropriate clinical setting, sensitivity, specificity, PPV and NPV of two point compression ultrasound of femoral and popliteal vein to detect thrombus to predict pulmonary embolus were 21 % (95% CI: 10.58 % 37.62 %), 97 % (95% CI: 91.35 % 99.63), PPV 81% (95% CI: 48.24 -97.18), NPV 71 % (95% CI: 61.80 - 79.37) respectively. Sensitivity, specificity, PPV and NPV for diminished response to compression were 78 % (95% CI: 62.38-89.42 %), specificity 2.47 % (95% CI: 0.37-8.65), PPV 28% (95% CI: 20.63- 38.20) NPV 18 (95% CI: 2.82- 51.76) respectively. The sensitivity and specificity, PPV and NPV of a combined ultrasound (right ventricular dilatation, direct visualization of clot in the lower limb, diminished response to compression) were 39% (95% CI: 24.21-55.49), 91 % (95% CI: 82.99- 96.44), 69 % (95% CI: 47.08-86.74) and 74% (95% CI: 65.02-82.94).

Discussion: Only bedside ultrasound was not a sensitive test for the diagnosis of PE in ED patients. The combined strategy did not improve the sensitivity significantly. However, point-of-care ultrasound can contribute to the physician's decision-making when used in conjunction with clinical scoring systems.

Keywords: Embolism, ultrasound, diagnosis

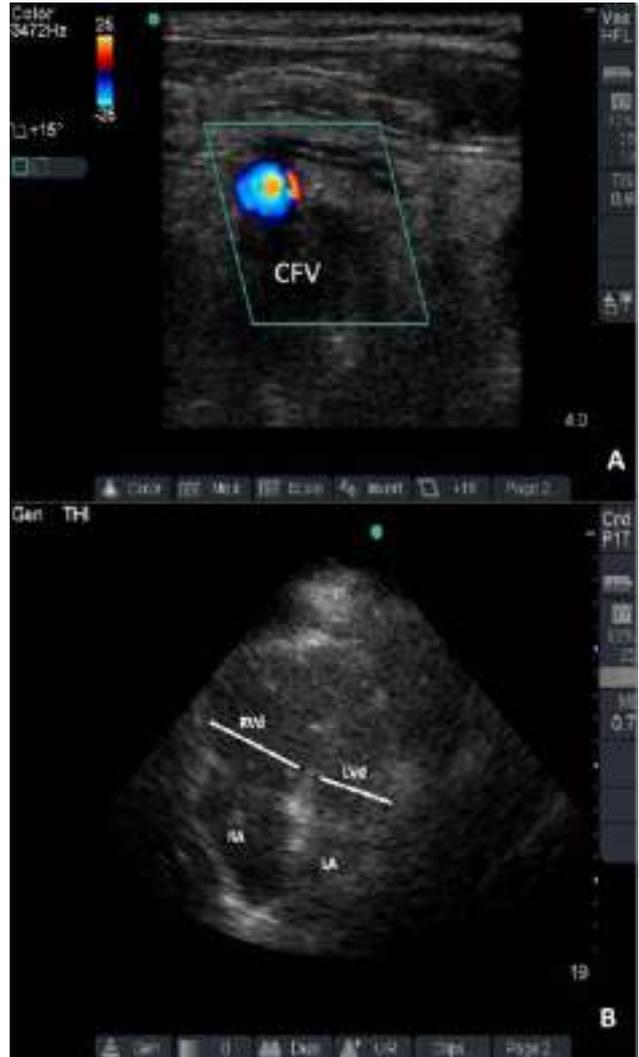


Figure 1. A) B-mode ultrasonography image (with the addition of color flow Doppler) of the right common femoral vein (CFV) and artery with compression. The CFV is still visible with compression and no venous flow. **B)** Apical four chamber of the heart with right ventricle strain as determined by qualitatively comparing the ratio of RV/LV and determining whether RV/LV <1.

P-118

[Acil Tıpta Görüntüleme]

A BENIGN RADIOLOGICAL FINDING; VACUUM PHENOMENON

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Introduction: As initially described by Magnusson and later by Knutsson the vacuum disc is an accumulation of gas residing within the intervertebral disc. Although occurring most often in the lumbar region, it can be found at any spinal level. In all ages, it can be identified in 1%-3% of patients and in 20% of elderly patients. This gas image is seen as a radiolucent area in the synovial space, intervertebral discs and vertebrae. The majority of the gas is nitrogen and the intervertebral disc degeneration is often accused in etiology.

Case: A 74 year old woman admitted to the emergency department because of falling down on her back while she was

walking. Vital signs were as follows: 36°C, blood pressure: 146/91 mmHg, pulse: 83 beats per minute, spO2:%98. There was tenderness in the middle and lower thoracic vertebrae. Other systemic examination was normal. In the computed tomography scanning of thoracic vertebrae, degenerative changes were observed and vacuum phenomenon was observed in the intervertebral disc space. The patient was prescribed a NSAID and she was recommended to admit outpatient clinic for control.

Discussion: Vacuum phenomenon is a common finding in degenerative intervertebral discs. The reason for the accumulation of air in the intervertebral disc space is not clearly understood. Spinal infections and multiple myeloma should be investigated for the least commonly observed etiologies. However many cases of the phenomenon are related to benign causes and do not require any urgent treatment.

Keywords: emergency medicine, emergency radiology, vacuum phenomenon



Figure 1. Vacuum phenomenon

P-119

[Acil Tıpta Görüntüleme]

DO YOU MEAN FOREIGN BODY IN SOFT TISSUES?

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Introduction, aim: Foreign body in human body is encountered in all age groups. Foreign body in soft tissues is generally seen as incidental penetrations, while penetrating part has an extent and access surface that may enter into soft tissue. In emergency department, foreign bodies in soft tissues are frequently observed, while foreign bodies that have challenging shape for penetration to tissue as in our case is rare. It is important to identify mechanism of injury accurately in order to recognize organ injuries with life threatening potential. It is required to exclude additional injuries that may be life threatening. In particular, vascular pathology should be considered in these patients and shouldn't be attempted to blind removal even in the presence of intact vessel in physical examination when trace

of penetrating foreign body is passing an area that may indicate a vessel.

We presented this interesting and rare case to emphasize importance of foreign body penetration into soft tissue in this perspective.

Case: A 32-years old man presented to our emergency department due to fall from roof on face while fixing television antenna on the roof. In primary evaluation in ED, it was seen that the patients was conscious with normal cooperation and orientation and had a wooden object (8-10 cm in diameter and 50 cm in length) which penetrated with access area at anterior aspect of left femur and exit area at gluteal region (figure 1, 2, 3). Blood pressure and heart rate was 130/85 mmHg and 100 bpm, respectively. Both femoral and popliteal pulses were palpable in the involved leg. Trauma radiographs were interpreted as normal and no bone lesion was detected on left femur radiograph. No abnormal finding was detected in neurological examination. After consultation with orthopedics and cardiovascular surgery departments, the patient was taken to operating room where foreign body was removed by sparing vessels and nerves as there was no additional injury other than soft tissue injury. The patient was discharged after follow-up.

Conclusion: It is important to exclude life-threatening injuries due to penetrating foreign body in patients.

Keywords: falls from height, foreign body in soft tissues, Emergency Medicine



Figure 1.



Figure 2.



Figure 3.

P-120

[Acil Tıpta Görüntüleme]

MISSING A 4 CM PNEUMOTHORAX IN TWO FRONTAL CHEST RADIOGRAPHS IN SUPINE POSITION

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Case Presentation: The patient has been brought to our emergency room after falling down from 3 meters height. He had dyspnea and back pain. His vital signs were normal, he had no hypoxia by pulse oximetry. We didn't detect any subcutaneous emphysema, crepitation and he had equal breath sounds on each lung. The portable chest film in the supine position showed no pneumothorax or rib fractures. After the abdominal ultrasound the patient came back to ER and his chest, thoracolumbar x-rays has been taken in the supine position. His lateral thoracolumbar film showed air behind sternum. Then we got a chest CT and there was a 4 cm pneumothorax and a nondeplaced fracture in the sixth rib in the left hemithorax.

Conclusion: We conclude that digital lateral shoot-through radiographs are significantly more sensitive than digital frontal radiographs for the diagnosis of pneumothoraces in supine patients.

Keywords: pneumothorax, lateral, supine, radiograph

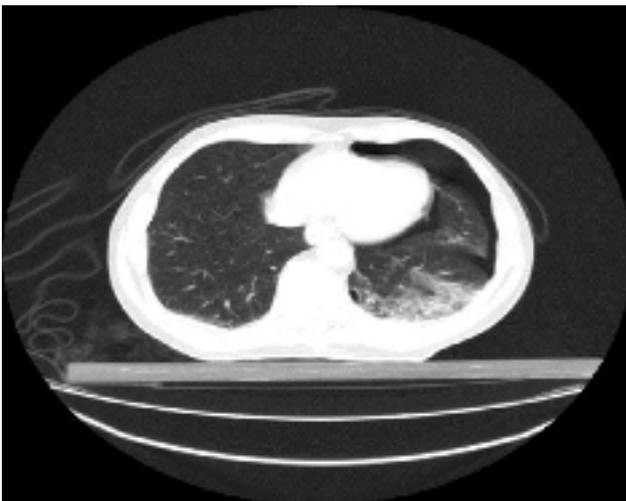


Figure 1. Chest CT



Figure 2. lateral



Figure 3. Portable chest

P-121

[Acil Tıpta Görüntüleme]

SIGMOID VOLVULUS IN AN ELDERLY ADULT: A CASE REPORT

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Introduction: Sigmoid volvulus (SV) is a well-recognized cause of acute large bowel obstruction and delay in recognition can lead to serious complications including morbidity and mortality.

SV is the most common form of volvulus of the gastrointestinal tract; it is responsible for 8% of all intestinal obstructions. Colonic length is one of the most important predisposing factors of SV; other factors include chronic constipation, systemic and local neurologic disease, adhesions, pregnancy, toxins, megacolon, and metabolic disease.

Case: A 67-year-old man was admitted to the our emergency department due to abdominal pain, constipation, nausea-vomiting, and abdominal distention of five days duration.

On clinical examination; vital signs were normal except for a heart rate of 103 per minute. Upon physical examination, a grossly distended abdomen with no rebound was revealed. On auscultation abdominal sounds were absent. Rectal examination showed an empty rectum. Routine laboratory investigations revealed elevated white blood cell of $14.6 \times 10^9/L$, lactate of 8.5 mmol/L (normal $0.5\text{-}1 \text{ mmol/L}$).

The abdominal X-ray and subsequent CT showed massively dilated loops of large bowel (approximately 10 cm) (Figures A, B, C). An urgent sigmoidoscopy showed mucosal necrosis of large bowel. Laparotomy was performed in general anesthesia and SV associated with massively dilated megacolon was appeared. The volvulus were untwisted and total colectomy was performed (Figures D, E).

Discussion: SV is an important surgical emergency which requires rapid detorsion of the affected bowel. Prompt diagnosis is crucial. It should be one of the differentials to be considered in patient presenting with abdominal distension and signs of intestinal obstruction.

Keywords: Sigmoid volvulus; Elderly patient; Emergency Medicine

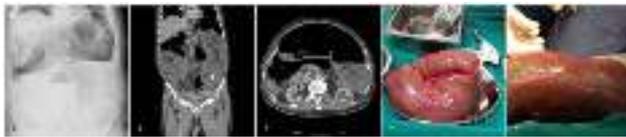


Figure 1. A: Dilated colon segments on abdominal X-ray; **B/C:** SV observed on coronal and axial cross-section with CT; **D/E:** Postoperative view of resected sigmoid colon.

P-122

[Acil Tıpta Görüntüleme]

A RARE CAUSE OF FLANK PAIN: SPONTANEOUS RUPTURE OF A HEPATIC HEMANGIOMA

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Introduction: Hemangiomas are the most common benign tumors of liver. So far, 32 cases of spontaneous hemangioma rupture have been reported.1 We report here a patient diagnosed with a 3-cm hemangioma in 1990 and attended no follow-up appointments thereafter. He presented with sudden-onset right-sided flank pain.

Case: A 75-year-old man presented to our emergency department with right-sided flank pain that began 2 hours ago. Nausea and vomiting accompanied the clinical picture. He had no disorders. On his physical examination he appeared well, and his vital signs were stable. There were upper right quadrant tenderness and right costovertebral angle tenderness upon palpation. Since

cholestatic enzymes were elevated (ALP: 480, GGT: 264), an abdominal USG was planned. He later developed hypotension, pallor, and cold sweating; thus, a control CBC was obtained. Hb level dropped to 10.1 g/dl from a baseline level of 13.3 g/dl. The patient was urgently taken to thoracoabdominal CT angiography and abdominal tomography. A mass lesion of 113x106 mm was found in the medial segment of the left lobe of liver. Besides this hemangioma, there was a 2 cm hemangioma on segment 6 with active contrast extravasation into the peritoneum. (Figure 1) There was also diffuse intraperitoneal hemorrhage. Selective right hepatic artery angiograms revealed active hemorrhage from a hemangioma in the liver segment 6. (Figure 2) The feeder branches of the hemangioma were selectively embolized with polyvinyl alcohol particles. (Figure 3) He was discharged with full recovery after hospital monitoring.

Conclusion: Hemangiomas are the most common benign tumors of liver and are complicated by rupture only in rare cases. Hemangiomas greater than 4 cm are classified as giant hemangiomas. Spontaneous rupture of hemangioma should be remembered particularly in patients with a history of hepatic hemangiomas who present to emergency department with flank and abdominal pain.1-3

Keywords: Emergency, Flank pain, Hepatic hemangioma.



Figure 1. Hemangioma with active contrast extravasation and diffuse intraperitoneal hemorrhage

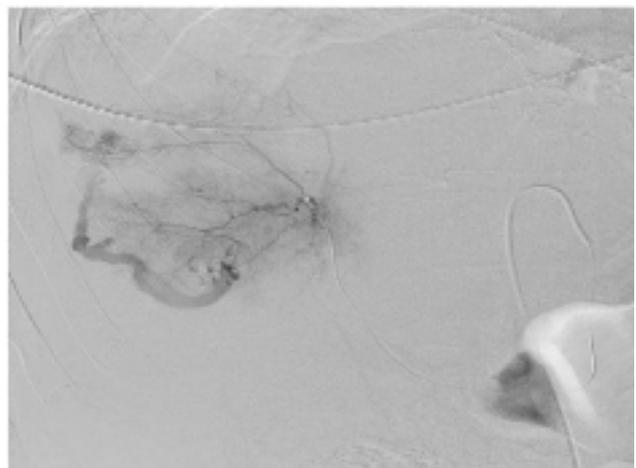


Figure 2. Active hemorrhage on the right hepatic artery angiogram

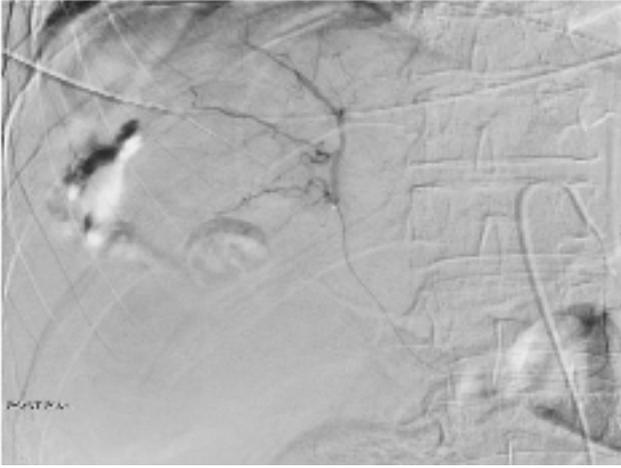


Figure 3. No bleeding after the embolization

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[Acil Tıpta Görüntüleme]

THREE DIMENSIONAL IMAGING BY COMPUTED TOMOGRAPHY GIVES A CLEAR IMAGE FOR RECTAL FOREIGN BODIES

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Rectal foreign bodies are not common in the emergency department they may cause serious conditions due to complications. For detecting foreign bodies especially history, physical examination and radiological investigations can be utilized. In this case we have used three-dimensional computed tomography image, which gives the opportunity to obtain a more clear image.

A 38 year-old man admitted to our emergency department had placed a bottle in the rectum for masturbating. The patient first tried to remove the bottle. As he failed to remove it, he admitted to our emergency department after 8 hours. Abdominal examination was normal. He had pelvic tenderness. To determine the size and location of the object, a computed tomography image was obtained. And then a three-dimensional image was obtained by the reconstruction of the original image. The object was removed via a rectosigmoidoscopic procedure by a general surgeon in the operating room.

In our study, we tried to show three-dimensional imaging would be useful in the diagnosis and treatment phases.

Keywords: Rectal foreign body, computed tomography, three dimensional imaging, emergency department



Figure 1. 3 boyutlu görünüm



Figure 2. 3 boyutlu görünüm

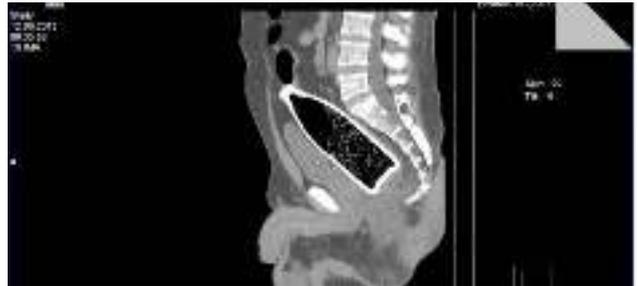


Figure 3. CT görünümü

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[Acil Tıpta Görüntüleme]

THE ETIOLOGY OF ABDOMINAL PAIN IN CIRRHOTIC PATIENT

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Introduction: Portal vein thrombosis is a complication that would occur at a rate of 10-25% throughout the course of disease in cirrhotic patients, although it is rare in healthy population. Chronic portal vein thrombosis is usually asymptomatic and in most cases it is detected incidentally.

Case: A sixty-one-year old man was admitted to the emergency service with constipation and vomiting for ten days. Vital signs were normal. HBV carriage, diabetes, and hypertension were present in his medical history. On physical examination, abdominal distention and diffuse tenderness were detected. Laboratory findings were as follows: white blood cell count $9.6 \times 10^3/\text{mL}$, hemoglobin 12.8 g/dL, creatinine 2.92 mg/dL, urea 29.9mg/dL, AST 22 U/L, ALT 17 U/L, total bilirubin 0.51 mg/dL, pH 7.30, HCO₃ 19 mmol/L, respectively. To elucidate

the etiology of abdominal pain, abdominal contrast-enhanced computed tomography was performed.

Conclusion: Portal vein thrombosis is a complication that can be seen in cirrhotic patients, although rare in healthy population. It is also common in the course of diseases such as malignancy, and myeloproliferative disorders which can cause hypercoagulability.

Portal vein thrombosis may present either with acute or chronic form. Acute portal vein thrombosis appears with pronounced symptoms, whereas chronic portal vein thrombosis usually does not cause severe symptoms and signs; it is mostly detected incidentally on CT scans that are taken for other reasons.

The most commonly used diagnostic method in abdominal imaging is ultrasound, whereas computed tomography scan with contrast medium is the gold standard method. Computed tomography is more reliable in detecting intestinal ischemia and other complications of portal vein thrombosis. Formation of collateral vessels (cavernous transformation) is suggestive of chronic portal vein thrombosis.

Anticoagulant therapy should be initiated in acute portal vein thrombosis. In patients with chronic portal vein thrombosis, anticoagulant therapy is controversial; it should be decided according to benefit-to-harm ratio.

In our case, thrombus was observed lying inside portal, superior mesenteric, splenic vein and renal vein. In our case, insignificant obscure symptoms and examination findings, as well as collateral vasculature detected on tomography monitoring, suggested chronic portal vein thrombosis. Examination of the etiology revealed that venous thrombosis had developed on the basis of cirrhotic liver. The patient was admitted to the general surgical service and anticoagulant therapy was started, and ten days later the patient was discharged uneventfully without any sequela.

As a result, emergency service physicians should consider portal vein thrombosis as a cause of abdominal pain especially in cirrhotic patients.

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Keywords: Portal vein thrombosis, Abdominal Pain, Emergency Department

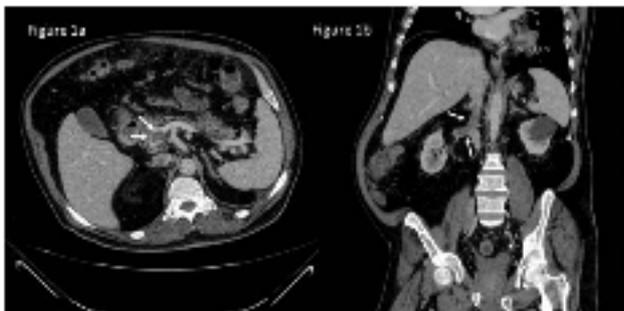


Figure 1. Contrast-Enhanced Computer Tomography

INTERNAL HERNIAS: RADIOLOGICAL DILEMMA

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Introduction: An internal hernia is a rare condition defined as the protrusion of abdominal viscera into one of the fossae, foramina, recesses, or congenital defects within the abdominal and pelvic cavity. Internal hernias are generally classified into 6 types: paraduodenal, pericecal, foramen of Winslow, transmesenteric, pelvic and supramesic, and intersigmoid. Internal hernias may present as intestinal obstruction and account for 0.5 to 5.8 % of all cases. Clinical diagnosis of internal hernias is often difficult and thus imaging studies plays an important role in the early diagnosis. We present a case that was diagnosed on computed tomography (CT), and confirmed and treated with subsequent surgery.

Case: A 37-year-old woman presented to the emergency department with diffuse abdominal pain, developing suddenly an hour ago. The pain was severe, constant and radiated through to her back. Sitting upright and leaning forward relieved the pain. There was associated with nausea and vomiting. She was passing flatus. She had not experienced any similar pain in the past. Her vital signs were normal and she was afebrile. In his physical examination there was diffuse tenderness, and rebound and guarding in right upper and lower quadrants. In blood gas analysis her venous blood pH: 7,19 HCO₃:16 CO₂:47 Lactate 4,2 base excess was -10,6. In her total blood count, WBC was 13400. Her liver function tests were minimally elevated. As her pain was persistent and unexplained, a CT scan was ordered. A computed tomographic scan of the abdomen and pelvis with intravenous contrast demonstrated dilated and left migration of the loops of jejunum, migration of inferior mesenteric vein to the left and free fluid in abdomen. With the prediagnosis of internal herniation, fluid resuscitation and supportive care were initiated in preparation for surgery. In the operation it was seen that ileum was herniated around cecum, 500 cc fluid was aspirated, ischemic loops were dissected, but the patient died in intensive care unit due to sepsis and multiorgan failure.

Conclusion: Although the autopsy incidence of internal hernia (IH) has been reported to range from 0.2% to 0.9%, IHs constitute up to 5.8% cases of small bowel obstruction. IH is defined as the protrusion of an organ into pouches or openings in the peritoneum. In contrast, standard hernias protrude through defects in the retaining walls of the abdomen. Clinically, IH can be asymptomatic or cause significant discomfort ranging from constant vague epigastric pain to intermittent colicky periumbilical pain. As no specific symptoms are associated with the condition, it is rarely diagnosed preoperatively. Although the occurrence is rare, delayed diagnosis and treatment is associated with a high rate of mortality. CT has become the first-line imaging technique in patients with suspected IH because IHs are often difficult to identify clinically. CT scan showed classic signs of internal herniations: ‘Whirlpool sign’, crowding of bowel loops in the upper compartment and the absence of caecum from the Right Iliac Fossa, replacement of abdominal organs and vasculature. When strangulation of the intestine is suspected, an internal hernia similar to that seen in our case should be considered.

Keywords: internal hernia, CT, intestinal obstruction



Figure 1. whirlpool sign in abdominal CT



Figure 3. Dilatation of intestinal loops



Figure 2. Left migration of ileocecal valve

P-126

[Acil Tıpta Görüntüleme]

A RARE FOREIGN BODY IDENTIFIED IN THE UPPER AIRWAYS: THE DENTURE

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Introduction: Dental implants are commonly used devices in the elderly. These prostheses have great importance in grinding the food but should be used with extreme caution, especially in bedridden patients. We report a patient who had been bedridden for four years due to CVA sequelae and accidentally swallowed lower jaw denture.

Case: A 79-year-old male patient was referred to our hospital from outside center with suspected denture swallowing and present hematemesis. From the patient's medical history, it was learned that the patient had right hemiplegia and global aphasia due to CVA sequelae and he might have swallowed his denture. No foreign bodies were found in the chest X-ray at outside center. The patient's vital signs were as follows; BP: 170/90 mm Hg, pulse: 102 / min, temperature: 36.8°, respiratory rate: 18 / min and O₂ saturation: 92%. On physical examination; the patient had right hemiplegia, global aphasia and poor cooperation. In the oropharynx; upper side of right tonsil was bleeding, uvula and its periphery was edematous. However, there was no foreign body in the pharynx. Patient had stridor and bloody secretions. The patient's respiratory sounds were coarse and heart was rhythmic. The lower jaw dentures were found in the larynx on cervical radiograph. Emphysema was also present in prevertebral region and soft tissue. Patient was consulted with ENT and thoracic surgery departments. In order to determine the exact location of dentures, cervical CT scans were obtained. Prosthesis was found to be located on top of the epiglottis and was found not to extend into trachea on cervical CT scans. The patient was taken to the operating room by ENT team and the foreign body was removed successfully with laryngoscopy under general anesthesia.

Conclusion: Cervical radiographs should not be overlooked in the imaging of patients with a history of intentional or accidental swallowing of foreign objects and also in patients with poor cooperation and suspected swallowing of foreign objects due to physical examination and history as in our case.

Keywords: Foreign body, cervical graphy, upper airways



Figure 1. lateral and AP cervical graphy



Figure 2. Sagittal view of cervical CT

P-127

[Acil Tıpta Görüntüleme]

HUGE PANCREATIC PSEUDOCYST; A CASE REPORT:

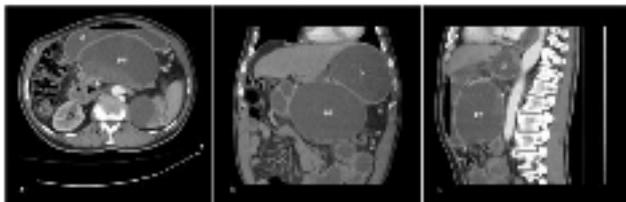
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Introduction: Pancreatic pseudocysts (PPs) are complications of acute or chronic pancreatitis. Pseudocyst of the pancreas is a localized fluid collection that is rich in amylase and other pancreatic enzymes and is surrounded by a wall of fibrous tissue that is not lined by epithelium. Initial diagnosis is accomplished most often by cross-sectional imaging.

Case: A 54-year-old man was admitted to ED with abdominal pain, anorexia, nausea, and vomiting after a case of pancreatitis. On examination, he was unwell and severely dehydrated, with a blood pressure of 91/70 mm-Hg, pulse rates of 103 beats/min, and a temperature of 38.7°C. Physical examination revealed diffuse tenderness on palpation of the abdomen. Laboratory workup showed total leukocyte count was at 13100/microliter (normal 4000–10000/microliter). The serum bilirubin, liver function tests, amylase and lipase are within normal limits. At ED admission, an abdominal computed tomography (CT) scan showed normal pancreatic head portion is being monitored, body and tail of about 15x10 cm in size that fits localization of the lesion, with liquid content.

Discussion: The majority of acute PPs resolve spontaneously, in some cases, it may hemorrhage, rupture, develop into fistulas, or become infected. Treatment is mandatory when the pancreatic pseudocyst is >6 cm in size and persists for more than 6 weeks. Management options include conservative, percutaneous, endoscopic, and surgical treatment. In our patient, conservative management was not possible as the mass had major effects on adjacent viscera.

Keywords: Pancreatic pseudocysts; ED; CT



Figures. Huge Pancreatic Pseudocyst

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[Acil Tıpta Görüntüleme]

HEPATODIAPHRAGMATIC INTERPOSITION OF THE COLON-CHILAITITI'S SYNDROME

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Introduction: In 1910 Demetrius Chilaiditi described an incidental radiological finding of hepatodiaphragmatic interposition of bowel, known as Chilaiditi's sign in asymptomatic patients. The incidence of such finding at radiography is between 0.025% and 0.28% including all age groups, with a slight increase in individuals above 60 years old. It is most frequently found in men than in women at a 4:1 ratio. However Chilaiditi's sign must be distinguished from Chilaiditi's syndrome, which produces symptoms associated with the bowel interposition. There are still some questions about the etiologic factors, but long and mobile colon, chronic lung disease, or liver problems are considered to be the reasons. Absence or laxity of the ligament suspending the transverse colon or of the falciform ligament is also thought to contribute to the condition.

Case: A 70-year-old male patient was presented to our emergency department complaining of abdominal pain, nausea and vomiting within 3 days. His blood pressure was 96/78mmHg, pulse: 98/m, sPO2:%96, and has no fever. Past medical history revealed nothing special. Physical examination was normal except the presence of a slight tenderness on right upper abdominal quadrant. There were no abnormalities in blood or urine tests. Chest radiography was suspicious for free air under the right diaphragmatic area. Computed tomography of the abdomen revealed interposition of bowel loops between the liver and diaphragm. Patient was treated conservatively and discharged with recommendations.

Discussion: Chilaiditi's syndrome can be misinterpreted as pneumoperitonium, pneumobilia, or hepatic-portal-venous gas. Asymptomatic patients with incidentally observed radiographic findings generally do not require any clinical intervention. However management of symptomatic patients exhibiting signs of peritoneal irritation on physical examination patients with Chilaiditi's Syndrome varies with the etiology. Majority of the cases are managed with noninvasive methods like bowel decompression. But there are reported cases in the literature that required surgical intervention due to bowel ischemia or obstruction. This syndrome should always be kept in mind in the management of patients with chest or abdominal pain and dyspnea in emergency department. Differential diagnosis of the patients with this specific radiologic sign is important to prevent patients from emergent surgical interventions.

Keywords: Abdominal pain,Chilaiditi's syndrome,hepatodiaphragmatic interposition



Figure 1. Chilaiditi sign

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[Acil Tıpta Görüntüleme]

PURPLE URINE BAG SYNDROME

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Introduction: Purple urine bag syndrome (PUBS) is characterized by the urine bag color turning into purple of patients who are having a urinary catheter for long term. It's a rare condition which was first defined at 1978 and usually noted in females who have a urinary catheter and chronically immobile. In this case, we have presented a patient who had PUBS.

Case Report: A 80 year old female presented to the ED with chief complaint of hematuria. The patient had been operated on for a femoral neck fracture and therefore, she had immobile and urinary catheter. In her past medical history, there was hypertension and coronary artery disease. On admission, her vital signs were stable. Physical examination revealed a decubitus ulcer of 5x5 cm size including the skin at the left presacral region and an incision scar on the lateral of right thigh. All other systemic findings were normal. The patient's urinary catheter bag and tubing was purple and had some cloudy urine (Figure 1). The laboratory tests showed leukocytosis of 14.000/ul, urea of 119mg/dL, creatinin of 1.8 mg/dL and in the urine test the pH was 8.0 and leukocyte +1. The patient's urinary catheter bag and tubing had been changed and a urine culture had been sent to the lab. Via the intravenous hydration, urea and creatinine values lowered. Empiric antibiotics have been started just after the infectious diseases consultation and the patient was discharged after setting a follow up appointment. In the urine culture results, 100.000 KOU/ml of E.Coli has reproduced.

Conclusion: PUBS is characterized by urinary catheter bag turning to purple color in patients who have a urinary catheter for a long term and chronically immobile. These patients are of female gender, constipated, having urinary tract infection, dementia and alkaline urine. This situation is generally related with bacterial infections who produce sulphatase and phosphatase. Indigo (blue) and indirubin (red) compounds which are two metabolic reduction products of bacterial enzymes cause the purple color.

The purple discoloration occurs after 2-3 months from catheterization and may last longer than one year. It's frequently issued that many of PUBS patients use laxative suppository for constipation. Because that constipation lengthens the triptofan transit time in the bowels, urinary indoxil sulfate levels increase. Purple discoloration is seen both in the urinary catheter bag and tubing.

Most of the publications related with PUBS notify that the urine pH is 7.0 and higher. Alkaline urine is a helpful factor for diagnosing PUBS. Urinary leukocyte count and bacteria amount show no difference between the patients with and without PUBS. Most common microorganism associated with PUBS are Citrobacter species, Enterobacter species, E. coli, K.pneumonia, M.Morganii, Proteus species and MRSA.

PUBS is related with significant morbidity and mortality but PUBS itself is a benign situation. PUBS cases are almost always asymptomatic and require no treatment. For preventing PUBS, developing urologic evacuation techniques, preventing constipation with proper nutrition approaches and curing the underlying UTI with proper antibiotics take place. For preventing the unpleasant odor, the urinary catheter bag and tubing must be changed periodically. As far as its known that long term catheterization is one of the reasons of PUBS, we must avoid placing catheters unless its necessary.

Keywords: purple urine, urinary catheterization



Figure 1.

P-130

[Acil Tıpta Görüntüleme]

PNEUMOMEDIASTINUM WITH MINOR TRAUMA

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Introduction: Pneumomediastinum (PM) is defined as the presence of air in the mediastinum. It is spontaneously and traumatically divided into two. Traumatic pneumomediastinum may develop due to, skull, neck, chest traumas and intraoral injuries in all age groups, but it may also occur spontaneously in healthy young men. Traumatic PM is generally related with other

injuries and isolated PM is relatively rare. We are presenting a case with isolated PM caused by a low energy trauma.

Case: 22 years old male admitted to emergency room with the complaint of pain and swelling in the neck. Vital parameters were normal and past medical history revealed nothing special. He denies any recent medication or drug abuse. However he described a minor trauma 3 days ago. His friend tightened his neck from behind while wrestling as a joke. In physical examination there was subcutaneous emphysema in the neck. Chest X-Ray showed subcutaneous air in the neck extending to shoulders. Thorax tomography revealed diffuse paratracheal, pericardial, mediastinal free air. Pneumothorax was not observed. He was admitted 2 days for observation and discharged without any complication.

Discussion: The natural history of isolated pneumomediastinum is generally benign; however, it can be associated with more serious injuries, such as disruption of the tracheobronchial tree or a perforated digestive viscus. Patients with isolated pneumomediastinum should be monitored for additional injuries and complications. Because the overall sensitivity and specificity of computed tomography for major aerodigestive tract injury is 100% and 85%, respectively, it is necessary to exclude aerodigestiveinjuries. Patients who return to full activity without any symptom and once their chest radiographs have returned to normal, they can be discharged safely without any intervention. Although the course of the disease is benign emergency medicine specialists should be suspicious about the pneumomediastinum even with low energy traumas.

Keywords: Computed tomography, pneumomediastinum, trauma,



Figure 1.

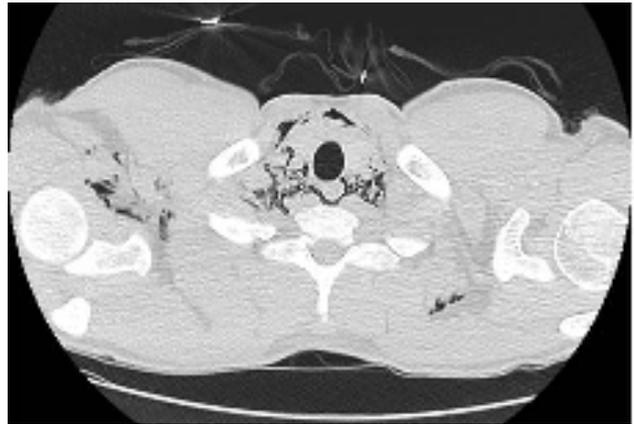


Figure 2.

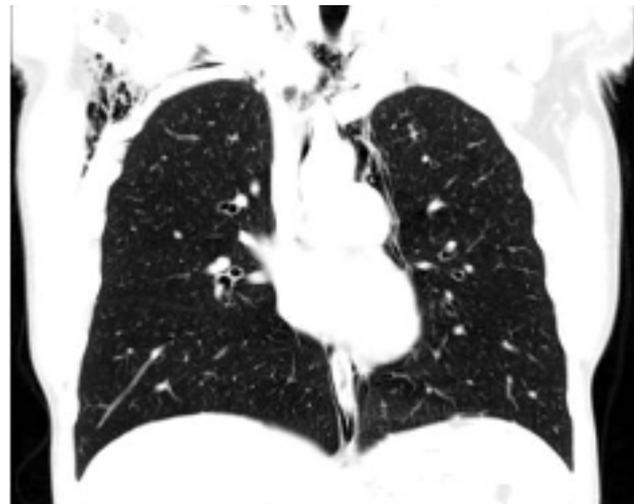


Figure 3.

P-131

[Acil Tıpta Görüntüleme]

EMERGENCY DEPARTMENT, DYSPNEA AND ULTRASONOGRAPHY

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Introduction: Cardiac and respiratory causes must be evaluated primarily in the patients admitted with dyspnea. Acute coronary syndromes, rhythm disorders, heart failure, pulmonary embolism and infections are common in differential diagnosis. If the cause of dyspnea is pleural or pericardial effusion, use of ultrasonography is very important for early diagnosis. In this presentation, we wanted to share an early diagnosis and treatment of a patient with massive pleural effusion and minimal pericardial effusion with the help of ultrasonography in the ED.

Case: 74 year old male patient admitted to ED with the complaints of chest pain and dyspnea. In his history, he was having chemotherapy treatment because of lung cancer, had diagnosis of hypertension and minimal heart failure. His vital signs were TA: 150/105 mmHg, body temperature: 37 °C, pulse:

110 /min, SpO₂: 86% (with O₂), respiratory rate: 24/min. His dyspnea got worst in one week and had mild chest pain for two days. ECG was normal sinus rhythm. Biochemical tests were planned. Massive pleural effusion in left lung region was observed with ultrasonography, and mild pericardial effusion was observed in echocardiography. Pleurocan was applied to left thorax from 6-7. intercostal space. 1000 cc fluid was drained in short time. His dyspnea complaint got better, and he was hospitalized to the ICU for further tests and treatment.

Discussion and Conclusion: Massive pleural effusion is a life-threatening condition. Early diagnosis and drainage of the fluid is a life-saving procedure. This procedure can be performed in the EDs with the help of ultrasonography easily. After the diagnosis, pleurocan should be applied for the drainage. Shortly pleural effusion that is a cause of dyspnea can be observed easily with the help of ultrasonography and this early diagnosis saves life.

Keywords: Emergency Department, Dyspnea, Ultrasonography

P-132

[Acil Tıpta Görüntüleme]

TWO INTRAUTERINE DEVICE

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Introduction: An intrauterine device (IUD) is one of contraceptive methods. These devices shall be removed from the uterus for a while. While replacing the device, the doctor must be certain that the old one is removed. In this case, we wanted to share a rare condition with a patient with two IUDs.

Case: A 36 year old female admitted to ED with the complaint of mild abdominal pain and leucorrhoea for two days. Her abdominal pain was intervally and mild and there was no defense and rebound tenderness in her examination. Leucorrhoea was small amount and dark colored. Her WBC was 14.215 and B-hCG was in normal ranges. Two IUDs were observed in her x-ray examination (Figure 1). In her history, old IUD was replaced three months ago in another hospital. She was consulted to gynecology department, and IUD in the uterus was removed (Figure 2). The other IUD was implanted in the abdomen and was declared to remove with an operation in another time. She was discharged with antibiotherapy and analgesic treatment.

Conclusion: An intrauterine device (IUD) is a contraceptive device that is inserted into uterus. These devices must be removed from the uterus for a while. While replacing the device, the doctor must be certain that the old one is removed. Radiography can be used to be certain that there is no moving IUD to abdomen. As this case, devices moving into the abdomen can cause abdominal pain.

Keywords: ntrauterine device, abdominal pain, emergency department



Figure 1.



Figure 2.

P-133

[Acil Tıpta Görüntüleme]

A CASE: POSTPARTUM DIFFUSE THROMBI IN THE PORTAL, SUPERIOR MESENTERIC, AND SPLENIC VEINS

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Introduction: Portal vein thrombosis during pregnancy and after delivery is a rare condition. The portal system has a higher risk for the thrombosis than other venous system parts in the postpartum period. Here we present a postpartum PVT case with the accompanying mesenteric and splenic vein thrombi.

Case: 31 year old female is admitted to our ER with the complaint of abdominal pain, emesis, and vomiting with a two-day history. She had a Cesarean section at the 30th week of gestation because of pre-eclampsia 8 days prior to her presentation to our

ER. She had no history of any other disease. At her presentation her vitals and physical findings were within acceptable ranges. Her abdominal examination was normal except for severe pain in RUQ. There was no accompanying defense or rebound in her abdominal regions. Her pain in abdominal RUQ increased during the observation and the blood tests were completed. WBC: 31900 (Neu: 91.9%), glucose 135 mg/dl, BUN:31 mg/dl, LDH: 289 U/L, CRP:221 mg/L. Contrasted abdominal CT was ordered with the differential diagnosis of intra-abdominal pathologies. The result of the abdominal CT reported diffuse thrombi in the portal, superior mesenteric, and splenic veins; diffuse ileo-jejunal venous ischemia, ascites, and portal hypertension. The patient was consulted to General Surgery and Gastroenterology. After starting medical anticoagulant and antibiotic therapy, patient was discharged on her on will.

Discussion: Portal vein thrombosis (PVT) during pregnancy is due to the hypercoagulation state of the physiological changes. There may be underlying precipitating factors such as endometritis, cirrhosis, or genetic factors. Postpartum mesenteric vein thrombosis alone is much more unexpected than PVT, and it can only be diagnosed by imaging methods. Most of the time, the thrombosis starts in the portal venous system and triggers other venous thrombi in the abdomen. The clinical presentation is characterized by insidious onset of poorly localized abdominal pain, which may be accompanied by nausea, vomiting, and abdominal distension. Clinical progress may be more severe than expected and close follow up of the patient is an asset.

Keywords: portal vein thrombosis, mesenteric vein thrombosis, postpartum



Figure 1. Portal and mesenteric ischemia due to thrombi.



Figure 2. Portal and mesenteric ischemia due to thrombi.

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[Acil Tıpta Görüntüleme]

THE USG IN THE DIAGNOSIS OF CHOLECYSTITIS IN THE EMERGENCY DEPARTMENT ACTIVITY

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Objective: Emergency physicians use bed-side ultrasound to detect cholecystitis in the emergency department. Usually emergency physicians consult with radiologists to confirm their decision. We compared the ultrasound reports performed by emergency physicians and radiologists for correlation with each other.

Material and Methods: Study was made between 01.06.2013 and 30.09.2014. Patients, 18 and over aged, with cholecystitis were included the study. Ultrasound reports performed by both emergency physicians and radiologists were analyzed retrospectively. Sonographic Murphy sign, gallbladder wall thickness, enlarged bladder, bladder stones, and free fluid on the pericholecystic area findings in the reports were compared. Mc Nemar test was used for analysis as a statistical method.

Results: 78 patients [37 women (47.4%) and 41 men (52.6%)] were included in the study. The mean age of the patients was 58.1 ± 19.7 (range: 18-88). Results of comparison of performed ultrasound by radiologists and emergency medicine physicians were as follows: similarity for sonographic Murphy sign 100% ($p = 1.00$), increased gallbladder wall thickness of 94.3% ratio ($p: 1.00$), enlarged gallbladder 89.1% ($p: 0.453$), gallbladder stones 98.3% ($p = 0.625$), free fluid on the pericholecystic area 55.6% ($p = 0.375$) (Table).

Conclusion: We found results of ultrasound reports performed both emergency physicians and radiologists were highly similar. Emergency physicians can use bed-side ultrasound

for cholecystitis reliably. They play an effective role to decrease morbidity and mortality by using bed-side ultrasonography.

Keywords: cholecystitis, hepatobiliary ultrasound, emergency service.

Table 1. Comparison of ultrasonographic sign

	USG	Radiology Physician		Increased Wall Thickness		Enlarged Bladder		Bladder Stones		Pericholecystic Liquid	
		Sonographic Murphy sign		Yes	No	Yes	No	Yes	No	Yes	No
Emergency physician		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
	Yes	18 (%100)	0 (%0)	50 (%94.3)	4 (%16.0)	41 (%89.1)	2 (%6.3)	59 (%98.3)	3 (%16.7)	5 (%55.6)	1 (%1.4)
	No	0 (%0)	60 (%100)	3 (%5.7)	21 (%84.0)	30 (%93.8)	1 (%1.7)	1 (%1.7)	15 (%83.3)	4 (%44.4)	68 (%98.6)
	McNemar	p: 1.00		p: 1.00		p: 0.453		p: 0.625		p: 0.375	

P-135 [Acil Tıpta Görüntüleme]

A RARE CAUSE OF ABDOMINAL PAIN AND ILEUS; PARADUODENAL HERNIA

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Paraduodenal hernia is the most common type of internal herniation but a rare cause of intestinal obstruction. Delayed diagnosis and surgical intervention may result in a significant morbidity and mortality risk. We wanted to remind physicians that this rare cause of ileus should be considered among the preliminary diagnoses of abdominal pain that cannot be diagnosed.

A 52-year-old male presented to the emergency department with symptoms of acute pain and nausea and vomiting that had started 6 hours ago. The general condition was good and the vital signs stable. The physical examination revealed abdominal tenderness in the left upper quadrant and periumbilical region. Other system examinations were normal. Standing direct abdominal radiograph revealed diffuse gas. USG revealed excessive gaseous distention. Hemogram revealed a WBC count of 11.300/ μ L, hemoglobin 15.2 gr/dl and platelets 201 000/ μ L. The patient's symptoms did not improve. Abdominal CT revealed mesenteric vascular dilatation in the abdominal quadrants, and increased density and minimal free fluid at the mesentery with collection of jejunal segments at this level, indicating left paraduodenal internal herniation. A general surgery consultation was requested. The patient underwent surgery and was discharged in good condition 4 days later.

Paraduodenal hernia is a rare cause of ileus. It is the cause of 1% of all ileus cases and paraduodenal hernias constitute 53% of all internal hernias. It is a congenital lesion emerging as a result of midgut rotation and insufficient fixation to the posterior abdominal wall. Ileus develops in 50% of the patients with paraduodenal hernia while the lesion may be completely silent in the remaining group. It is three times more common in males than females. It is also three times more common in the left than in the right. Patients are usually in the 40-60 years age group. Recurrent abdominal pain in form of cramping, nausea, vomiting, bloating, and inability to pass gas or defecate may be present in

symptomatic patients. Abdominal pain in the form of cramping, nausea, and vomiting are marked in upper level obstruction while symptoms of distention, vomiting, and inability to pass gas or defecate are more prominent in lower level obstruction. A broad-based air-fluid level and/or collection of bowel loops in a certain region can be seen on radiography. US is not diagnostic. The most helpful diagnostic test is abdominal CT with contrast.

The delay of the diagnosis can lead to incarceration and bowel necrosis. The basic principle in the treatment is surgical reduction of the hernia and repair of defect. Bowel resection may be necessary if ischemia develops in the small intestinal walls.

In conclusion, internal herniation should be considered in patients without a history of surgery and with a preliminary diagnosis of mechanical ileus. An abdominal CT with contrast should be obtained at an early stage and surgery performed as early as possible, considering that a delay in diagnosis and treatment will significantly increase the morbidity and mortality.

Keywords: Abdominal Pain, Ileus, Paraduodenal Hernia



Figure 1a. Axial contrast enhanced CT image showed distended small bowel (yellow arrow).

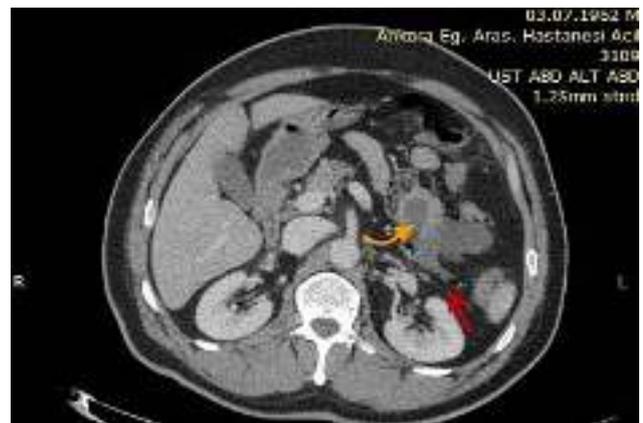


Figure 1b. Axial contrast enhanced CT image showed distended small bowel (yellow arrow) between the stomach and pancreas and mild intra-abdominal fluid (red arrow).



Figure 2. Coronal enhanced CT image showed increased density at the mesentery (red arrow) with collection of jejunal segments (blue arrow)

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[Acil Tıpta Görüntüleme]

THE NUTCRACKER SYNDROME TRIGGERED BY TRAUMA

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Introduction: The nutcracker phenomenon (NCP) is the compression of the left renal vein between the aorta and the superior mesenteric artery, resulting in left renal vein stenosis at this level and increased pressure and dilatation at this segment and the previous renal vein segment. The nutcracker syndrome (NCS) is differentiated from NCP with the presence of marked clinical symptoms and findings such as hematuria, orthostatic proteinuria, pelvic congestion, left varicocele and flank pain. We discuss two rare NCS cases that were aggravated by trauma and were coincidentally diagnosed, together with the radiological findings.

Case 1: A 35-year-old male presented at the emergency department with hematuria and left flank pain. The patient had presented at the emergency department yesterday as well because of a traffic accident and had been discharged after being investigated and followed-up for thorax and head trauma. There was no history of hematuria before the first presentation. Examination revealed left costovertebral angle tenderness. The vital signs and other examination findings were normal. Urinalysis revealed 3+ erythrocyturia. Urinary system ultrasonography results were normal. Multidetector computerized tomography with intravenous non-ionic iodinated contrast matter revealed NCS. The patient was discharged on analgesics as there was no severe hematuria causing anemia or marked flank pain causing discomfort.

Case 2: 25-year-old male presented at the emergency department after following 3 steps from a mobile ladder and experienced left flank pain. There was tenderness of the left

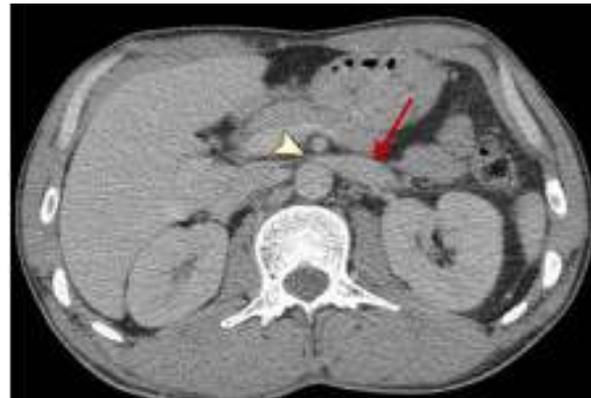
elbow, hip and costovertebral angle on examination. The vital signs and other examination findings were normal. Urinalysis showed numerous red blood cells and 3-5 white blood cells per high-power field together with a protein level of 100 mg/dl. The x-rays and urinary system ultrasonography results were normal. Multidetector computerized tomography with intravenous non-ionic iodinated contrast matter revealed NCS. The patient was discharged on analgesics as there was no severe hematuria causing anemia or marked flank pain causing discomfort.

Discussion: The main pathology in NCS is stenosis of the left renal vein and increased pressure in the distal section, leading to tears in the thin-walled veins in the renal calices, hematuria and sometimes proteinuria. NCS cannot be diagnosed with routine diagnostic methods. The diagnosis is usually made coincidentally. The treatment indication is usually accepted as severe hematuria causing anemia and marked flank pain causing discomfort while conservative measures are recommended for less severe cases.

Conclusion: NCS should always be considered in the differential diagnosis in patients presenting at the emergency service with flank pain and hematuria even if there is no history of trauma.

Keywords: Hematuria, Nutcracker Syndrome, Trauma

Case 1: Multidetector computerized tomography



Yellow arrow: Stenosis of the left renal vein Red arrow: Dilatation of the left renal vein

Case 2: Multidetector computerized tomography



Yellow arrow: Stenosis of the left renal vein Red arrow: Dilatation of the left renal vein

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[Acil Tıpta Görüntüleme]

LOWER LIMB PAIN AND WEAKNESS: AORTIC OCCLUSION

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Introduction: Aortic occlusion (AO) is a rare condition associated with substantial morbidity and mortality. Considering that the aorta distribute blood to all parts of the body, symptoms may vary, thus, it might be hard for the clinician to diagnose this condition. We are presenting a case, who visited the Emergency Department(ED) with bilateral lower limb pain who was diagnosed as AO.

Case Presentation: 64 years old female patient presented to the ED with complaints of bilateral lower limb pain and weakness. Symptoms had started 30 minutes before presenting to the ED. Her vital signs were: Blood pressure: 210/120 mmHg, Temperature: 36.7 0C, Pulse Rate: 110/min, Respiratory rate: 20/min, Oxygen saturation: 96%, Finger stick glucose: 165mg/dl, ECG: 110/min, Atrial Fibrillation with no ischemic ST-T changes. She had Diabetes Mellitus, Hypertension, Atrial Fibrillation and an eye operation in her medical history. Sensory loss and motor deficit (1/5) has been observed on the physical examination of the patient who hadn't used the warfarine for ten days (prescription for atrial fibrillation). Bilateral lower extremity pulses were palpated filiformly. Other systemic symptoms were normal. CT Angiography was obtained with a diagnosis of Aortic Dissection or Aortic Thrombosis. CT Angiography demonstrated extensively atherosclerotic changes of abdominal aorta and all branches and total occlusion of abdominal aorta just after the mesenteric artery exits. (Figure 1.2) Patient was admitted to the Cardiovascular Surgery Intensive Care Unit and she underwent trombectomy. On the 5th day of admission patient was discharged neurologically intact without any complications.

Conclusion: Clinically, aortic occlusion should be kept in mind as one of the diagnostic possibilities in a patient with acute cerebrovascular disease, acute lower extremity ischemia, neurological problems of the lower extremities and sudden increased blood pressure.

Keywords: Extremity pain, neurologic deficit, Aortic occlusion, Emergency Department



Figure 1



Figure 2.

P-138

[Acil Tıpta Görüntüleme]

SPONTANEOUS INTRAPERITONEAL RUPTURE OF AN ADRENAL GLAND HYDATID CYST

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Introduction: Hydatid disease (HD) is a parasitic disease caused by the larval stage of Echinococcus granulosus and E. Alveolaris. The liver the lung and the spleen are the organs most frequently involved in human echinococcosis (80-95%) (1-3). Adrenal gland has been considered as an exceptional localization of the hydatid cyst.

Case: A 38-year-old male presented with left upper quadrant pain and nausea over the 36 hours prior to admission. The patient had no history of trauma. His physical examination was fever. Abdominal examination left upper quadrant tenderness, rebound tenderness and guarding. Complete blood cell count, electrolytes, eosinophil count, serum biochemistry and urinalysis were within normal limits. Plain radiographs of the abdomen and Chest X-ray was normal. CT scanning demonstrated the presence of a rupture solitary cystic mass within the left adrenal gland. No other intra-abdominal or intra-thoracic masses were found, either in the liver, peritoneum or lung. The patient was consultation and admission to the general surgery department.

Conclusion: Primary hydatid cysts in the adrenal gland are a rare. Spontaneous intraperitoneal rupture, which can be life threatening. Although rare, a ruptured hydatid cyst should be considered in the differential diagnosis of the acute abdomen in a patient residing in an endemic area.

Keywords: Hydatid cyst; Spontaneous rupture; ED

P-139

[Acil Tıpta Görüntüleme]

NASAL BONE FRACTURE AND ULTRASONOGRAPHY

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Introduction: Nasal bone fracture is one of the most common fractures in patients with a maxillofacial injury. It is mostly isolated but it may be associated with head, face, neck injuries. Although the diagnosis is usually made by physical examination, imaging methods are often referenced. Clinical examination is an

important finding for urgent reduction. Also radiography results usually not change treatment. As an alternative to radiography, ultrasonography is a common and easy method that involves no radiation. ultrasonography offers diagnostic imaging option as in our case.

Case: A 51-year-old male patient presented to the Emergency Department (ED) with penetrating and blunt trauma that caused by a fight. On arrival his vital signs were: body temperature 36,6°C; blood pressure 141/97 mmHg; respiratory rate 15 per minute and heart rate 108 beats per minute. General examination was within normal limits and he was alert (GCS: 15). During the initial assessment, dermabrasion in the frontal and left side of his face, crepitation on his nose, three incisions on left gluteus maximus and four incisions on left gluteus maximus were observed. His neurological examination was normal but he had amnesia. FAST revealed that there wasn't intraperitoneal free fluid and pneumothorax. Superficial ultrasound showed nasal bone fracture. Two peripheral vein accesses were gained, and blood tests (complete blood count, complete blood chemistry, blood type) were obtained. His hemogram results were; hemoglobin 12,2 g/dL; (normal range [NR]: 12-18), leukocyte 15,9 K/uL (NR: 4,8–10,8), hematocrit %47,2 (NR: 43,5-53,7). The patient received whole body CT scan. CT showed nondeplase nasal bone fracture. Six hours later hemogram results were; hemoglobin 15,4 g/dL, hematocrit %45,5. Patient's symptoms were well controlled in our department in a day and he was discharged.

Discussion: Physical examination (crepitation, deviation from the midline, and dislocated fracture) is the gold standard method for the diagnosis of nasal bone fracture. Ultrasound is an alternative method of conventional radiography and computed tomography to evaluation of nasal fractures in the emergency department. In a research sensitivity of conventional radiography was 79% specificity conventional radiography was 95% sensitivity of ultrasonography was 100%, specificity of ultrasonography was 91%. Ultrasonography is a reliable and available method for the diagnosis of nasal bone fractures. The examination of nasal bone fractures by ultrasonography is a common method involving no radiation exposure.

Keywords: Nasal bone, Nasal bone fracture, ultrasonography



Figure 1.



Figure 2.

P-140

[Acil Tipta Görüntüleme]

A CASE OF BRAIN ABSCESS, ADMITTED WITH MALAISE

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Case: A 55-year-old male patient admitted to emergency department with complaint of weakness in the right arm. In his history, he had admitted to a hospital with the same complaint 10 days ago and he was diagnosed with brain abscess. An operation was proposed there but he did not accept then. In the physical examination in our emergency department the upper and lower extremities were slightly paretic and the muscle power was 4/5. Other neurological examinations were normal. Body temperature was 37.3 C. He had no other known diseases in his history. In the CT imaging of the brain a view of brain abscess was present in the left occipitio-temporal region. In consultation with neurosurgery department surgery planned and the patient was hospitalized.

Conclusion: As evident in our case even in severe clinical conditions such as brain abscess neurological examination may be normal except faint paresis. Therefore examination of the CT imaging of the brain is important.

Keywords: brain abscess, CT, neurosurgery

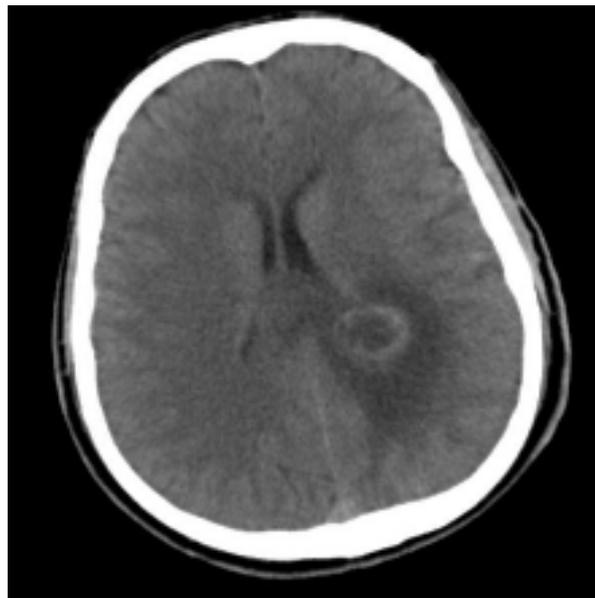


Figure 1. Brain CT

A RARE IMAGE PHYTOBEZOAR IN THE STOMACHFigen Tunali Türkdöğün¹, Mehmet Yiğit², Eda Yiğit², Kenan Ahmet Türkdöğün², Özgür Söğüt²¹Department of Radiology, Bayrampaşa State Hospital, Istanbul, Turkey²Department of Emergency Medicine, Bezmialem Vakif University, Istanbul, Turkey

Case: A 42-year-old female patient came to our emergency services complaining of abdominal pain, nausea, vomiting and constipation for five days. No property was determined when the patient was questioned about chronic diseases, drug use and her history of surgery. It was learned that a slimming diet rich in fibre had been done for 10 days. A physical examination revealed a tenderness in the epigastric section, and there were no palpable abdominal mass, rebounds and defence. The patient's vital signs were normal with normal laboratory values. A nasogastric tube was inserted in the patient with vomiting, abdominal distension and constipation. There were air and liquid levels in the intestine in her direct abdominal radiographs, and there was a severely distended stomach (Figure 1). The gastric lumen had been filling with opacities. The intense soft tissue and isodense density, which fills the lumen, were available in the abdominal tomography, and the fluid and air levelling were observed in the intestine (Figure 2). The oral intake was stopped, and an intravenous hydration was started. The patient was drained with a nasogastric tube, and a conservative method was used for follow up. The patient was discharged on the fifth day of the hospitalization with a poor diet in fibre. The phytobezoar consists of plant materials that are not ingested by a human, and they contain cellulose, hemicellulose, lignin and fruit grain. A gastric lavage and endoscopic or surgical techniques can be used in the treatment of a gastrointestinal phytobezoar. In patients without an underlying chronic disease or a history of previous surgery, the physicians can give the chance of treatment with a conservative method to the patients.

Discussion: Despite the fact that bezoars are mostly settled in the stomach, they may be seen in the entire gastrointestinal tract, from the esophagus to the rectum [6]. The bezoars are named according to the substances they contain. In daily life, a phytobezoar, including most fruits and vegetables, can be seen. A phytobezoar is caused mostly by consuming the fruit known as a persimmon fruit [5]. The persimmon fruit's cellulose-containing fibrous structure in rich foods, such as citrus, fig, coconut, raisins and cabbage, are at risk of developing a phytobezoar. In our case, the fibrous fruit and vegetable consumption to lose weight was the cause of the phytobezoar.

The first imaging modality for the diagnosis of a bezoar is the direct radiography. Dilated bowel loops due to a direct radiography ileus and the air-fluid levels are monitored. A silhouette of a foreign body can be viewed in the attached poly bezoar cases related to foreign body ingestions. In captured barium graphies, an intraluminal filling defect is the classic image of the bezoars [9,10]. In our case, a direct abdominal radiography showed the air-fluid levels. However, the opacities filled the lumen of the gastric fundus, which is rarely seen. This image is an indication of early congestion, such as ileus, and may be resolved in patients with a palliative treatment.

Conclusion: This view of the rare gastric fundus by an ambulatory direct abdominal radiograph is the precursor (pointer) of an unsclerosed phytobezoar. This may be an indicator that it

could be improved by a palliative treatment without the need for surgery, especially in patients without a history of chronic diseases or surgical operations.

Keywords: direct graphy, palliative treatment, phytobezoar

The intense soft tissue and isodense density, which fills the lumen, were available in the abdominal tomography, and the fluid and air levelling were observed in the intestine



Figure 1. The intense soft tissue and isodense density, which fills the lumen, were available in the abdominal tomography, and the fluid and air levelling were observed in the intestine

There were air and liquid levels in the intestine in her direct abdominal radiographs, and there was a severely distended stomach



Figure 2. There were air and liquid levels in the intestine in her direct abdominal radiographs, and there was a severely distended stomach

AN INTERESTING LOCATION FOR APPENDICITIS**Funda Karbek Akarca, Ayse Ece Tavas, Yusuf Ali Altuncu, Enver Ozcete, Murat Ersel***Department of Emergency Medicine, Ege University, Izmir, Turkey*

Introduction: Epigastric pain is one of the most common complaints patients present to the emergency department with. The differential diagnosis of epigastric pain includes but is not limited to peptic ulcer, dyspepsia, gastroesophageal reflux, gastroenteritis, acute coronary syndrome, pancreatitis, organ perforation and gall bladder diseases. In this case we discuss an unusual case of epigastric pain.

Case: 45 year old male presented to the emergency department with progressively worsening epigastric pain of 2 days duration. Initial vitals were BP:130/80mmHg, HR:82bpm, Body temperature:36.5C SaO2:99%. The patient reported a history of diabetes and hypertension. Physical examination revealed diffuse abdominal tenderness, more profound in the epigastric region. Other physical examination findings were within normal limits. The electrocardiogram did not show any pathological findings. Laboratory findings showed no pathological results except WBC:13,260 and CRP:2.7. The abdominal ultrasonography was reported as «no solid organ pathology, appendix could not be visualised». Upon control examination, abdominal rebound was found, so the patient was sent for an abdominal computerized tomography (CT) scan, which was reported as colonic malrotation anomaly, with the caecum and appendix localized in the epigastric area, and findings of appendicitis (Figure 1 and Figure 2). The patient was internated for surgery.

Discussion: Appendicitis is one of the more common causes of acute abdominal pain and it is defined as an inflammation of the inner lining of the vermiform appendix that spreads to its other parts. Because appendicitis can mimic several abdominal conditions, the differential diagnosis is often a clinical challenge. Appendix is located at the right upper quadrant in 4% of patients and retrocaecally in 26% of patients. However, in our case, the appendix was located at the epigastric region due to an anatomic anomaly. There were no similar cases found in literature describing epigastrically located appendix.

Keywords: Epigastric appendicitis, epigastric pain, emergency medicine



Figure 1. Arrow pointing at the inflamed appendix.



Figure 2. Arrow shows the inflamed appendix.

OVARIAN MATURE TERATOMA**Bahaeddin Onur, Mazlum Kılıç, Rohat Ak, Serdar Özdemir, Tuba C. Öztürk, Ebru Akoğlu, Onur Yeşil***Fatih Sultan Mehmet Research and Training Hospital*

Introduction: Mature cystic teratoma is a relatively common ovarian tumor that is an infrequent cause of abdominal and flank pain. It is frequently multicystic, and contains sebaceous fluid as well as hair, teeth, bone, and skin. Mature cystic teratomas account for 10–20% of all ovarian neoplasms and are the most common neoplasm in patients younger than 20 years of age. Mature teratomas are usually benign, but in 0.1-0.2% of cases, it may undergo malignant transformation. They may remain

asymptomatic or may present with acute abdomen because of torsion, infection, or rupture. Spontaneous rupture of the teratoma is rare and has been occasionally reported. We presented a case of ovarian teratoma causing acute abdominal pain and discuss the findings in CT of abdomen.

Case: A 26-year-old woman presented for left upper and lower abdominal pain that began suddenly 72 h before. It was severe, colicky pain with radiation to her left flank. She had no other symptom. She was sexually active and monogamous (G2P1Y1). Her examination was significant for severe left lower quadrant abdominal tenderness with voluntary guarding, without rebound tenderness. There was no costovertebral angle tenderness. The pelvic and rectal examinations were normal. Urinalysis demonstrated no blood, ketones. Her beta human chorionic gonadotropin hormone was normal. White blood cell count was 12.500 cells per cubic mL, with 75% neutrophils. Her pain didn't answer to analgesics and a contrast computed tomography (CT) scan of the abdomen and pelvis was obtained for differential diagnosis of acute abdomen followed by transvaginal doppler ultrasonography.

Discussion: Mature cystic teratomas (a more appropriate term than the commonly used "dermoid cysts") are cystic tumors composed of well-differentiated derivations from at least two of the three germ cell layers (ectoderm, mesoderm, and endoderm). Most mature cystic teratomas are asymptomatic. Mature cystic ovarian teratomas, also called dermoid cyst is a relatively common ovarian tumor that is an infrequent cause of abdominal and flank pain. Pain, when it does occur, is from mass effect and ovarian torsion; but our patient has none of them. Dermoid cysts are suggested when a fat-containing cystic tumor is identified on imaging. These tumors have a classic radiographic and ultrasonographic appearance. At CT, fat attenuation within a cyst, with or without calcification in the wall, is diagnostic for mature cystic teratoma. A floating mass of hair can sometimes be identified at the fat-aqueous fluid interface. Fat is reported in 93% of cases and teeth or other calcifications in 56%. Knowledge of the imaging features of these tumors allows for a confident diagnosis to be made in most cases.

Keywords: mature teratoma, dermoid cyst, CT

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[Acil Tıpta Görüntüleme]

DEEP NECK INFECTION EXTENDING TO POSTERIOR MEDIASTINUM

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Introduction: The complexity and the deep location of deep neck region make diagnosis and treatment of infections in this area difficult. These infections remain an important health problem with significant risks of morbidity and mortality. Diagnosis of these infections is much easier with the development of the diagnostic tools (e.g. CT, MRI). In this report, a case of deep neck infection and abscess extending into posterior mediastinum is presented.

Case: A 50 year old male patient presented to emergency department with the complaint of sore throat, dysphagia, fever,

neck swelling and flushing. He had a history of type 2 diabetes mellitus which he had diagnosed 10 days ago. In physical examination, consciousness was open, patient was oriented and cooperative, and Glasgow Coma Scale was 15. Vital findings were as follows: arterial blood pressure 120/70 mmHg heart rate: 96 beats /minute body temperature 38.0 C and respiration rate was 18/minutes. In system examination patient had a painful, swelling starting from below right mandibula and extending to sternal notch. In his respiratory exam he has bibasilar coarse rales. A neck ultrasound was performed. He had skin and underskin tissue edema, at this level there was reactive lymph nodes the largest one of which was 19x7 mm and dense content loculated fluid contrasts at underskin and muscle localizations. A contrast neck and thorax computed tomography was planned. His tomography interpreted by radiology department. In CT, hypodense areas at hyoid bone level, pushing epiglottis to the left, and in post laryngeal space and extending into right inferior paravertebral muscles and to inferior scapular muscles in the posterior and continuing throughout posterior mediastinum (oesophagus posterior and paraoesophageal area) consistent with abscess and consolidated areas in the posterior of both lower lobes were observed. Ear nose throat, chest surgery and infectious diseases departments were consulted. With the recommendation of infectious diseases department, sulbactam ampicilin 4x2 gr ve ciprofloxacin 2x400 mg iv treatment was initiated. As there was no chest surgery clinic in our hospital with beds, he was referred to an another center.

Conclusion: Deep neck infections extends to mediastinum via fascial plans through gravity, respiration and negative intrathoracic pressure. We should be aware of mediastinal spreading of deep neck infections.

Keywords: Deep Neck, Posterior Mediastinum, Abscess

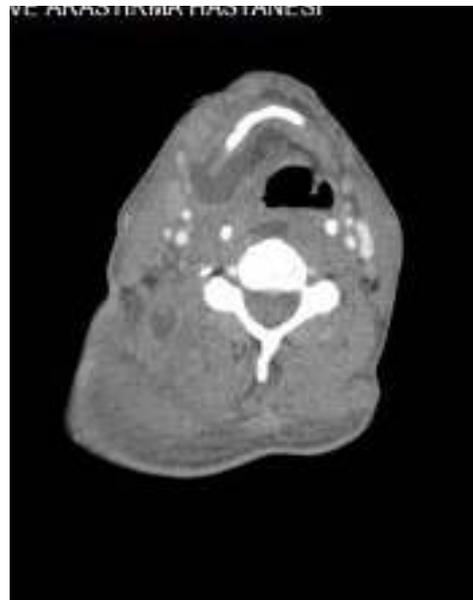


Figure 1. CT-1



Figure 2. CT-2

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[Acil Tıpta Görüntüleme]

ANTERIOR MEDIASTINAL MASS CAUSING JUGULER VEIN THROMBOSIS

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Introduction: Because a great many organ systems and varieties of tissues are represented within the mediastinum, tumors that occur in this area can represent many different clinical entities and pathologic processes. Mediastinum divides into three compartments; anterior, middle and posterior. In this report a case of new diagnosed anterior mediastinal mass causing jugular venous thrombosis is presented.

Case: A 35 year old woman presented to emergency department with the complaint of chest and back pain for two weeks, neck swelling and shortness of breath for last four days. In physical examination, consciousness was open, patients was oriented and cooperative, and Glasgow Coma Scale was 15. In system examination there was a painless mass at the left side of the neck. An ultrasound performed to this area. There was increased echogenicity inside the left jugular vein and there wasn't flow below middle neck level. Also there was reactive lymph nodes at cervical chain and tissue and under tissue edema. A contrast enhanced neck and thorax tomography was planned. There was a heterogeneous contrasted, necrosis at the center, extending to left cervical area, 9.5x9x8 cm sized anterior mediastinal mass. Left brachiocephalic vein was suppressed by mass and contrast matter was filling to perivertebral, periscapular and front wall of thorax via collaterals. True cut biopsy was suggested to patient but she left the hospital by her will.

Conclusion: Approximately one third of mediastinal tumors and cysts produce symptoms in the adult population. Malignant lesions are more likely to produce signs and symptoms of obstruction and/or compression than benign lesions because they invade or transfix normal mediastinal structures. Clinical findings associated with these malignant properties includes invasion of superior vena cava vein or other great vessels.

Keywords: thrombosis, mediastinal mass, jugular vein, ultrasonography

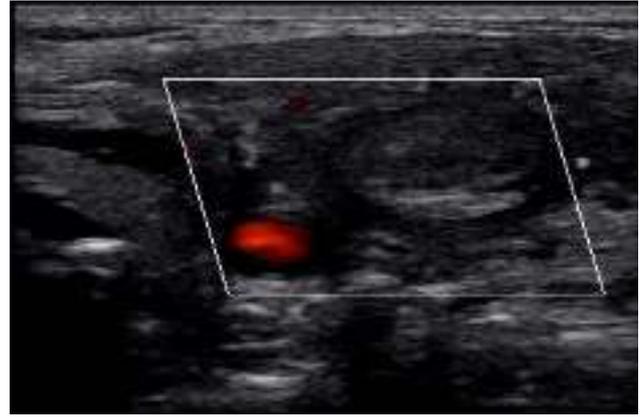


Figure 1. Doppler ultrasonography of left jugular vein



Figure 2.



Figure 3.

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[Acil Tıpta Görüntüleme]

SPONTANEOUS PNEUMOMEDIASTINUM:3 CASESHatice Eryiğit¹, Mehmet Ünalı², Kadir Burak Özer¹, Gökhan Gencer³¹Dr. Lutfi Kırdar Kartal Training and Research Hospital, Thoracic Surgery Department, Istanbul²Medipol University Hospital, Emergency Department, Istanbul³Dr. Lutfi Kırdar Kartal Training and Research Hospital, Emergency Department, Istanbul

Introduction: The free air in the mediastinum is defined as pneumomediastinum. Spontaneous pneumomediastinum was first described by Hamman in 1939. It grows dependent on excessive cough, physical exercise and intra-abdominal pressure in young patients usually without trauma. In this study, we aim to present the 3 spontaneous mediastinum cases in emergency room.

Case reports: Each of three cases has complaints of swelling of the neck and sound changes. They were in the age 22, 20, 25 respectively. None of the patients had no history of trauma. All of arterial blood pressure, pulse rate and O₂ saturation were normal. First postero-anterior (PA) radiographs further thoracic CT were evaluated on radiology. Those patients who determined with spontaneous pneumomediastinum were followed by thoracic surgery as a result of consultation. Normal lung parenchyma, healthy tracheobronchial system and esophagus were evaluated by bronchoscopy. In 3 cases, pneumomediastinum was regressed only with medical treatment and all of them were discharged.

Conclusion: The patients with spontaneous mediastinal emphysema present developing sudden onset of dyspnea, swelling in the neck, cough, voice changes, and rarely present with difficulty swallowing in the emergency department. As some cases may be regressed with medical treatment as in 3 cases, caution should be exercised in terms of subcutaneous emphysema in the neck can create obstruction in the upper airways.

Keywords: Mediastinal emphysema, Pneumomediastinum, Spontaneous

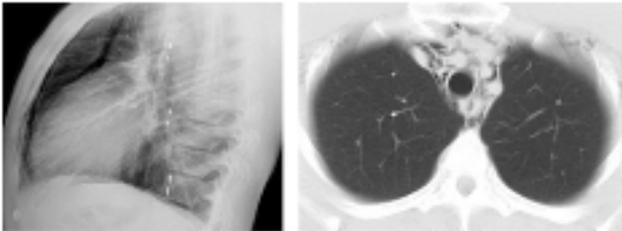


Figure 1. Pneumomediastinum on lateral chest X-Ray and thorax CT

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[Acil Tıpta Görüntüleme]

SPONTANEOUS RECTUS SHEET HEMATOMA DUE TO COUGH

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Introduction: Rectus sheet hematoma is a rare reason of abdominal pain in emergency department. Trauma, anticoagulant use, cough attacks, sudden position changes, asthma-chronic obstructive pulmonary disease, inflammation, recent surgical operation, injection and pregnancy are the known risk factors for rectus sheet hematoma. Bleeding of superior and inferior epigastric veins is responsible from hematoma collection in muscle sheet. Atheromatous changes in elderly give additional risk with decreased elasticity in vein membranes.

Conservative treatment is generally preferred with analgesics; in complicated cases surgery or fresh frozen plasma could be indicated.

Case Presentation: A 75 years old female patient admitted to the emergency department with the complaint of abdominal pain following cough for a few hours. Her past medical history was unremarkable except diabetes mellitus and oral antidiabetic was the only drug the patient was used. At her physical examination the patient revealed right lower quadrant tenderness, no other finding was present. In the laboratory examinations, platelet count was 298 10³ mq/l, INR was 0.928. In superficial ultrasonographic examination, hypoechoic, heterogenous appearance with a dimension of 110x95x43 mm was detected in the right rectus muscle. In the computerized tomography of abdomen right rectus muscle hematoma was detected. The patient was hospitalized and conservatively followed, and discharged at the fourth day without any complication.

Conclusion: In conclusion, rectus sheet hematoma could be kept in mind in differential of abdominal pain.

Keywords: spontaneous, rectus hematoma, cough

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[Acil Tıpta Görüntüleme]

A CASE REPORT: INNOVATION IN EMERGENCY NURSING PRACTICE

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Introduction: The use of bedside USG by emergency physicians was first described for investigate fluid in trauma today, it is widely used to evaluation pregnancy, cardiac, biliary system, urinary tract and procedural. The visual technologies create new and different ways for knowledge and skills of nursing as in other medical sciences. The case is presented due to applied bedside USG monitoring in nursing practice for control of circulation to the patient with snake bite. 25-year-old female patient with ecchymosis on 5. proximal finger of right hand was transferred to emergency unit from rural hospital due to a snake bite and unknown snake genre. The patient have received hydrocortisone for anticipated anaphylaxis, tetanus toxoid and the snake antivenom therapy in rural hospital but on the fact that spreading towards the elbow edema and ecchymosis in follow-up, she has transferred suspected of the Compartment Syndrome (CS). Clinical examination revealed the following: blood pressure 82/48 mmHg, heart rate 98/min, respiratory rate 22/min, temperature 36.7°C, GCS 15/15; pain score 8/10. Systemic examination was normal except for swollen, tender, tense, shiny right hand and elbow, diminished pulses, edema and ecchymosis at proximal finger. The circumference was her right hand metacarpal of finger 22.5cm, right arm 23.5cm, right upper arm 35cm. Electrocardiogram and chest x-ray were normal. Laboratory investigation results; liver function tests, kidney function tests and serum electrolytes were all within normal limits. The following treatment was given: intravenous (IV) fluid hydration for prevention hypovolemic shock, nasal oxygen, fentanyl for pain control, antibiotherapy for potential sepsis in our emergency room. In Nursing practice management was monitored vital signs, consciousness, laboratory findings. Circulation of her arm was controlled by USG and measuring tape. The patient's

clinical condition was normally but edema and ecchymosis was progressed dramatically throughout to upper arm with marked of the CS. Level of fluid was increased in the tissue; level of fluid of flexor tendon in wrist short segment to 0,22 from 0,45 cm; level of fluid of forearm middle line short segment to 0,20 from 0,13 cm. The surgery team was decided to fasciotomy in 2.day. The patient was discharged to home with no residual functional loss/ disability.

Discussion: The USG provides screening in real time, it doesn't contain ionizing radiation, it can localize arteries and veins clearly. Besides this device can determine anatomic variations and venous thrombosis, it allows to use with standard IV catheters without any additional equipment. The using of USG in nursing practice is being used as a new technology in both USG-guided peripheral IV catheterization, the patients with chronic venous insufficiency and venous leg ulcers, to assess the bladder before placing a catheter to ensure adequate volume in the various intensive care units, obstetric/gynecologic nursing. The case is presented because due to use of USG for practice of nursing to signs of CS in our center in addition could not find nursing study to related to use of USG in soft tissue damage with trauma patients. The USG use in nursing practice in suspected CS, provides screening in real time for clinic conditions and effective and truth therapy decision before without muscle necrosis. USG technology and techniques are cost-effective, efficient and relatively non-invasive but there is need to more nursing study related to use of USG in practice.

Keywords: nursing, innovation, USG, emergency

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[Acil Tıpta Görüntüleme]

FLANKS PAIN AND ACCESSORY LEFT RENAL VEIN

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Flank pain is the classic presenting symptom of urinary calculi and is the predominant cause of flank pain that occurs in the absence of fever. These patients refer to emergency department usually. Most common and significant causes of flank pain are urinary calculi, abdominal aorta abnormalities, pyelonephritis, muscle pain and other vascular abnormalities like as renal vein thrombosis. Accessory renal veins are less frequent than accessory arteries and occur more commonly on the right. However, the left renal vein may bifurcate to encircle the aorta and become a circumaortic renal vein. These vessels are particularly important because they may preserve the kidney, should venous thrombosis occur. We present a case who had a rare localization of accessory renal vein.

Case: A 35 year old female patient admitted to our emergency service complaints of flank pain. Her vital signs were as follows: blood pressure, 164/88 mm Hg; pulse rate, 104 beats/min, temperature, 36.4°C, and SpO₂ 96 %. At physical examination costovertebral angle tenderness was positive on the left flank. Defensive and rebound was negative and pain is increasing with moving. Other physical examination was normal. At laboratory analysis white blood cell count of 6.4 10³/ UL, urea 24 mg/dl, creatinin 0.9 mg/dl. At urine microscopy there was 6-7 red cells. During the renal sonographic examination there was no urinary stone and an accessory vein associated with the lower pole of left

kidney was detected. We were not able to follow until the end of this vein. CT angiography was performed and it was seen that this vascular structure was accessory left renal vein which was draining into the left common iliac vein (figure 1). This finding was not related with clinical situation. Pain was caused by musculoskeletal spasm.

Conclusion: Flank pain is related with urinary system stones usually but some rare and important causes should be kept in mind. Accessory vein thrombosis should cause the pain and this rare variations should be known by emergency physicians and radiologist. This variation of left renal vein has not been described in the literature yet.

Keywords: flanks pain, accessory vein, renal vein



Figure 1. CT view of accessory renal vein

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[Acil Tıpta Görüntüleme]

A RARE CAUSE OF ABDOMINAL PAIN: CHILADITI SYNDROME

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Chilaiditi syndrome is a rare condition when pain occurs due to transposition of a loop of large intestine (usually transverse colon) in between the diaphragm and the liver, visible on plain abdominal X-ray or chest X-ray. Chilaiditi sign is a rare anomaly incidentally seen on chest or abdominal radiographs, with an incidence of 0.025–0.28%. Chilaiditi syndrome refers to the medical condition in which a Chilaiditi sign is accompanied by clinical symptoms. Symptoms associated with Chilaiditi syndrome include abdominal pain, distention, bloating, nausea, vomiting, flatulence, changes in intestinal habits as well as more unusual manifestations such as substernal pain, cardiac arrhythmias, dyspnea, and respiratory distress. Initial management of Chilaiditi syndrome should include bed rest, intravenous fluid therapy, bowel decompression, enemas, and laxatives and rarely has surgical intervention been indicated. We aimed to remind chilaiditi syndrome with a patient presenting with abdominal pain.

Case: A 51 year old man admitted to emergency department with abdominal pain, nausea, vomiting and weakness for two days. He had no chronic disease and any surgical history. Examination of the abdomen there was tenderness all of the abdomen and did not reveal rebound. Bowel sounds were normal. There was no costovertebral angle tenderness and no palpable abdominal masses were appreciated. Other physical examination was normal. Laboratory values revealed a hemoglobin value of 16,3 mg/dL and white blood cell count of 10.47 10³/UL, platelet count was 189,000/mm³. His urea was 51 mg/dl, creatinin 1,4 mg/dl. At abdominal radiograph there was Chilaiditi's sign (air-filled transverse colon lying anterior to the liver) and at abdominal computed tomographic scan there was interposition of the transverse colon in between the liver and diaphragm. The patient was diagnosed as Chiliaiditi syndrome and followed conservatively.

Conclusion: Abdominal pain is the most common cause of emergency service application and some clinical and radiological findings are important in patient management. Emergency physicians should remember these findings and managed patients properly.

Keywords: abdominal pain, chiliaiditi syndrome, imaging



Figure1. Abdominal computed tomography of patient

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[Acil Tıpta Görüntüleme]

PATIENT WITH HEADACHE: PAGET DISEASE

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Paget disease of bone, also known as osteitis deformans, is a focal disorder of bone metabolism that is characterized by an accelerated rate of bone remodeling, resulting in overgrowth of bone at selected sites and impaired integrity of affected bone. Approximately 70-90% of persons with Paget disease are asymptomatic; however, a minority of apply with some symptoms (bone pain, bone deformity, neurologic complications, excessive warmth). The diagnosis is usually made incidentally by a routine chemistry screen showing an elevated serum alkaline phosphatase concentration, calcium or by a plain radiograph obtained for some other reason.

In this case report we will discuss the paget disease with a patient who was admitted to the emergency department with complaints headache.

Case: A 62 year old man admitted to emergency department with headache which was growing for 2 months. At medical history he had diabetes mellitus and using oral antidiabetics. At his physical examination vital signs were normal. GCS was 15. There was no lateralization and neurological examination, cardiac, pulmonary, musculoskeletal examination was normal. At laboratory analysis serum calcium was normal and alkaline phosphatase concentration was high. Brain computerized tomography was planned and at tomography brain parenchyma was normal and at bone window hypodense lesions in the skull was available.

With these findings patient's preliminary diagnosis was Paget disease and his headache was because of bone pain. Patient is directed to the clinic for further evaluation.

Conclusion: Paget disease is generally asymptomatic but sometimes these patients admitted to emergency departments because of pain and other symptoms. Radiological signs are typical for paget disease and these findings should be known by emergency physicians.

Keywords: Paget, headache, emergency medicine

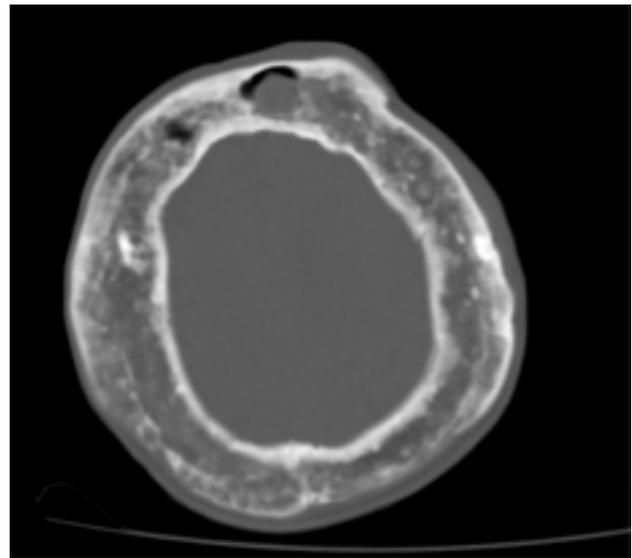


Figure 1. Brain tomography of patient

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[Acil Tıpta Görüntüleme]

OPACITY AT X RAY

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Calcification of soft tissue may be an unspecific local response or present as only a symptom of a complex underlying disease. Patient approach and treatment vary greatly depending on the cause of soft-tissue calcifications. Soft tissue calcifications are usually caused by six entities and the most common cause is dystrophic (Ca in damaged tissue may progress to ossification). When tissue is damaged, the body responds to this injury in a nonspecific manner by invoking the generic inflammatory response

reaction. This sometimes ends with calcification of the damaged tissue. This calcification is probably usually only microscopic, but is occasionally enough to be seen radiographically. We aim to present a radiologic finding with a back pain patient.

Case: A 57 year old male patient admitted to our emergency service complaints of back pain. We learned that he had back pain for 2-3 month but after fall down his complaints was increased. His medical history didn't supply properties. His vital signs were stable. At physical examination there was pain with palpation at left flank area and left costovertebral angle tenderness was positive. Other physical examination was normal. At x ray there was opacity at left side of the lumbar vertebrae. After that tomography was performed and it was seen that there was calcification in left paravertebral muscles. History has deepened and it was learned that he received trauma to the same area two years ago. After these results patient diagnosed soft tissue calcification and pain was secondary to soft tissue calcification. Analgesic treatment was started.

Conclusion: Soft tissue calcification is usually secondary to damaged tissues calcification and trauma is the most common causes of this disease. When we evaluate a patient we can see opacity at x ray and this should give rise to thought us history of trauma.

Keywords: Calcification of soft tissue, x-ray, opacity



Figure 1. Opacity at Computerized tomography

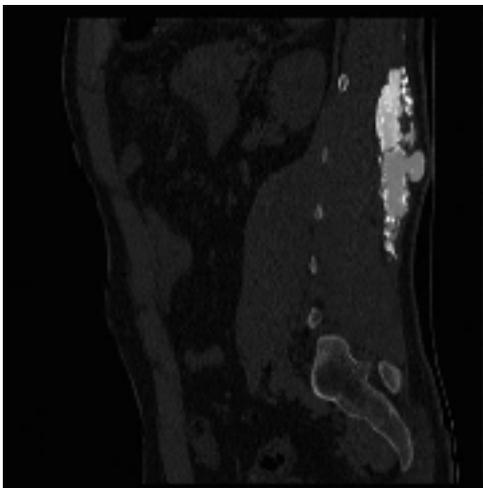


Figure 2. Lateral view of lesion

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[Acil Tıpta Görüntüleme]

ACUTE RENAL INFARCTION: TWO CASES

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The diagnosis of acute renal infarction is often delayed or missed because of both the rarity of the disease and its nonspecific clinical presentation. High-risk factors for acute renal infarction include age older than 50 years and an increased risk for thromboembolism.

Case A: A 42 years old man who had been previously treated for renal colic was admitted to ED with acute right flank pain. He was normotensive and in sinus rhythm, and the only abnormality on examination was an area of tenderness in the upper right quadrant of the abdomen. Hematuria or renal dysfunction weren't detected. WBC and serum LDH levels were slightly increased. A CT scan there had revealed 2 cm cortical hypodense lesion and 8 mm renal calculi in his right kidney.

Case B: A 65 years old woman was admitted to ED with abdominal pain and nausea. She had history of chronic bronchitis and used prednisolon. Her vital signs were stable, and in sinus rhythm. She had diffuse abdominal tenderness but not rebound. Her WBC and Troponin T levels were high. Hematuria or renal dysfunction weren't detected. A CT scan there had revealed large left renal infarct and embolic thrombus in renal artery.

Both cases were discharged with anticoagulant medications.

Discussion: Renal infarction is a serious cause of acute nephron loss that is potentially reversible by reperfusion therapy. The diagnosis is often missed or delayed at presentation. The diagnosis can be established with various radiological techniques, including CT urogram, CT renal angiogram and DMSA radioisotope scan, depending on local availability. Therapeutic guidelines for renal artery embolism have not been established. Prompt recognition of acute occlusion of the renal artery is important, because thrombolysis, anticoagulation, or embolectomy may minimize the loss in renal function. Our patients had unilateral involvement and were treated conservatively.

Keywords: acute renal infarction



Case A



Case B

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[Uluslararası Acil Tıp]

THE PROTECTIVE EFFECT OF GOJI BERRY EXTRACT IN ISCHEMIC REPERFUSION IN TESTIS TORSION

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Objective: This study investigated whether goji berry extract (GBE), known as an antioxidant, would reduce ischemic reperfusion injury when used alone in rats with experimental testis torsion.

Materials and Method: A total of 32 Sprague-Dawney male rats were randomized into 4 groups. The groups were the control (sham), goji, torsion, and torsion-goji groups. The treatment groups received intraperitoneal GBE before torsion. Left testis of the animals was subjected to torsion via 5 hours of ischemia and 6 hours of reperfusion. TAC (Total Antioxidant Capacity), TOS (Total Oxidant Status) and OSI (Oxidative Stress Index) levels were calculated. The sections of approximately 5 µm thick were stained with hematoxylin-Eosin (H&E) and examined under light microscopy. Statistical analyses were performed with SPSS 15 software package.

Results: The mean serum TAC level was statistically significantly higher in Groups 2 and 4 compared to both Group 1 and 3 in biochemical analysis (for both p<0,001). The mean serum TOS level was statistically significantly higher in Group 3 than Groups 1, 2, and 4 (p<0,001, p<0,001, and p=0,003, respectively). Comparison of the groups with regard to histopathologic examination revealed that Group 4 had a significantly higher rate of hemorrhage and congestion than those of Groups 1 and 2 (p=0,038). The groups did not differ significantly with respect to degeneration.

Conclusion: It is found out in this study that the ischemic reperfusion injury associated with testis torsion was reduced by the antioxidant effect of GBE. Further experimental and clinical studies are needed to confirm the agent's efficacy for this indication.

Keywords: antioxidant, lycium, testis

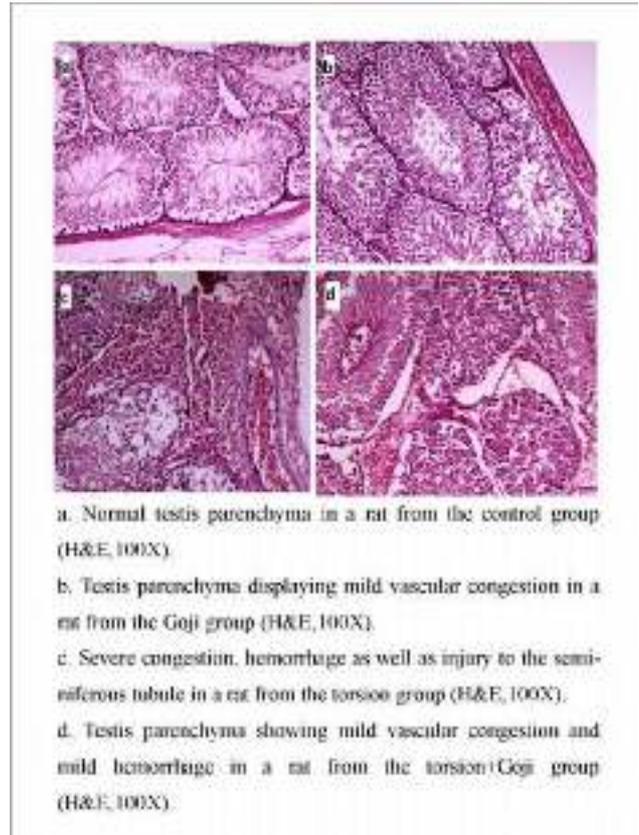


Figure 1. Histologic findings in rat testis

Table 1. Results of the biochemical analyses

Parameters	Group 1	Group 2	Group 3	Group 4	P
TOS(µmol/L)	32.88±14.7	47.60±24.1	120.9±44.2	65.99±16.55	<0.001
TAC(mmol/L)	1.30±1.02	3.09±0.71	1.32±0.32	3.02±0.58	<0.001
OSI(%)	3.48±2.34	1.63±0.97	9.41±3.75	2.20±0.45	<0.001

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[Uluslararası Acil Tıp]

A CASE OF UPPER GASTROINTESTINAL HEMORRHAGE DUE TO ABDOMINAL AORTIC ANEURYSM

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Introduction, objective: The most common causes of upper GIS bleeding include peptic ulcer, hemorrhagic gastritis, esophageal varices. Aortointestinal fistula bleedings resulting from abdominal aortic aneurysm (AAA) are more rarely seen. Frequently, a connection between aorta and duodenum has been identified. It generally doesn't presents any symptoms unless AAA is dissected or perforated or fistulized to intestinal area. Upper GIS endoscopy cannot visualize aortointestinal fistula if active bleeding is lacking. However, mortality rate increases when diagnosis and treatment are delayed. Occasionally, GIS bleeding and palpable pulsatile mass at abdomen can be the only finding that may indicate diagnosis.

Here, we aimed to emphasize this topic by presenting a patient diagnosed as aortointestinal fistula bleeding.

Case: A 74-years old man was presented to emergency department with fatigue and it was found out that he described episodic watery, sniffy, black stool evacuation (last episode 2 days ago) for twice within prior 10 days and fatigue in the secondary evaluation which was prompted by pallor in the triage assessment. The patient had no abnormal finding other than hypertension in the history and vital signs were as follows: blood pressure, 110/70 mmHg; Pulse: 102 beat per minute. Digital rectal examination was normal with normal stool. There was a palpable pulsatile mass at midline in abdomen. Laboratory findings were as follows: Hemoglobin, 7.05 g/dL; hematocrite, 22.5%; platelet count, $260 \times 10^3/\mu\text{L}$, BUN: 161 mg/dL, creatinine, 1.48 mg/dL. On the abdominal sonography performed due to palpable abdominal mass, aneurysmatic dilatation (largest diameter being 7 cm) in addition to appearance compatible to dissection was detected; thus, the patient underwent CT scan which revealed aneurysmatic dilatation (largest diameter being 77 mm) extending from infrarenal aorta to both common iliac arteries (Figure 1-2). The patient was consulted to Cardiovascular surgery with initial diagnoses of aortic dissection and aortointestinal fistula bleeding. The patient was admitted to Cardiovascular surgery clinic. Hemoglobin value was 10.27 g/dL after 4 units of erythrocyte suspension.

In conclusion, aortointestinal fistula should be kept in mind in patients presenting with GIS bleeding and palpable pulsatile mass in abdomen.

Keywords: Abdominal Aortic Aneurysm, Gastrointestinal Hemorrhage, Emergency Medicine

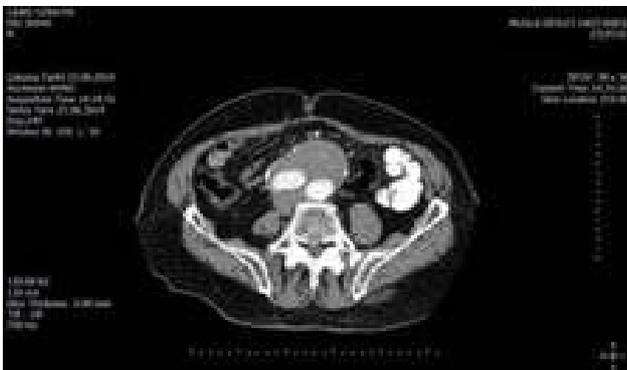


Figure 1.



Figure 2.

GLOBAL INITIATIVE FOR IEMERGENCY MEDICINE FOR MEDICAL STUDENTS AND INTERNS: A STEP FORWARD

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We recently created the first Emergency Medicine (EM) Clerkship program for students in United Arab Emirates University (UAEU), College of Medicine and Health Sciences in United Arab Emirates (UAE). Our curriculum includes a mixture of SAEM and IFEM undergraduate education curriculum. In 2013-2014, the program was a big success and 42% of students mentioned to choose EM as a career choice in the survey and 82% of the students request to do additional elective in EM. We believe that EM Clerkship played positive role for improving the reputation of EM in the medical school and in UAE. This year we are leveraging on mobile learning technologies, applying flipped teaching model, following the SAEM and IFEM guidelines. The student's satisfaction levels improved 20% compared to last year. Using mobile technologies in teaching is one of the main interests of the education leaders of UAEU. This is also spurred by the collaboration with Apple Inc. in all colleges. As EM is new in UAEU, we have decided to start an iEmergency Medicine for Medical Students and Interns Project. This project will help to create awareness of the EM specialty among the medical students and interns in UAE and in the region. After discussions with leaders from Apple Education, UAEU, and some EM Societies including IFEM, we are very elated to extend an invitation to the International EM community to contribute to this project. The idea behind this iBook is to make learning EM fun, promoting EM as a very attractive specialty and encourage students and interns to choose EM as their future career. This is very unique initiative in UAEU, and we believe that it will improve the reputation of EM in UAE and in the region. The iBook (iEmergency Medicine for Medical Students and Interns) will be published in iTunesU and it will be free for everybody. We are planning to publish the book at September 2015 for the 2015-2016 academic year. All possible social media environment, high quality education links will be implemented to the book as much as possible to improve and spread the Free Open Access Medical Education idea. Technical part of this book will be completed under the guidance and help of Apple officials. Language/Grammar will be controlled by professional grammar editors. You can select one or more of the following options to contribute. Contribution Choices: You can be an author/co-author for a chapter, You can submit high yield clinical pictures, images, You can submit your high yield clinical case, physical exam, procedure videos or their links, You can prepare and submit NBME type MCQ questions, You can share your experience in a short video about a topic (Expert opinion videos), You can share your top EM learning website link list for medical students, If you an digital medical artist or if it is your hobby, you can help us for some figures and pictures, You can be a section editor to review the medical contents in the chapters. We are expecting participation from all continents to create this book which will combine almost every possible way of learning for our students and interns. If you interested to help this project please send us an email (aacevik@uaeu.ac.ae) to be informed for further action.

Keywords: emergency medicine, education, students, intern, iBook, social media, FOAM

P-157

[Uluslararası Acil Tıp]

HEMORRHAGIC RENAL ANGIOMYOLIPOMA

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Introduction: Angiomyolipomas are rare benign mesenchymal tumors consisting of a mixture of mature adipose tissue, smooth muscle cells and bundles of thick blood vessels in varying proportions. They are more common in middle-aged women. They may cause lumbar pain due to intra-renal, perirenal hemorrhage, hematuria, hypertension and hemorrhagic shock.

Case: A 68-year-old male patient was admitted to the emergency department with complaint of a pain in his left side lasting for one week. He told that his pain became more severe in the last day and he was told he had kidney stone. He had hypertension and benign prostate disease in his medical history. In the physical examination he had left flank pain, KVAH+, there was no defense or rebound. In the laboratory test INR was 1,2, Hb values 2 units lower (9/7), BFT and LFTs were normal and 19 erythrocytes and 9 leucocytes were counted in the urine analysis. The pain did not resolve with management with narcotic analgesics. In the follow up hemoglobin levels decreased, and cold sweats, and hypotension developed. In the abdominal CT a view of dense fatty liquid in size of 250x136x120 mm which presents bleeding was observed. In addition, minimal fluid was observed between intraperitoneal bowel loops and morrison.

The patient was hospitalized in the urology service with diagnosis of hemorrhagic renal angiomyopolima. Arterial embolization was performed by interventional radiology service because continuing decrease in hemoglobin values. The condition of the patient was stable in the service and he was discharged after healing.

Conclusion: The patients presenting with side pain and hematuria and present with KVAH + in the examination should be further evaluated before diagnosed with renal colic. Bleeding may depend on renal angiomyolipoma and major bleeding complications may develop if they are discharged after analgesic treatment.

Keywords: Angiomyolipomas, bleeding, hematuria



Figure 1.



Figure 2.

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[Uluslararası Acil Tıp]

CHRONIC PORTAL VEIN THROMBOSIS IN A PATIENT ADMITTED WITH ABDOMINAL PAIN

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Introduction: Abdominal pain is one of the major causes of admissions in the emergency department. Portal vein thrombosis (PVT) is a rare cause of abdominal pain. Portal vein thrombosis is a rare clinical condition that should be diagnosed and treated quickly because complications such as mesenteric ischemia and infarction may develop. It may occur secondary to cirrhosis, pancreatitis, appendicitis, omfolit, acute dehydration, umbilical vein catheterization, malignancies, and hepatitis. Early diagnosis is important because life-threatening complications such as gastrointestinal bleeding and infarction. We presented a patient who admitted with abdominal pain and the diagnosis of PVT was performed by ultrasound and confirmed by CT angiography.

Case: A sixty-five-year-old men admitted to emergency department with a blunt non-spreading abdominal pain, nausea and vomiting lasting for a few days. In the physical examination

tenderness localized on especially the lower-right quadrant and defense were present, other system examinations were normal. Vital signs were TA: 130/80 mmHg, heart rate: 78 beats / min, Fever: 36.4 ° C. The patient's general condition was good and he was conscious. Laboratory tests were: WBC: 11 x10.e3 / microL, RBC: 4.97 x10.e6 / microL, HGB: 15.9 g / dl, HCT: 48.4%, PLT: 153 x10.e3 / microL, INR 1.15, APTT: 25.1 sec Urea: 32 mg / dL, creatinine 1 mg / dl, Na 142 mmol / L, K: 4.56 mmol / L, glucose 160 mg / dl, AST 23 U / L, ALT 21 U / L, T. Bilirubin: 0.7, d.bil: 0.23. In the ultrasonography examination (USG) the contour, size and location of the liver were normal. Portal vein couldn't been visualized. In the portal hilum, there were a large number of collateral vessels in thin cavernous calibration (cavernous transformation). In the right side cecum, proximal part of the ascending colon and distal ileal segment were significantly edematous. Wall thickness of ileum was 10 mm. Minimal-to-moderate amount of free fluid was detected in the pericecal area. The appendiks wasn't visualized.

Conclusion: PVT is rarely considered in the differential diagnosis because it is a rare cause of abdominal pain. Portal vein can be seen with ultrasound in 97% of the cases. When the portal vein wasn't visualized PVT should be considered and this should suggest that cavernous transformation process is chronic

Keywords: Portal vein, abdominal pain, cavernous transformation



P-159

[Acil Tıpta Eğitim]

SPONTANEOUS PNEUMOTHORAX PRESENTED WITH ONLY COMPLAINT OF RIGHT UPPER QUADRANT PAIN

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One of the most common complaints encountered in the emergency department is acute nontraumatic abdominal pain. Acute gastroenteritis, appendicitis, pancreatitis, intussusception, bowel obstruction, mesenteric adenitis, diverticulitis, inflammatory bowel disease, malrotation, renal disease, and nonspecific abdominal pain are common causes.

Despite the fact that most abdominal pain is due to intra-abdominal pathology, extra-abdominal conditions like

pneumonia, pneumothorax and myocarditis can simulate an acute abdomen. Spontaneous pneumothorax is a common disease encountered in hospital practice. Nearly all patients have chest pain or acute dyspnea. We report a patient with primary spontaneous pneumothorax who presented with acute abdominal pain.

A 65-year-old male with no co-morbidities presented to the emergency department with chief complaints of right upper quadrant pain and vomiting for 2 days. He describe the pain got worse with breathing. He had no medical history of a diseases or drug use. On examination, he was conscious, oriented and hemodynamically stable; His initial vital signs were; blood pressures 126/68, pulse rates was 116/min, temperature was 36.9 C, respiratory rate was 23 breaths/min. He was afebrile and had an oxygen saturation of 90% on room air. On abdomen examination he had mild right upper quadrant pain, no organomegaly, no palpable lump. Breath sounds on the right was decreased. His other systemic examinations were unremarkable. Laboratory investigations revealed hemoglobin of 13.6g/dl with leukocyte count of 12.0 x 10³, predominantly neutrophilic (polymorphs 92%). The liver and renal function tests were within normal values. Her renal function test and electrolytes were normal. Abdominal ultrasound were performed with an initial diagnosis of cholecystitis and there were no abnormal findings on ultrasound. Chest radiograph was performed and It revealed pneumothorax in the right hemithorax (figure 1). Chest CT was taken to investigate the etiology (figure 2). Chest CT confirmed the diagnosis of spontaneous pneumothorax. Tube thoracostomy was performed and abdominal pain subsided after tube thoracostomy. The patient were hospitalized for the purpose of observation in thoracic surgery service. He made a steady recovery and was discharged from hospital four days later.

In conclusion sometimes findings that are not expected are more significant than the presenting problems. Physicians working in the emergency department should be aware of extra-abdominal pathologies mimicking acute abdominal pain. This case suggests that a chest radiograph should be included in the evaluation of patients with abdominal pain of unknown cause despite the absence of respiratory symptoms or signs.

Keywords: Abdominal pain, Spontaneous Pneumothorax, Right Upper Quadrant Pain



Figure 1. The patient's chest radiograph- pneumothorax line indicated by arrow

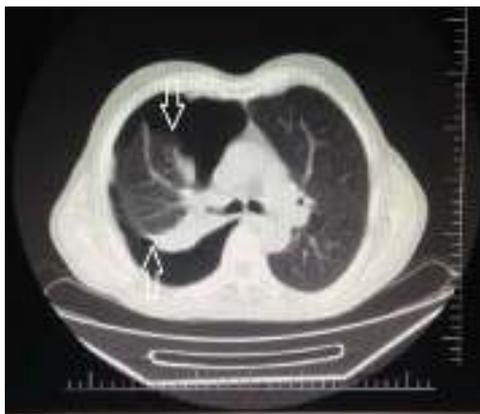


Figure 2. the patient's chest CT image- pneumothorax line indicated by arrow

P-160

[Acil Tıpta Eğitim]

THE NATIONAL CORE CURRICULUM FOR UNDERGRADUATE MEDICAL EDUCATION-2014 (UCEP-2014) AND EMERGENCY MEDICINE EDUCATION: THE EVALUATION OF BASIC MEDICINE PRACTICES REGARDING TO EMERGENCY MEDICINE EDUCATION

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Introduction and AIM: Emergency Medicine Residency Training in Turkey, in the Year 1993 at Dokuz Eylul University Department of Emergency Medicine began with the establishment.

The next development process, with the efforts of young academics emergency medicine has been very fast.

Emergency Medical Sciences in connection with the assistant and undergraduate education and training within the context of social responsibility both at the same time began. Emergency Medicine Specialist at the last point in almost every university and major teaching hospital emergency medicine residency training can be given.

2000 Since the beginning of longer various committees and meetings evolving Medical Education configuration process, most recently in April 2014, published in Undergraduate Medical Education of the National Core Curriculum (UCEP-2014) and the Faculty of Medicine for the minimum common level and developed a medical education curriculum offers.

In this study, constituting an important part of undergraduate medical education of emergency medical training, we will try to assess the place of UCEP-2014.

Results: UCEP-2014 on the absolute importance of pre-graduate Medical Education in Emergency Medicine with the application of 78, 136 Basic Medical Practice in pre ratio (Emergency Medicine Practices/Basic Medicine Practice) was found to be 57.35%. UCEP-2014, the Basic Life Support-Advances Life Support identified as directly related to the last 18 of Basic Medical Practices in Pre ratio of 136 Basic Medical Practices (BLS-ALS / Basic Medicine Practices) was found to be 13.23%.

Conclusion: BLS-ALS basic medicine practices Basic Medical Practice for 18% of Emergency Medical Education may be concerned with other Basic Medical Practice all of the

Basic Medicine Practices accounted for 50%, and this practice 69% of the learning level 3 (40%) and 4 (29%) if they are taken into account emergency medical education prior to graduation, expectations are high in Medical Education is an important sub-components. Emergency medical education, not just before graduation and post-graduation in medicine specialist at the stage of professional associations and also focus on the establishment and development expertise as an area that remains undecided. Faculty of Medicine, UCEP-2014 has an important place all the basic amenities adapt to their medical practice and should develop.

Keywords: National Core Curriculum for Undergraduate Medical Education, Emergency Medicine Practices

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[Acil Tıpta Eğitim]

ANTI PYRETIC IN EMERGENCY DEPARTMENT - IV PARACETAMOL, ORAL PARACETAMOL, IM DICLOFENAC - A COMPARATIVE STUDY

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Introduction: Fever accounts for a substantial proportion of adult emergency visits. Opinion on route of administration of antipyretics in the emergency department (ED) has been controversial. We aimed to compare the antipyretic efficacy of intravenous (IV) paracetamol, oral paracetamol and intramuscular (IM) diclofenac in adults presenting with fever to the ED.

Methods: In this parallel-group, open-label trial, participants (aged 14-75 years) who had temperature of more than 38.5°C were enrolled and treated at the ED of Alkhor Hospital, Hamad Medical Corporation (HMC), Qatar. Patients were randomly assigned to receive either 1000mg intravenous paracetamol 1000mg oral paracetamol or 75mg intramuscular diclofenac. Patients with known allergies to paracetamol or diclofenac, those who have taken antipyretics within 8hrs and patients diagnosed to have hepatic or renal diseases were excluded from the study. The primary outcome was degree of reduction in mean oral temperature at 90 minutes and the secondary outcomes were degree of reduction in mean oral temperatures at 30, 60 and 120 minutes. The efficacy of the drugs in reducing the temperature was assessed by a superiority comparison. Analyses were done using intention to treat (ITT) principles

Results: 139 patients received intravenous (IV) paracetamol, 145 patients received oral paracetamol and 150 received intramuscular (IM) diclofenac. Baseline demographic and clinical characteristics were similar in all the groups. After 90 minutes all the groups showed significant reduction in mean temperature, IM diclofenac showed the greatest reduction $[-1.44 \pm 0.43$ (95%CI: -1.4, -2.5)] than IV paracetamol $[-1.35 \pm 0.46$ (95% CI -1.3, -3.1) $p < 0.0001$] and oral paracetamol $[-1.08 \pm 0.51$ (95% CI -0.99 to -2.2) $p < 0.0001$]. After 120 minutes, there was significant difference observed in the mean change from the baseline temperatures in all the 3 groups, -1.81 ± 0.46 (95%CI -1.7, -2.9) in IM diclofenac versus -1.63 ± 0.55 (95%CI -1.5, -4.1) in IV paracetamol group ($p < 0.0001$) and -1.35 ± 0.51 (-1.3, -2.5) ($p < 0.0001$) in oral group. Significant changes in temperature were observed in favor of

IM diclofenac at each time point from 60 minutes through 120 minutes inclusive.

Conclusion: All the three drugs showed significant antipyretic activity with oral paracetamol having the least and IM diclofenac was having the greatest effect. We conclude that, in the emergency department IM diclofenac can be used as an antipyretic of choice to reduce the temperature within short time. However if rapid reduction is not required patients can be treated with oral paracetamol.

Keywords: Antipyretic, Intramuscular, Intravenous, Paracetamol, Diclofenac, Emergency Department

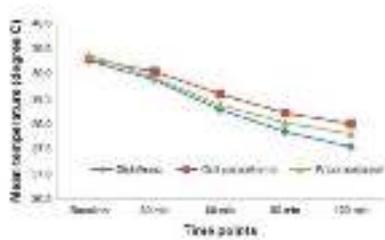


Figure 1. Fall in temperature in all 3 groups over 120 mts

Table 1. Between-Treatment Comparisons in the mean change from baseline in temperatures at different time points

Time/Temp (minutes)	IM Diclofenac mean ±SD (95% CI)	Oral Paracetamol mean ±SD (95% CI)	IV Paracetamol mean ±SD (95% CI)	P-Value
30	-0.39 ± 0.29 (-0.34, -1.5)	-0.45 ± 0.36 (-0.39, -1.7)	-0.23 ± 0.35 (-0.17, -2.5)	< 0.0001
60	-0.99 ± 0.34 (-0.94, -2.1)	-0.69 ± 0.43 (-0.61, -1.7)	-1.01 ± 0.40 (-0.94, -2.2)	< 0.0001
90	-1.44 ± 0.43 (-1.4, -2.5)	-1.08 ± 0.51 (-0.99, -2.2)	-1.35 ± 0.46 (-1.3, -3.1)	< 0.0001
120	-1.81 ± 0.46 (-1.7, -2.9)	-1.35 ± 0.51 (-1.3, -2.5)	-1.63 ± 0.55 (-1.5, -4.1)	< 0.0001

Mean change from baseline = post baseline mean- baseline mean 95%CI for mean change from baseline

Table 2. Comparison of mean temperatures at different time points among the three treatment groups

Time (min)	IM-Diclo	IM Diclo mean	IM Diclo SD	Oral Para n	Oral Para mean	Oral Para SD	IV para n	IV Para mean	IV para SD	P Value
0	150	39.27	0.438	145	39.28	0.473	139	39.38	0.527	0.112
30	150	38.88	0.421	145	39.04	0.526	139	38.92	0.463	0.009
60	150	38.28	0.394	145	38.59	0.487	139	38.37	0.424	<0.0001
90	143	37.84	0.407	142	38.21	0.524	137	38.03	0.443	<0.0001
120	112	37.55	0.387	118	38	0.436	118	37.80	0.436	<0.0001

WELLENS' SYNDROME: ELECTROCARDIOGRAPHIC MANIFESTATION OF CRITICAL PROXIMAL LAD STENOSIS

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Introduction: Emergency department (ED) physicians often see patients with symptoms, such as chest pain or dyspnea, of a potential underlying cardiac cause for which standard investigations fail to reveal an acute ominous process. Patients are often discharged or referred for outpatient investigation, such as exercise stress testing (EST), based on correct recognition of cardiac risk factors. However, nonspecific electrocardiographic abnormalities might be misinterpreted. Wellens' syndrome described by de Zwaan and Hein J. J. Wellens in 1982. In Wellens' syndrome, typical chest pain presents with T-wave inversion in precordial leads, especially V2-V3 and named type A or less frequently type B that includes biphasic T-wave in leads V2-V3. Biomarkers and ST segment will be normal or minimally elevated. The underlying cause of this syndrome is critical stenosis in the left anterior descending artery (LAD). This syndrome will end up widespread acute anterior MI and death. We reported a case of Wellens' syndrome with chest pain and pain free periods for a month duration.

Case: 51-year-old man presented to emergency department (ED) with chest pain radiating to the left arm for three hours with no known cardiac disease. His Glasgow Coma Scale (GCS) was 15, blood pressure was 125/75 mmHg and nearly equal for left and right arm, pulse rate was 55 bpm, oxygen saturation 100% and respiration rate was 17 breaths/ minute. His upper and lower extremity pulses were normal and equal. He described the pain as pressure in the middle of the chest, he had chest pain and pain free periods during last one month. The physical examination was normal. In his electrocardiography (ECG), there was biphasic T-wave in leads V2-V2-V4 and minimally elevated ST segment in V3. There were no abnormality in the laboratory results, including Troponine I. It measured 0.001 ng/ml (cut off 0,03 ng/ml) at first time. There was no pathologic image on chest xray. Echocardiography estimated EF 60% and found no dysfunction. The ECG was defined as Wellens' pattern and we started medical treatment for acute myocardial infarction. Second troponine level after 3 hours was elevated, there was 20-fold increase in troponine. In the angiography performed by the cardiologists, proximal LAD was 100 % stenotic.

Conclusion: Wellens' syndrome will end up widespread acute anterior MI or death and its characteristic ECG findings must be recognized by Emergency Physicians. Patients who had diagnosed as Wellen's syndrome need urgent cardiac catheterization. Sometimes patients do not have known heart disease, and troponine levels will be in normal limits such as our patient. It is also important to mention that these patients may resort to ED with ongoing chest pain for a few months. Emergency Physicians will be aware of the ECG signs that indicate to Wellens' syndrome.

Keywords: Wellens' syndrome, Ecg Pattern, LAD Stenosis

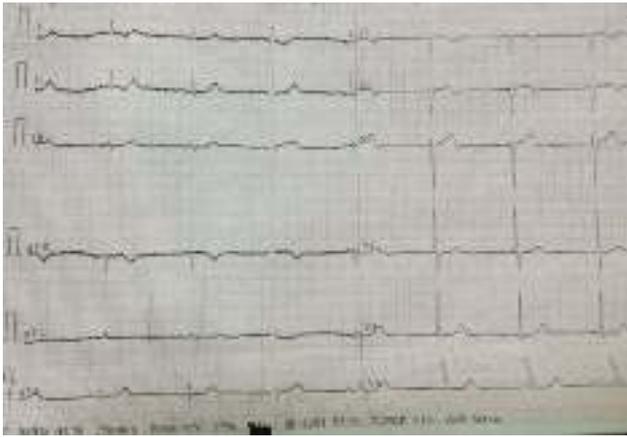


Figure 1. ECG image



Figure 2. Angiogram image

P-163

[Acil Tıpta Eğitim]

COMPARISON OF ALVARADO SCORE SYSTEM AND PROCALCITONIN LEVELS IN THE EFFECT OF ACUTE APPENDICITIS DIAGNOSIS, IN THE PATIENTS WITH RIGHT LOWER QUADRANT PAIN IN THE EMERGENCY DEPARTMENT

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The aim of this study was to evaluate the diagnostic utility of Alvarado Score System and Procalcitonin measurements in the acute appendicitis. This prospective study was conducted between 01.12.2012-31.11.2013. The patients admitted Eskisehir Osmangazi University Medical Emergency Department with right lower quadrant pain who are older than 18 years old. Totaly 52 of patients, 17 were male. The mean value of Alvarado Score was 6.4 (2-10). The mean value of procalcitonin value was 0.4328 ng/ml (0.0126ng/ml-14.6600ng/ml). 47 of patients (%90.4) procalcitonin values are normal (<0.5 ng/ml), 4 (%7.7) patients

had systemic infection (0.5-2 ng/ml), 1 (%1.9) had septic shock (>10 ng/ml). Appendicitis was confirmed with postoperation pathology in 49 of 52 patients (%94.2). Only 3 of these 49 patients PCT values were higher than normal limit (>0.5 ng/ml), 46 patients PCT levels were normal (<0.5 ng/ml). There is no statistical significance between increase in PCT levels and diagnosis of acute appendicitis.

Keywords: Procalcitonin, Alvarado Score System, Acute Appendicitis, Emergency Department

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[Acil Tıpta Eğitim]

THE FIRST EMERGENCY MEDICINE CLERKSHIP OF UAE: WHAT DO THE STUDENTS THINK?

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Introduction: Emergency Medicine (EM) is a newly growing specialty in UAE. The first EM clerkship was created in the UAEU according to Society for Academic Emergency Medicine (SAEM) recommendations. The aim of the study is to appraise student's thoughts.

Methods: The students evaluated the EM clerkship by online survey. 5-point evaluation (1 to 5) scale was used for 17 questions. Two questions were evaluating yes/no answers.

Results: 48 (88.9%) of the students out of 54 (38 females [70.4%] and 16 males [29.6%]) responded to the survey. Students rated their improvement level of EM knowledge and clinical skills as 4.0 and 4.1 out of 5, respectively. Overall learning experience was rated as 4.0. 87.5% of the students noted to take EM as elective rotation, 41,7% of the students noted the EM as a career of choice.

Discussions: The EM rotation prepared according to SAEM recommendations is well received by UAEU senior medical students. A successful rotation will help to the specialty recognition and reputation, especially where the EM is newly growing specialty. It may also help to find doctors of the future of EM.

Keywords: emergency medicine, student, education, clerkship

2013-2014 Academic Year Content



5 Points Evaluation Scale



Results Table

Question	Mean (SE)	Grade (Female)	Grade (Male)
The duration of the EM-C	3.08(0.18)	3,31	2,62
Didactic content of the EM-C	3.68(0.14)	3,59	3,67
Clinical practice part of the EM-C	3.72(0.14)	3,71	3,75
Communication level with the faculty	4.43(0.10)	4,46	4,37
Reachability of faculty/teachers in EM-C	4.04(0.16)	3,96	4,18
Communication level with nurses	3.16(0.14)	3,00	3,43
Learning experience from nurses	2.77(0.14)	2,68	2,93

Question	Mean (SE)	Grade (Female)	Grade (Male)
Communication level with EM residents	3.64(0.16)	3,59	3,75
Learning experience from EM residents	3.60(0.15)	3,59	3,62
Communication level with EM attending physicians	3.62(0.15)	4,06	2,75
Learning experience from EM attending physicians	3.33(0.16)	3,75	2,50
Improvement level of your knowledge about EM	4.04(0.12)	4,12	3,87
Improvement level of your practical skills in EM-C	4.10(0.13)	4,25	3,81

Question	Mean (SE)	Grade (Female)	Grade (Male)
Teaching environment of TAWAM ED	3.41(0.13)	3,62	3,00
Taking the examinations online in EM-C	3.52(0.19)	3,75	3,06
Grading process in EM-C	3.79(0.14)	3,75	3,87
Your overall learning experience	4.02(0.11)	4,12	3,81
Would you like to do elective rotation	87,5% YES	84,4% YES	93,8% YES
Would you like to be a residency trained EM physician (attending EP) in the future?	41,7% YES	40,6% YES	43,8% YES

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[Acil Tıpta Eğitim]

A MODEL OF EMERGENCY MEDICINE CLERKSHIP FOR GENERATION Y

Arif Alper Cevik, Abdel Nouredin, Salah Gariballa

United Arab Emirates University, College of Medicine and Health Sciences

Introduction: Generation Y was born with computers, attractive TV programs, 3D movies, and they live with their mobile technology. Standard models of education may not be attractive for the generation Y. They need different methods to learn and dynamic education structures to become attracted.

Model: We recently created an Emergency Medicine Clerkship in UAEU. In the first year, the clerkship reached to big success and rated as one of the best clerkships. In 2014-2015 academic year, we changed the education model to flipped classroom model and implemented mobile learning technologies to our education structures. Didactic lectures, weekly exams, skills labs, simulation sessions, reading and watching assignments for specific disease entities and procedures, clinical shifts, case management exam, bedside mini-CLEXs, final MCQs and OSCE are the main components of 4 week rotation. Each weeks has their specific learning objectives and topics. In this poster presentation, we will present our teaching model and sample of 4 weeks rotation schedule for final year medical students. The model improved the

students satisfaction levels 20% comparing to previous year. We hope it will be good sample for potential medical colleges which may be interested to improve their medical student education in their final year.

Keywords: emergency medicine, education, student, clerkship, curriculum

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[Acil Hemşireliği]

AKDENİZ ÜNİVERSİTESİ HASTANESİ ACIL SERVIS'E BAŞVURAN İŞ KAZALARININ GERİYE DÖNÜK İNCELENMESİ VE DEĞERLENDİRİLMESİ

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Amaç: Bu çalışmadaki amaç bir üniversite hastanesi acil tıp kliniğine başvuran iş kazalarının demografik özelliklerini, başvuru şikâyetlerini, geliş saatlerini, rapor sürelerini ve yapılan işlemleri belirlemek amaçlı düzenlenmiştir.

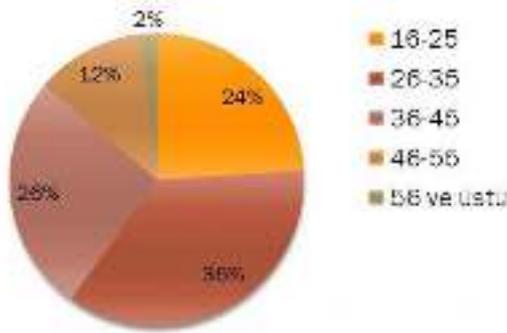
Gereç ve Yöntemler: Bu çalışmada, 1 Ocak 2013 - 31 Aralık 2013 tarihleri arasında Akdeniz Üniversitesi Hastanesi Acil Servis'e başvuran iş kazalarının geriye donuk kayıt incelemesi yapıldı. Acil tıp kliniğine başvuran tüm iş kazaları çalışmaya dahil edildi. Elde edilen verilerden kategorik ölçümler sayı ve yüzde olarak, sayısal ölçümler ortalama ve standart sapma olarak özetlendi ve SPSS 22,0 paket programı ile analiz edildi.

BULGULAR: Çalışmadaki n=883 iş kazasının %87,8'i erkek, %12,2'i kadındı. Yaş ortalaması 33,55' di. En çok olgunun eylül-ekim-kasım aylarında (%37,6), şehir merkezinden geldiği (%70,1), en fazla yaralanmanın ise %42,1 ile üst ekstremitte yaralanması olduğu, olguların %53,8'i 08.00-16.00 saatleri arasında başvurduğu ve %31,8'inin kesi şikâyetiyle geldiği görüldü. Olguların %55,7'sine hekim konsültasyonu istenmediği, %72,4'üne hekim istemlerinin istendiği, %65,1'ine hemşirelik uygulaması yapıldığı belirlenmiştir. Acile gelen olguların %68,6'sı taburcu olurken, %0,6'sı hastane bünyesinde yer olmadığı için başka hastanelere sevk edildiği, %0,7'sinin hastane içerisinde hayatı sonlanmıştı.

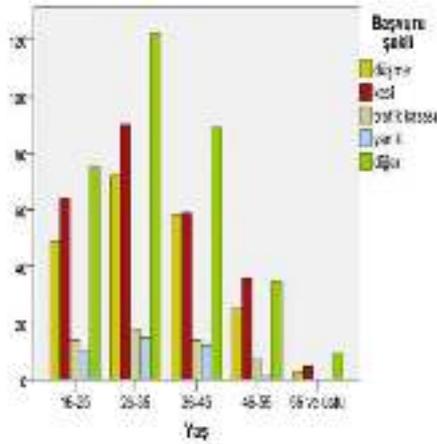
Olgulara düzenlenen iş kazası raporlarından %25,3'üne bir ay üzeri rapor verilmiş ve %34,2'sine rapor düzenlenmemiştir. Olgular toplamda 42332 gün iş kaybına neden olmuştur.

Sonuç: İş kazaları en fazla genç yaşta erkeklerde görülmektedir. En sık yaralanan bölge üst ekstremitelerdir. Hastaların büyük kısmı acil serviste ayaktan tedavi görmüştür. Yapılan tıbbi müdahalelerin birinci ve ikinci basamak hastanelerde yapılabileceği tespit edilmiştir. İş kazası raporlarının iş gücü kaybında ve maliyet açısından büyük kayıplara neden olduğu görülmektedir.

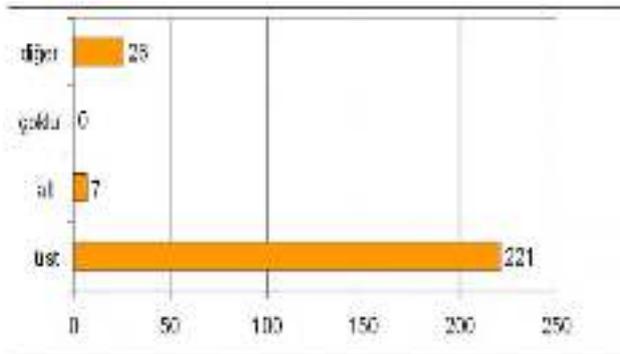
Keywords: iş kazası, acil servis, iş kazası raporu, travma



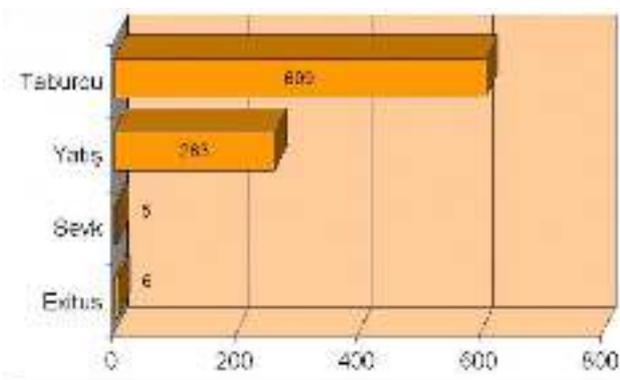
Tablo 1. Basvuran olguların yaş dağılım grafiği



Tablo 2. Yaş - Basvuru grafiği



Tablo 3. Kesil basvurularının dağılım grafiği



Tablo 4. Olguların dağılım grafiği

Tablo 5. Basvuru - rapor grafiği (Diğer*): gözde yabancı cisim, minor travmalar, elektrik çarpması, yabancı madde inhalasyonu

Başvuru Çeşidi	Raporun Yeri	Raporun Alanları (Yaralı)				Toplam
		1-10	11-20	21-30	31 ve üzeri	
diğer	71	10	6	0	87	207
kazalı	22	22	15	11	82	254
yaralı	0	15	6	7	18	93
diğer	47	10	0	0	57	30
diğer	143	21	10	13	64	330
Toplam	312	272	33	33	229	689

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[Acil Ultrasonografi]

BEDSIDE ULTRASOUND DIAGNOSIS FOR URETHRAL CALCULUS

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A 22-year-old boy presented to the emergency department with penile pain and acute urinary retention. On examination he was afebrile with normal vital signs. On physical examination, abdomen revealed a grossly distended bladder. The patient had a tender and painful mass along the distal volar surface of the penis, 5 cm away from external urethral meatus. Bedside ultrasound was performed in the emergency department. The image of his penis is shown at figure.

Keywords: bedside ultrasound, diagnosis, urethral calculi



Figure 1. Bedside ultrasound image of the calculus (arrow)

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[Acil Ultrasonografi]

EMERGENCY ULTRASOUND: ACHILLES TENDON RUPTURE

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Introduction: Achilles tendon injury is one of the most common sport-related injuries frequently observed in athletes who engage in activities such as running and jumping. It occurs typically in young men who have no prior injury reported in the affected leg. Ruptures occur mostly 3 to 6 cm proximal to the calcaneal insertion of the tendon because of the small cross-sectional area, large eccentric loads and hypovascularity. Achilles tendon rupture has been reported as missed in more than 20%

of cases, most likely because of pain and swelling limiting the physical examination.

Case: A 32-year-old woman presented to emergency department with acute onset of severe left leg pain started 1 hour ago while playing football. Pain was located at the posterior aspect of the ankle. Swelling was noted but overall ankle examination was limited because of severe pain. X-Rays didn't reveal any acute abnormality. Ultrasound was performed with linear array transducer. The normal right side was examined first. Left Achilles tendon examination revealed a complete disruption of the fibrillar appearance of the tendon approximately 6 cm from calcaneal insertion site with retraction of the torn ends consistent with full-thickness rupture. The gap between the ruptured ends was filled with hematoma and debris. With dynamic testing (slight passive dorsiflexion to plantar flexion), separation of the distal tendon edge was well visualized. The patient was discharged with splint and crutches.

Discussion: Achilles is the strongest tendon; however, it is the most frequently injured ankle tendon. The sensitivity and specificity of ultrasound for rupture are 96% to 100% and 83% to 100%, respectively. Comparison with normal side and dynamic imaging is recommended. This case illustrates the use of ultrasonography in the evaluation of suspected tendon rupture especially with limited physical examination. Point-of-care ultrasound can potentially avoid misdiagnosis.

Keywords: emergency medicine, ultrasound, achilles tendon rupture

Achilles Tendon



Achilles Tendon Rupture



WHICH DIAGNOSIS CAN MIMICKING GLOBE VESICALE?

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Abdominal pain and shortness of breath, each of these are a frequent cause of emergency department visits. When these two symptoms together emergency diagnosis is highlighted. By an emergency physician should be excluded cases of abdominal aortic aneurysm or dissection, pulmonary edema -with acute coronary syndrome, acute kidney failure-, pulmonary embolism, abdominal fluid seconder cirrhosis etc. All of these diagnoses can be excluded by an emergency physician with bedside ultrasonography in the emergency department. In this case we describe a patient who admitted to the emergency department with abdominal pain and shortness of breath and evaluated by bedside ultrasonography. A 78 year old male patient was admitted to the emergency department with acute onset shortness of breath and abdominal pain. In his history, he had metastatic prostate malignancy. On his admission, he had hypertension, tachypnea and tachypnea. His peripheral oxygen saturation was 87% in room air. Physical examination findings were respectively bilaterally crackles up to the apex, impaired peripheral circulation signs in right foot fingers, abdominal distension, widely defense and sensitive. There was a palpable mass on suprapubic area extending to umbilicus and it was also sonority on percussion (Figure 1). On bedside abdomen ultrasonography there was a fluid-filled mass and reverberation artefact (Figure 2). Also his lung ultrasonography showed that pulmonary edema. All of these findings - patient history, physical examination and bedside abdomen ultrasonography - were considered that as an initial diagnosis of pulmonary edema induced obstructive uropathy due to prostate malignancy -globe vesicale-. After inserted urinary catheter urine output was 500 ml and there was no size change on abdominal mass. When bedside abdomen ultrasonography was repeated, there was no fluid-filled mass regression but the bladder was reduced. In the same time his laboratory examination was showed that increase of urea, creatinine and calcium levels. When the patient was evaluated to advanced examination his abdominal computed tomography showed that huge dilated bowel loops. Final diagnosis was paralytic ileus due to electrolyte imbalance. The patient was hospitalized to the intensive care unit with a diagnosis of acute renal failure, hypercalcemia, paralytic ileus, pulmonary edema and end stage metastatic prostate malignancy. As a result all the time in the emergency department bedside ultrasonography should be performed for an initial diagnosis and when patient's conditions change it should be repeated. As our case the first sonography can be misleading.

Keywords: Ileus, pulmonary edema, bedside ultrasonography, emergency department



Figure 1. There was a palpable mass on suprapubic area extending to umbilicus and it was also sonority on percussion



Figure 2. On bedside abdomen ultrasonography there was a fluid-filled mass and reverberation artefact

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[Acil Ultrasonografi]

CARDIOGENIC SHOCK: EFFECTIVENESS OF EMERGENCY CARDIAC ULTRASOUND

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Introduction: Shock is associated with high mortality, regardless of its etiology. Hemorrhagic (hypovolemic) and cardiogenic shock in ED are the most commonly seen types of shock. Etiology of cardiogenic shock includes left and right heart derived pathologies. We have been using many tools for differential diagnosis as cardiac markers, D-dimer, Pro-BNP and computed tomography as well as physical examination. However, evaluation of myocardial and heart valve functions can be easily determined by cardiac ultrasound. In this case report, we presented the process revealing acute severe tricuspid valve failure resulting from congestive heart failure by using FATE (Focused Assessment Transthoracic Echocardiography).

Case: 79 years old female patient was admitted to the ED with fatigue, dyspnea and acute bilateral shoulder pain. In her medical history, there was only hypertension. Her vital signs were BP 70/40 mmHg, HR 40 beats/min, SaO₂ 96%, RR 24/min, fever 36,7 C. ECG showed 45/dk, atrial fibrillation, low voltage and poor R progression but no ischemic changes at ST-T segments. Due to the presence of hypotension, poor R wave progression and Jugular venous distansion, pericardial tamponade was considered in the first step. While the presence of shoulder pain and hypotension led us to AMI or thorasic aort

dissection, the cooccurrence of hypotension, dyspnea and normal findings in the lung auscultation led us to acute PTE. First of all we started fluid resuscitation and administered atropine via intravenous route. Then we performed transcutaneous pacemaker because of unresponsiveness to atropine. We performed RUSH (Rapid Ultrasound of SHock) protocol to find out the etiology of the shock. There wasn't pericardial tamponade but we showed hypokinesia and dilatation of the RV in addition to RV/LV >1. By cardiac ultrasound we showed McConnell's Sign which is defined by the akinesia of RV free wall and sparing of the apex. Looking at these findings, we thought the diagnosis of massive PTE and right ventricular AMI. We performed FATE for more detailed assessment. Left ventricular ejection fraction was moderate (35%-45%) and severe tricuspid regurgitation was seen at the same time. Unexpectedly, pulmonary artery pressure was only measured about 30 mmHg. This finding was concordant with primary right heart pathologies such as AMI or valvular disorders rather than PTE. CTA excluded aortic dissection and pulmonary embolism. Serial troponin I measurements ended up normal. Consequently, we diagnosed the patient with cardiogenic shock induced by severe tricuspid valve regurgitation. The patient was admitted to the coronary care unit for the valvular replacement surgery preparation.

Conclusion: It should not be forgotten that severe TR may present with the similar clinical findings of PTE, pericardial tamponade, aortic dissection and/or AMI. It might cause shock by decreasing in the stroke volume rapidly. In this clinical setting, it's difficult to diagnose acute severe TR because it does not cause acute pulmonary edema as MR does. FATE is a fast and sensitive diagnostic method for approaching cardiac problems. FATE is performed in ED to the patients who have symptoms that give clues about cardiac problems such as dyspnea and chest pain. Since a vast majority of critical submissions to ED are consisting of those patients, an EP should know how to perform FATE.

Keywords: Tricuspid Regurgitation, Cardiogenic Shock, FATE

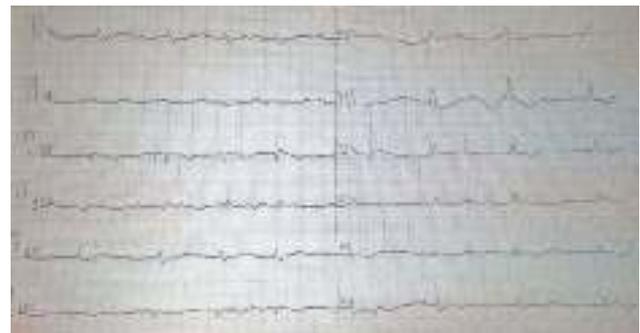


Figure 1. ECG image



You can watch echo video on youtube with this barcod

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[Acil Ultrasonografi]

QUADRICEPS TENDON RUPTURE DIAGNOSIS BY BEDSIDE ULTRASOUND IN EMERGENCY DEPARTMENT

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Department of Emergency Medicine, İzmir Tepecik Training and Research Hospital

Introduction: The quadriceps tendon is consisted by the rectus femoris and the distal tendons of the vastus muscle group (lateralis, intermedius, medialis). This tendon which inserts to the superior part of the patella, is responsible for extension of the leg. Quadriceps tendon rupture is rarely encountered among the adult musculoskeletal soft tissue injuries. It often occurs in individuals with predisposing factors. With this case, we presented a patient referring to the emergency department with the complaint of knee pain after a fall who had quadriceps tendon rupture diagnosed by using bedside ultrasound.

Case: A 46 year old patient who had hypertension and end-stage renal failure on a dialysis program referred to the emergency department with the complaint of left knee pain and inability to walk after falling. His medication history included ASA, metoprolol, paricalcitol, hydroxyzine hydrochloride and lansoprazole. Physical examination revealed tenderness, abrasions, swelling and ballottement on the left patella. Anterior and posterior drawer, medial and lateral stress tests were negative. There was no significant limitation in passive knee motions. He could not flex the left knee. The knee radiographs were normal. Bedside ultrasound examination revealed diffuse effusion and rupture of the quadriceps tendon (figures 1 and 2). This diagnosis was confirmed with MRI after immobilization with a long-leg splint (figure 3). The patient was planned a surgical repair and thus hospitalized.

Conclusion: Quadriceps tendon rupture is rare even in among all tendon injuries. (incidence is 1.3% approximately) It is 4 times more frequent in men and the peak incidence, in the sixth decade. In 80% of cases there is a predisposing factor which gives rise to susceptibility to injury. Predisposing factors were shown in Table 1. In partial tears patient can bring the knee leg to extension but cannot do fully extension. In complete tears extension is not possible at all. Suprapatellar gap may be palpable. The physical examination being not effective and the patient being able to extend his knee may mislead the cinician. Misdiagnosis rate is

between 10-50%. Plain radiography is usually normal though occasionally pieces of bone avulsed from the patella can be viewed. The best diagnostic methods are ultrasonography and MRI. MRI is a highly sensitive diagnostic tool showing the exact localization of the lesion and differentiating the complete and partial tears. Besides it is also used in the planning of surgical treatment. However ultrasonography can be applicable at bedside, is cheaper and more accessible than MRI. In addition, it can be used for patients extremely obese or with metal implants for whom MRI can not be performed. Ultrasonography shows quadriceps tendon extending as a fibrillar structure and inserting to the patella. (figure 2) When the tendon is teared, its proper fibrillar structure and continuity is distorted. Hematoma at the area of injury and avulsed bone pieces can also be displayed. While partial tears are managed conservatively, surgical treatment is needed for complete tears.

Keywords: Quadriceps tendone rupture, ultrasonography, emergency department

Table 1. Factors predisposing to tendon rupture

Age
Obesity
Steroid therapy
Systemic lupus erythematosus
Chronic renal failure
Diabetes mellitus
Syphilis
Tuberculosis
Tumour infiltration
Chronic anaemia
Atherosclerosis
Rheumatoid arthritis
Gout
Secondary hyperparathyroidism



Figure 1. The ruptured quadriceps tendon and patella, Q: quadriceps tendon, P: patella, *: torn bone fragment



Figure 2. Normal quadriceps tendon and patella, Q: quadriceps tendon, P: patella



Figure 3. Left Knee sagittal MRI, Q: quadriceps tendon, P: patella

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[Acil Ultrasonografi]

INTRAPERITONEAL FREE AIR AND BEDSIDE ULTRASOUND

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Acute abdominal pain is a common symptom in patients who present to emergency department (ED). The differential diagnoses of these patients are varied, and it is often difficult to be certain based only on the history and examination (1). Ultrasound easily accessible, inexpensive, rapid bedside use has spread its use in the emergency department. especially in patients with abdominal pain, free fluid in the abdomen, major vascular injury, hepatobiliary pathology being investigated; Knowing that the images created intraperitoneal free air is important. It may

lead to the diagnosis of perforation of the emergency physician. It gives the possibility of early diagnosis and treatment of the patient. In this case report, we aim to share the ultrasound image with abdominal pain presenting to the emergency department and perforation diagnosed patients, showing intraperitoneal free air (IPFA) to the bedside ultrasound.

Fourty two years old male patient presented with abdominal pain to ED. Gastric malign neoplasm was present in the story. He had heart rate 112 bpm, BP of 112/68, temperature 38,3 °C, respiration rate 20/min and SatO2 96%. The patient's physical examination revealed acute abdomen. In the supin patients right upper paramedian epigastric area of abdomen bedside ultrasound showed reverberation artifact. Gas being seen above the liver. Plain x-ray revealed air under the diaphragm improving IPFA. Patient consulted with general surgery and hospitalized.

Gastrointestinal perforation is diagnosed by demonstrating intestinal content, air, or intestinal fluid in the peritoneal cavity. Air in the peritoneal cavity is indicated by the existence of IPFA. The diagnosis of IPFA is usually made using a plane radiograph (chest radiography in the standing position or abdominal radiography in the left lateral position) or CT, which is thought to be the most sensitive method.(2) In recent publications ultrasound was found to be more sensitive and specific compared to plain radiographs.

Usually the liver lies against the diaphragm with no intervening gas. In pneumoperitoneum, gas may lie above the liver, obscuring the liver parenchyma. In contradistinction to shadowing from the lung edge, this gas does not move with respiration. Further, liver parenchyma may be seen superior to the free intraperitoneal gas, inferior to the lung margin. If the gas is traced inferiorly and medially, it can be seen to lie against the peritoneal line. The patient should be in a supine or left lateral decubitus position. (1)

As patients with undiagnosed abdominal pain often undergo ultrasound as part of the diagnostic process, all ultrasound users should be aware of IFPA signs.

Keywords: Intraperitoneal Free Air, Bedside Ultrasound



Figure 1. Reverberation artifact shows intraperitoneal free air.



Figure 2. X-Ray intraperitoneal free air

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[Acil Ultrasonografi]

NEW TECHNIQUES IN BEDSIDE ULTRASOUND FOR THE DIAGNOSIS OF PNEUMOTHORAX: PLEURAL FROTMAN

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Introduction: Pneumothorax frequently accompanies penetrating chest trauma and significant blunt chest injuries, and is a leading cause of preventable morbidity and mortality. Determination of the presence of a pneumothorax relies on excluding the presence of normal physiologic “to-and-fro” pleural motion synchronized with respiration, a sonographic sign that has been labeled as the lung “gliding” or “sliding” sign. We describe a modified examination method, focusing on the use of Pulse Wave (PW) doppler to facilitate the diagnosis of pneumothorax in a patient after blunt trauma.

Case 1: 17 years old male presented to emergency department with penetrating thoracic injury located at the right thorax, at the intersection of mid-axillary line and 5th intercostal space. To observe pneumothorax with ultrasound, linear probe was used. We evaluated the pleural sliding, “B-line” and “comet-tail” artifacts and M-mode findings. Pleural sliding, which is the most important finding in normal aerated lung, was absent. B-line and comet tail artifacts were also absent. At the M-mode, a “barcode” finding was found instead of “sand and sea”. All of these strongly suggested of pneumothorax. We went one step further and evaluated the lung with PW doppler. With the PW doppler we observed a decrease in the pulse wave signals, compared to the normal lung.

Case 2: 34 years old male patient came to emergency department with blunt chest injury after a traffic accident. The patient has pneumothorax at the left lung. The sonographic observation techniques used on the previous patient were applied to this patient. The results were the same.

Case 3: 32 year old male with a history of spontaneous pneumothorax presented to emergency department with

shortness of breath. Left sided pneumothorax was spotted. The sonographic observation techniques used on the previous patients were applied to this patient. The results were the same.

For the three patients the ultrasound images were recorded.

Conclusion: PW doppler allows us to measure pleural velocities at a single point, or within a small window of space. The ultrasound probe sends out a pulsed signal to a certain depth (chosen by the operator), as the operator just listens for the reflected frequency shift from that particular depth. The computer then calculates the velocity of flow at the chosen point. Each velocity is plotted as one white point. Many white points (from many doppler shift frequencies) make up the nice flow profile. The more intense the density of white points, the stonger the signal returning to the probe at the frequency/velocity.

In this case series we aimed to point out that besides the standard sonographic diagnostic findings, PW doppler findings may also be used to diagnose or to rule out pneumothorax. Further studies need to be done for the use of PW doppler.

Keywords: Bedside emergency ultrasound, pleural frotman, power doppler ultrasound, pneumothorax

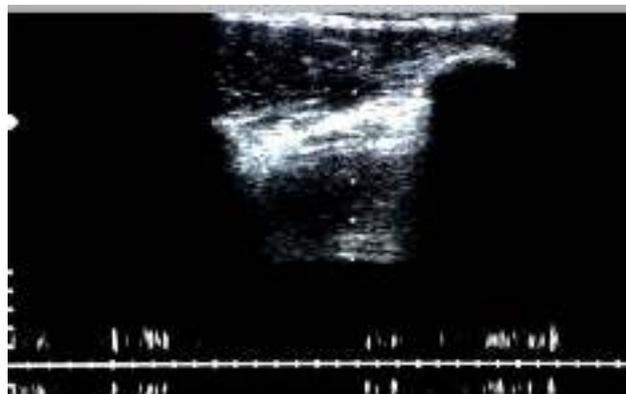


Figure 1. Decreasing the pulse wave signals

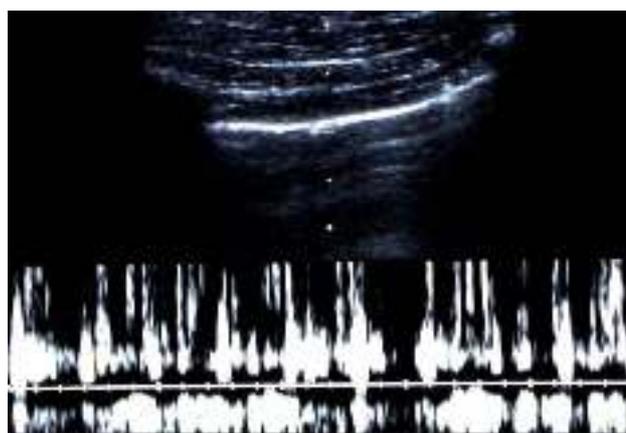


Figure 2. Normal pulse wave signals

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[Acil Ultrasonografi]

ULTRASOUND SHOWS THE WAY: A RARE CAUSE OF HYPOVOLEMIC SHOCK, SPLENIC ARTERY ANEURYSM RUPTURE

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Background: Rapid ultrasound in shock (RUSH) is an emergency ultrasound procedure that plays an important role in the first step diagnostic workup of a patient in shock. We present a patient with hypotension and abdominal pain that has evaluated rapidly and survived by the RUSH protocol.

Case: 67 year old man presented to emergency room with sudden onset abdominal and chest pain. His medical history was unremarkable. Vital signs were as follows; blood pressure: 80/34 mm/Hg, heart rate: 126/min, temperature: 36,7 C, oxygen saturation: 90%. Electrocardiographic was normal. On admission he was nearly syncope and physical examination revealed pale, clammy skin and generalized tender abdomen without guarding/rebound. RUSH showed fluid collection detected at perisplenic area and left upper quadrant without enlargement of abdominal aorta. Meanwhile he was resuscitated and as hemodynamically stabilized; shifted to radiology unit for abdominal CT angiography. Splenic artery aneurysm rupture was documented. Emergent laparotomy was performed. He discharged to home, after an 80 days of hospitalization.

Conclusion: Spontaneous rupture of splenic artery aneurysm is a challenging diagnosis that needs to be considered in collapsed patients presenting with abdominal pain. Delayed treatment is detrimental to patient survival. Easily performed at the bedside, not time consuming, a noninvasive; RUSH gives a real-time differential diagnosis of the shock and guides the management. In our case RUSH indicated intraabdominal hemorrhage and lead us to abdominal CT angiography for definitive diagnosis. So it is important to integrate ultrasound especially RUSH into our emergency room practice to identify rare and mortal causes of shock; like splenic artery aneurysm rupture.

Keywords: Ultrasound, Shock, Aneurysm

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[KBB ve Oftalmoloji]

A RARE CAUSE OF EPISTAXIS

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Epistaxis is a common complaint. It is rarely life threatening but usually benign, self-limiting and spontaneous. The true prevalence of epistaxis is not known, because most episodes are not reported. When medical attention is needed, it is usually because of either severe or recurrent nature of problem. Local trauma is the most common cause, followed by facial trauma, foreign bodies, nasal or

sinus infection and prolonged inhalation of dry air. Controlling significant bleeding or hemodynamic instability should take precedence over obtaining a lengthy history. Initial ED assessment for epistaxis begins with a rapid primary survey addressing potential airway or hemodynamic compromise. Obtain IV access in patients with severe bleeding, and request cross-matched blood if there is hemodynamic instability

Our case study is 23 years old man who presents epistaxis with severe bleeding and hemodynamic instability. In the patient's history there was a gunshot injury at left orbita and undergoes orbital operation. GCS was E2 V3 M4 = 7, blood pressure was 60/20 mm/hg, heart rate was 40 bpm and respiration was shallow. After the intubation, cross match, cbc and pt test send to laboratory and request cross matched erythrocyte suspension. For bleeding control posterior nasal packing with 16 f foley catheter was used. CVP catheter inserted then crystalloid and colloid solutions was applied. Laboratory result was hgb: 5.9, hct: 19.4 and pt: 14.9, erythrocyte suspension and fresh frozen plasma was given. Ct scan showed a foreign body near the ethmoidal bone (Image). The patient admitted the intensive care unit by ENT consultant. The patient was given with total of 7 units erythrocyte suspension and 3 units fresh frozen plasma. The patient had no urine output and creatinine was elevated. For this reason iv solution continued. Three days later the patient died.

The initial goals of therapy are control of bleeding and intravascular volume resuscitation. Crystalloid solutions, colloids, and blood products are the primary volume expanders for intravascular volume depletion. In patients requiring posterior packing or in cases of uncontrolled anterior epistaxis, early ENT consultation is likely to be beneficial, as there are many options available, including IMA embolization, open surgical approaches, or endoscopy. The approach depends on the anatomic source and the comfort of the consultant.

Keywords: Epistaxis, Hemodynamic Instability, Resuscitation



Figure 1. Ct scan show a foreign body near the ethmoidal bone

BILATERAL VOCAL CORD PARALYSIS

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Introduction: Vocal cord paralysis is a rare but mortal cause of respiratory distress. Due to the upper airway obstruction, typical finding is stridor. Decrease in oxygen saturation and loss of consciousness can be seen in patients. Severity of symptoms are related to the type of the paralysis: bilateral/unilateral or complete/incomplete. We report a case with spontaneous bilateral vocal cord paralysis as rare mortal and emergent clinical condition.

Case: A 46-year-old man presented with stertorous respiration for 2-days. He did not complained chest pain or loss of consciousness. He has ischemic stroke in past medical history 1½ years ago. Vital signs were as follows: arterial blood pressure 130/60 mmHg, heart rate 140 beats/min, temperature 36.8 °C, respiratory rate 28 breaths/min, and oxygen saturation was 97% without oxygen supplementation. On physical exam, he was alert and oriented. Stridor has been detected and there were no rales. There weren't any foreign bodies in mouth or oropharynx. There were no uvule edema. He didn't have any new neurologic abnormal finding. Laboratory evaluation was normal. His chest x-ray shows no abnormality. Upper airway obstruction have been suspected. Emergent ENT consultation was made. There was bilateral vocal cord paralysis on his video laryngoscopy. The patient was performed tracheotomy for respiratory distress. He was discharged home safely with tracheotomy canula several days later.

Conclusion: Vocal cord paralysis is a rare but mortal cause of respiratory distress. Finding in physical examination is stridor. Diagnosis can be made via laryngoscopic evaluation. Emergency physicians must be aware of this serious clinical problem.

Keywords: respiratory distress, vocal cord paralysis, tracheotomy

RECURRENT EPISTAXIS AND BLURRED VISION

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Introduction: Recurrent epistaxis is a common disorder. Common underlying causes include local inflammatory diseases of the nose, infections, vascular malformations, tumors, and trauma. The most common types of nasal cavity tumors are; adenocarcinomas and squamous cell tumors. Risk factors are supposed to be cigarette smoke, exposure to wood dust, formaldehyde and being a leather/textile business employee. Nasal cavity tumors usually present with nasal/chronic sinus congestion. Complaints are usually unilateral. According to the extent of the tumor; the symptoms may vary as olfactory problems to proptosis, diplopia, vision loss. We report an unusual cause, undiagnosed nasal cavity tumour causing recurrent nasal bleeding and acute blurred vision.

Case: The patient admitted to emergency department with occasional nasal bleeding for two days and the new onset of blurred vision. The patient's GCS was 15, vital signs were stable, physical and neurological examination were normal; except bilateral decreased vision, more on the left. Cranial and maxillofacial CT were taken. A mass was detected; filling both of the nasal cavities, invading optic nerve and pushing optic chiasm. The patient was consulted to neurosurgeons and the ear nose throat surgeons. The patient was operated by ear nose throat surgeons.

Conclusion: The lifetime prevalence of epistaxis is about 60% in the general population. Ten percent will present to a physician. Individuals older than age 50 represent 40% of those requiring medical attention and tend to have more serious bleeds. In the recurrent epistaxis, a detailed history and physical examination for other pathologies other than nose like hematological malignancies, other tumors those can invade cranial and orbital involvement should be done. As cranial CT is helpfull for bones, nasopharynx and lymph node invasion evaluation, MR is helpfull for determining intracranial, orbital or perineural involment. As treatment; surgery, chemotherapy and radiotherapy are options. Combining these treatments is superior to only surgery/radiotherapy/chemotherapy. As a surgical skill; endoscopic resection technique is superior to the others in nasal cavity tumours.

Keywords: nasal cavity, blurred vision, epistaxis



Figure 1. Tumor in nasal cavity



Figure 2. Optic nerve invasion



Figure 3. Destruction of base of skull

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[KBB ve Oftalmoloji]

ADULT CYSTIC HYGROMA: A CASE REPORT

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Introduction: Cystic hygroma is a rare and benign congenital soft tissue tumor of the lymphatic system. Despite sometimes showing itself at birth, 90% of cases are diagnosed during the first 2 years of life. Cystic hygroma grows slowly and may rarely show spontaneous regression. An hemorrhage or infection inside the cyst may lead to its sudden swelling and therefore enlargement. Here we report the case of an adult patient with an intracystical

hemorrhage and as a result, a sudden enlargement of the cystic hygroma.

Case: A 25-year-old female patient presented herself at the emergency department with a sudden swelling on the left side of her neck. During the physical examination the patients general condition was found to be good, she was conscious and cooperative. A soft tissue swelling of 5x3 cm was detected in her left supraclavicular region. She had a BP of 100/60 mmHg, a pulse of 80/min and her temperature was 36.5°C. The other systems were found to be normal during physical examination. She had no history of chronic disease or recent upper respiratory tract infection (URTI) and her laboratory results were within normal range. An ultrasonography was performed on the neck's soft tissue and in the supraclavicular region a densely-filled septated cystic lesion of 75x20mm was detected. The initial diagnosis were infected cystic hygroma and hemorrhagic cystic hygroma. To ascertain the diagnosis a neck exploration was performed. The cyst was found to be red in color and hemorrhagic and was situated on the medial side of the omohyoid muscle, adjacent to the jugular vein and had elongated itself along the medial side of the carotid artery reaching the inferior part of the clavicle. The aforementioned cyst was excised and the diagnosis was confirmed by the pathological report as a hemorrhagic cystic lesion.

Conclusion: Despite being a rare condition in adults, cystic hygroma is a diagnosis to be borne in mind by the emergency department doctors for patients presenting with a sudden and swift neck mass enlargement.

Keywords: cystic hygroma, adult, emergency department

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[KBB ve Oftalmoloji]

A RARE CONSEQUENCE OF TRAUMA: UVEITIS

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Background: Uveitis represents a complex intraocular inflammatory process that can involve not only the uveal tract but also the retina, vitreous, optic nerve cornea, and sclera. There are inflammation, including leukocytic infiltration, and exudate in the anterior chamber and/or vitreous, as well as inflammation in the uvea, and retina. In many instances the cause is unknown. When identified, the causative agents and/or mechanisms include infectious agents, trauma, neoplasms, and autoimmunity.

Case: A 21 years old male admitted to emergency department because of head trauma by hooligans after one hour. His vital signs were as follows; blood pressure 120/80 mm Hg, pulse 98 bpm and regular, respirations 18 /min, and body temperature 36,7°C, oxygen saturation with pulse oximetry 97%. He had a Glasgow Coma Score of 15 at the time of admission. Furthermore his anisocoria of 4 to 2 mm right to left respectively neither systemic nor neurologic abnormal physical signs was found. He denied any existing medical condition, use of medications or illicit drugs.

His cranial computed tomography and magnetic resonance imaging modalities revealed nothing abnormal. He was consulted by neurosurgeon and ophthalmologist. Ophthalmologic examination yielded that he had traumatic uveitis and given therapy. He was discharged by the recommendation of control.

Conclusion: Uveitis is an ophthalmologic emergency since it can result in blindness if not treated properly; urgent consultation

with ophthalmologist is indicated. Mild traumas also could lead to anterior uveitis. An emergency physician should be alert about uveitis also after a trauma.

Keywords: trauma, uveitis, ophthalmology

P-180

[KBB ve Oftalmoloji]

SPONTANEOUS SUBCUTANEOUS ORBITAL EMPHYSEMA FOLLOWING FORCEFUL NOSE BLOWING

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Introduction: Orbital emphysema is an uncommon condition occurring because of air trapped into subcutaneous tissue around the orbit. It commonly seen in cases with history of sinusitis, facial trauma or surgery. Orbital wall fracture is a common cause. Other causes include forceful nose blowing, post-surgical and pressure changes during air travel. In this case we discuss a 34 year old man presented with sudden onset of left periorbital emphysema and swelling following forceful blowing of nose. There was history of facial trauma. We obtain brain and orbital CT and there was no pathological finding.

Case: A 34 year old man was admitted to the emergency department with mild periorbital ecchymosis. There was a facial trauma on his right zygomatic area when he was playing football. He presented emergency department with sudden painless onset of right periorbital swelling following forceful blowing of nose. Crepitation was present in the right orbita superior at physical examination. The eye was not painful at palpitation. Swelling was not accompanied by redness or elevated temperature. Direct and indirect light reflex was positive in both eyes. Sight examination was normal. Eye movements were free in both directions. There was no diplopia or ptosis. There was no bone fracture in orbital CT. The sinuses were normal.

Conclusion: Diagnosis of orbital emphysema is generally made with accurate anamnesis, physical examination and orbital tomography. Orbital emphysema developing after nose blowing is one such rare condition. The emergency department physician must be aware of the diagnostic approach to orbital emphysema.

Keywords: orbital emphysema, orbital ct, clinical symptoms

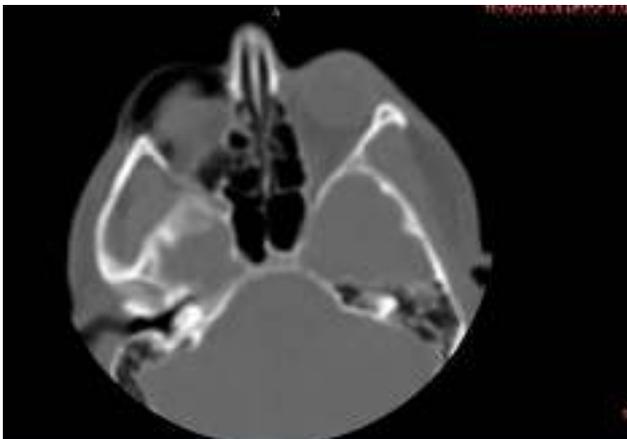


Figure 1.



Figure 2.

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[KBB ve Oftalmoloji]

UVULAR HAEMATOMA DEVELOPMENT DUE TO THE USE OF WARFARIN

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Introduction: Warfarin is a medicine which is commonly used in the group with high risk of thromboembolism in cardiovascular diseases. Not only it is difficult to achieve the therapeutic level in ambulatory patients, but also it may cause embolic or haemorrhagic complications. Spontaneous bleeding can happen within a wide range from purpura and ecchymosis to bleeding in major organs. In this case, we aim to present isolated uvular haematoma, which is a rare complication arising from warfarin use.

Case: The 49-year-old male case applied to our Emergency clinic for complaints of bleeding into his mouth. In his physical examination, uvular haematoma was detected which was bleeding as leakage. Our patient was receiving the treatment of Coumadin 5 mg 1x1 and Coraspin 100 mg 1x1 due to arrhythmia. Vital signs were stable. In the laboratory analysis, the following were found; Hgb: 16.0, Plt: 178.000, INR: 0.98, APTT: 30.5. The patient who doesn't have respiratory distress was observed as symptomatic. Otorhinolaryngology and Cardiology clinics were also consulted. After, the patient who didn't have respiratory distress and active bleeding was discharged with recommendations.

Conclusion: Although the patients using oral anticoagulant realize a regular medication follow-up, the possibility to face undesirable complications in the individuals who have anticoagulant and antiagregant treatments simultaneously, as it was the case for our patient. Uvular haematomas are rare cases in the practice of emergency medicine. We wanted to research that its follow-up should be done symptomatically, unless there is respiratory tract distress.

Keywords: oral anticoagulant, uvular haematoma, warfarin



uvular hematoma 1



uvular hematoma 2



uvular hematoma 3

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[Çevresel Aciller]

BROWN RECLUSE BITE: A CASE REPORT

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Introduction: The *Loxosceles reclusa* (LR), commonly known as the brown recluse spider, is responsible for virtually all cases of spider bites leading to a significant necrosis. It is also count in top ten poisonous spiders in the world. However, some authors suggest that the only way to definitively diagnosis a brown recluse bite is to identify the spider itself, which is often not available. LR is commonly seen in southeast of America but it may be seen in other parts of the world because of travelling routes.

Case Presentation: Our case was a 39 years old woman whom had no illness before. She experienced a mosquito like bite 1 week

ago but could not capture the insect. At the time of acceptance she had a necrotic lesion with hemorrhagic containment in the anterior portion of left knee with a diameter of 4 cm. lesion was surrounded with an erythematous area of 10 cm diameter. She was consulted to dermatology and plastic surgery.

Lesion was aspirated and topically treated in dermatology service and the patient was disposed after 3 days of admission.

Conclusion: Brown recluse bite is hazardous and hard to copulate with. Although it is very rare in Turkey we may come across the patients with its bite. Treatment modalities may vary but when recognized it must be treated rapidly and aggressively. If it is not, patient may end with an unwanted complication such as losing a limb.

Keywords: Brown Recluse, Spider Bite



Figure 1. *Loxosceles Reclusa*



Figure 2. Lesion of the patient

SPONTANEOUSLY RESOLVED ATRIAL FIBRILLATION CAUSED BY LOW TENSION ELECTRICAL SHOCK: A CASE REPORT

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Introduction: Today, incidence of electrical injuries are not exactly known. Various cardiac rhythm disorders as well as asystole, ventricular fibrillation, sinus tachycardia and heart block can be seen as a result of electric shock. However supraventricular arrhythmias such as atrial fibrillation are rare. Despite being provided consensus on the treatment of ventricular arrhythmias due to electric shock, different publications are available in the literature about treatment of supraventricular arrhythmias such as atrial fibrillation. We also aimed at contributing to the literature by presenting this article about a case who presented to the emergency room with atrial fibrillation as a result of electrical injury and soon returned spontaneously to normal sinus rhythm.

Case: 75 year old male patient was brought to the emergency room by 112 ambulance service due to electric shock while trying to repair the dynamo in his garden. Patient experienced short-term loss of consciousness, immediately after exposed to electrical shock. Patient, hasn't known any cardiac disease history, was conscious, oriented, and cooperative, TA: 120/60 mmHg, pulse: 96/dk, arrhythmic, SpO₂: 96% when it comes to emergency department. In the detailed physical examination heart sounds were arrhythmic and lung sounds were normal. Patient couldn't have brought to abduction his both shoulder joint more than 90 degrees. Atrial fibrillation was present in patient's electrocardiography (ECG) on admission (figure 1). Determine to whether the new-onset atrial fibrillation, old ECGs of the patient was asked to relatives of patients however, this information has not been achieved. Then patient was taken to the intensive care unit and was monitored for near the vital follow-up. Low molecular weight heparin were given subcutaneously. In the seventh hours of the patient's emergency follow-up, ECG rhythm was noticed that as sinus rhythm (figure 2). Hemodynamic parameters remained stable during follow-up. patient's rhythm, observed 24 hours in the intensive care unit and 24 hours in monitored observation unit, remained in normal sinus rhythm and the patient was discharged with recommendations.

Conclusion: Despite ventricular dysrhythmias such as VF/VT are frequent due to low-voltage (<300 V) electric shock, supraventricular dysrhythmias such as atrial fibrillation is rarely seen. Cases of atrial fibrillation, returning spontaneously to normal sinus rhythm, have been reported in the literature. Some cases has returned to sinus rhythm with antiarrhythmic drugs such as digoxin, amiodarone, some resistant cases applying the cardioversion.

Keywords: atrial fibrillation, electrical injuries, emergency department

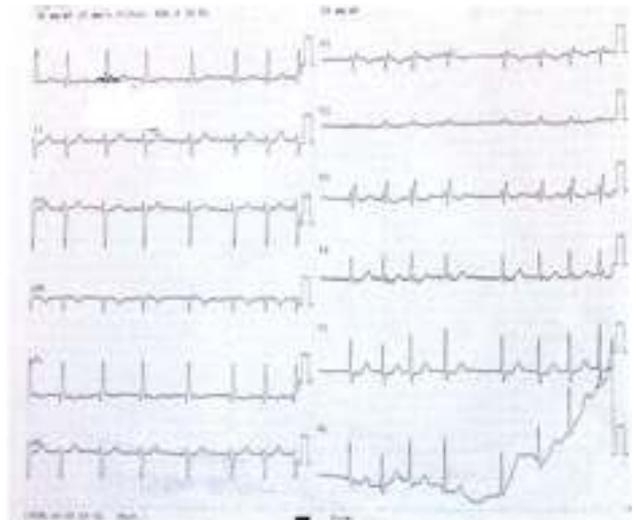


Figure 1. patient's ECG on admission

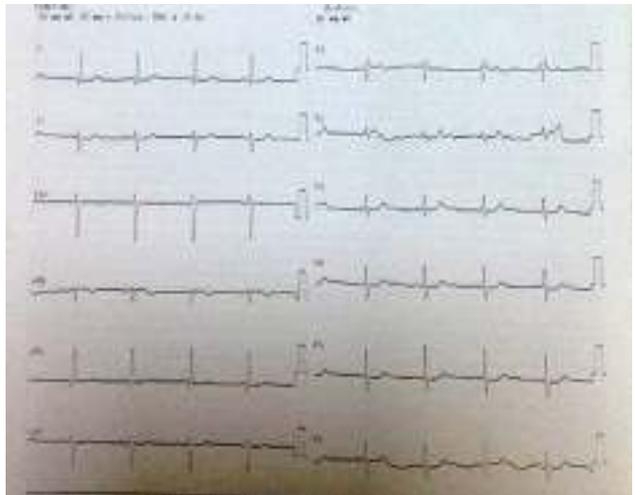


Figure 2. patient's control ECG

MOBITZ TYPE 2 A-V BLOCK DUE TO BUPROPION OVERDOSE

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Introduction: Bupropion is a monocyclic antidepressant which is considered to inhibit dopamine and norepinephrine uptake. Overdose ingestions generally lead to tachyarrhythmias, agitation and seizures. The most common cardiac side effects are tachycardia and prolongation of QT and/or QRS complex.

In our case, we present an atrioventricular (AV) conduction disorder in a patient with multidrug ingestion which is considered as bupropion intoxication in the first place.

Case: 41 year old female patient was admitted to the emergency room because of suicide attempt by intake of 1200 mg bupropion, 800 mg esomeprazole, 100 mg medazepam and 100 mg hyoscine. At the time of admission she was conscious,

oriented, cooperative, and her vital signs were measured as TA: 110/60 mmHg, pulse: 80 beats / min, SatO₂: 98%, fever: 36.7 °C. Gastric lavage was performed with orogastric tube and activated carbon was given with this way. Patient were delivered short-term generalized seizure once at emergency room. After administration of 1 mg of diazepam intravenously during the seizure, patient's seizure activity stopped and about 15 min. later her awareness was reopened. 114 national poison control center has suggested to be followed 24-48 hours in intensive care and the administration of sodium bicarbonate if QRS widening or QT interval prolongation is detected due to intake of high dose bupropion. Mobitz type 2 A-V block with 2:1 AV conduction was detected on ECG (figure 1). On these findings, the patient was admitted to the emergency intensive care unit. Patient was followed up in the emergency intensive care unit for 24 hours. Patient's blood pressure, saturation and fever values remained stable in intensive care unit follow up. Patient's heart rate was between 35-55 beats/min. Due to her bradycardia wasn't symptomatic, no additional treatment was applied. There were no ECG changes (figure 2). At the end of the 24-hour observation in intensive care, due to the continuation of Mobitz type 2 A-V block with 2:1 AV conduction, the patient was transferred to the Cardiology service. The patient was followed for about a week in the cardiology department and it is learned that rhythm disorder had continued intermittently during her follow up. The patient was recommended to control the cardiology clinic to control cardiac rhythm after a week. Because absence of active complaint and symptomatic bradycardia, patient was discharged from hospital.

Conclusion: Because of National poison center recommendations and patient seizures in the emergency department, bupropion intoxication was considered firstly in patient. No data found about other drugs, taken by patient, in the literature to explain the cardiac side effects in patients. In the light of these data Mobitz type 2 A-V block with 2:1 AV conduction, developed in patient, were considered as the effect of bupropion intake. Rythm disorder, developed in patient, didn't improve despite a week follow up. Because absence of symptomatic bradycardia, no treatment had recommended.

Keywords: A-V Block, Bupropion Overdose, Intoxication.

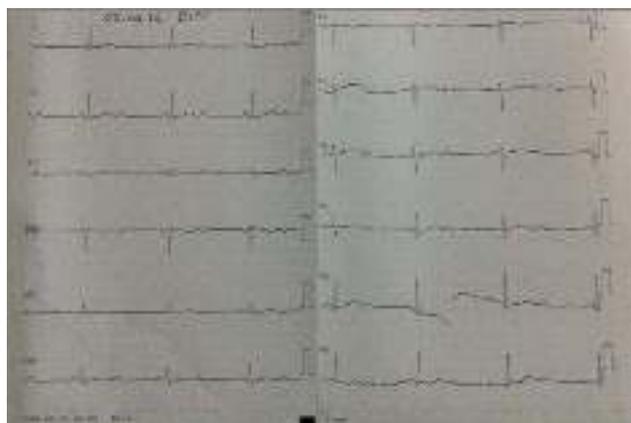


Figure 1. Patient's ECG at admission

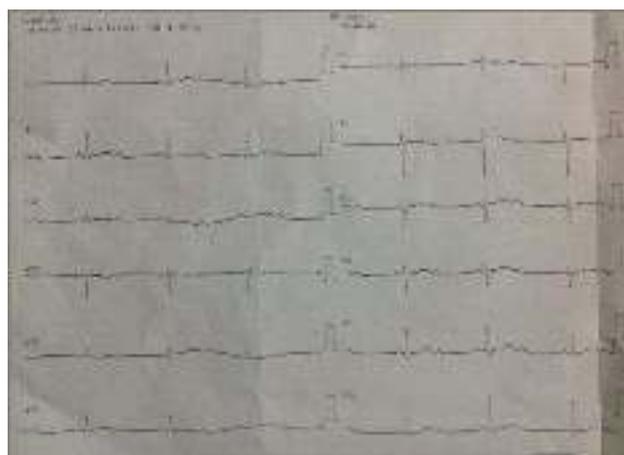


Figure 2. Patient's control ECG

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[Çevresel Aciller]

AN INTERESTING WAY OF THINNER ABUSE

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Introduction: Thinner (Toluene), that is used as a solvent in industrial area, is an aromatic hydrocarbon material. Because it is cheap and easy attainable, it is common in all over the world. Toluene is commonly abused by inhaling to get a sensation of euphoria. Our case administered thinner to his body via an uncommon way.

Case: Forty years old male was admitted to the emergency service because of the lesions on his body. From the history, it was understood that he had self-injected thinner to his body. At admission he was depressive and aphatic. His arterial blood pressure was 110/70 mmHg, heart rate was 90/min and body temperature was 37.9 °C. In his physical examination, eight hyperemic, sensitive, palpable, yellow in the middle and fluctuative, nodular lesions were seen in the anterior thorax and pelvic region(Figure 1).

Considering that the lesions might be in abscess formation, one of them was drained from the most fluctuating part. Drainage material was yellow and purulent. For differential diagnosis cranial tomography was performed and complete blood count, liver and kidney function tests were analysed. The results of tests were in normal range except the leukocyte level (16000/uL). No microorganism could be developed in the material culture. Hemodynamics of patient was stable during nursing. The lesions were recovered after dressing. The patient was diagnosed as psychosis by the psychiatrist.

Conclusion: Abuse of solvent is seen very common because of its cheapness and easy accessibility. Many local and systemic signs are developed after thinner abuse. These signs can be acute or chronic. Because of its lipophilicity, it may affect central nervous system. Death from its toxicity is due to anoxia, respiratory depression, vagal stimulation and cardiac arrhythmia. It may also cause metabolic insufficiency like hypokalemia, hypercloremia, metabolic acidosis and hypocalcemia. Chronic toluene inhalation causes central nervous system, cardiac, renal and liver damage

Abuse of toluene is commonly via inhalation. In literature there is a case report of toluene self-injection via intrathoracic region for the aim of suicide attempt. In a study made with children, was found that orally acute thinner toxicity might have caused non-infectious fever due to lipid peroxidation consisted in the brain. Our case self-administered thinner to his body in an uncommon way that was self-injection and no systemic reaction was observed. We believe that this case will help the clinicians for differential diagnosis of pathologic lesions.

Keywords: Thinner, Emergency service, Aromatic hydrocarbon



Figure 1. Anterior toraksta ve pelvik bölgede toplam sekiz adet hiperemik, duyarlı, deriden kabarık, ortası sarı renkte ve fluktuasyon veren nodular tarzda lezyonlar mevcuttu

Eight hyperemic, sensitive, palpable, yellow in the middle and fluctuative, nodular lesions were seen in the anterior thorax and pelvic region

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[Çevresel Aciller]

TRANSIENT ISCHEMIC ATTACK AFTER PRESUMPTIVE MESOBUTHUS GIBBOSUS ENVENOMATION

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Introduction: Scorpion stings are a major public health problem in many underdeveloped tropical and subtropical countries. The majority of these incidents are not serious, with local pain being the only clinical manifestation. However, severe

complications such as acute pulmonary edema, cardiogenic shock, and neurological complications can occur.

Case: A 88-year-old woman with a past medical history of peptic ulcer disease was stung by a large yellow scorpion on her first finger of the right foot. She was admitted to our emergency department (ED) an hour later due to severe sharp pain, paresthesia and burning at the sting site. On initial examination, the patient was conscious and well oriented, and her vital signs were as follows: a blood pressure of 148/68 mm Hg, a pulse rate of 84 beats per minute, a respiratory rate of 18 breaths per minute, a body temperature of 36.3°C, and an oxygen saturation of 98% on room air. During the ED course, the patient received intravenously 50 µg fentanyl, 45.5 mg feniramin maleat, and 100 mg ranitidine. Approximately 5 hours after envenomation, her blood pressure was progressively elevated (max level of 218/115 mm Hg) and the patient developed new-onset and progressive neurologic deterioration. In neurological examination, she had moderate dysarthria, left-sided hemiparesis with muscle power of 3/5 in upper and lower extremities. The deep tendon reflexes were brisk and a left Babinski sign could be easily elicited. A single vial (dissolved in 100 mL of crystalloid) polyvalent scorpion antivenom was administered intravenously approximately 30 minutes. An urgent non-contrast computed tomography scan of the brain detected no acute hemorrhage, mass effect, or sign of acute ischemic lesion. Following the antivenom administration, her neurologic symptoms resolved completely within 2 hours. She was discharged from the ED after 3 days in good clinical condition and without any neurologic deficits.

Discussion: *Mesobuthus gibbosus* is a member of the Buthidae family which is one of the most widely distributed and important scorpion in western of Turkey (eg Manisa, Aydın, İzmir). Scorpion venom is generally composed of several toxins and other compounds. The most important components of the venom are neurotoxins that primary target voltage-gated ion channels. Neurotoxins result in release of excessive neurotransmitters such as epinephrine, norepinephrine, acetylcholine, glutamate, and aspartate at synapses and the neuromuscular junction. Neurological complications after scorpion envenomations typically include cranial nerve dysfunctions (eg, ptosis, nystagmus, blurred vision, tongue fasciculations, slurred speech, and hypersalivation), somatic skeletal neuromuscular dysfunction (eg, restlessness, fasciculations), ischaemic or haemorrhagic strokes, and acute hypertensive encephalopathy. On the other hand, transient ischemic attack (TIA) is an extraordinarily rare but devastating complication after scorpion envenomation.

In conclusion, TIA after a scorpion envenomation is rare but can be life-threatening. Therefore, all patients with scorpion envenomation should be closely monitored in anticipation of possible neurological complications due to direct toxic effects of the venom, vasospasm, and hypertension especially in patient with known carotid artery disease.

Keywords: Scorpion envenomation, Transient ischemic attack, Venom, Antivenom

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[Çevresel Aciller]

JELLYFISH STING TREATMENT MAY BE RESISTANT AND SLOW

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Introduction: Jelly fish stings are hard to manage because of the resistant dermatological, sympathomimetic and psychiatric symptoms.

Case: A 32 year old woman is admitted to the emergency with the complaint of a serious rash on her forearm. She reports of getting stung by a jelly fish 4 days prior to the visit. During that 4 day period, she had visited different hospital emergency rooms with the complaint of severe pain and panic attack. She claims of her panic attack being started after the incident. She has a branchy and patchy pattern of edematous, painful, and itchy lesion which exacerbates in the evening and has the same attacks with the duration of 2 hours (Figure). She has been using antihistamines since the first day of the incident. Our consultation to the dermatology and psychiatrist resulted with the diagnoses of “acute reaction to jelly fish sting” and “panic attack”; as a consequence she was prescribed high dose corticosteroids and Xanax ®

Conclusion: Pain control is the mainstay of jellyfish sting unless there is another anaphylactic lesion. Removal of foreign bodies and wound irrigation may be alone significant pain controlling actions. Most of the patients may experience severe sympathomimetic symptoms after envenomation and these patients are to be treated with ACLS algorithms. Furthermore patient may have panic symptoms and fear of death due to this experience. In case it may happen; Irukandji syndrome involves a painful sting that is followed about 30 minutes later by the onset of generalized back, chest, and abdominal pain, hypertension, diaphoresis, agitation, and tachycardia. Patients may develop myocardial injury and pulmonary edema 6 to 18 hours after the sting. The syndrome may easily be misdiagnosed as a panic attack. Current use of magnesium therapy for the syndrome still lacks enough evidence.

It is widely recommended for the patients to undergo hot water immersion of the involved area (water temperature 40° C) for up to 90 minutes. This therapy should immediately start before or at the emergency room. If the temperature is unbearable especially for the children, the clinician can use the hottest water temperature that can be tolerated. Patients may also be treated with opioids and nonsteroidal anti-inflammatory drugs (eg, ibuprofen) or acetaminophen for mild pain.

Our patient was treated with long term corticosteroids and benzodiazepine to improve the complaints, but she recovered with a pigmentation on her forearm at the end of 2 months. She still complains of nightmares about once a week.

Keywords: Jellyfish, corticosteroid, panic attack, Irukandji syndrome



Figure 1. The patchy pattern of edematous, painful, and itchy lesion on the forearm.

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FRESHWATER STINGRAY INJURIES TO THE EXTREMITIES

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Introduction: There are 150 species of stingrays worldwide, accounting for thousands of injuries every year. Up to 1500 cases are reported each year in the USA, with few fatal events. Stingrays are not aggressive by nature, they only react when people step on them or handle them improperly. Severe pain is the main symptom, appearing immediately after the sting and causing behavioral changes in patients due to its intensity. The injuries cause intense local pain and cutaneous necrosis, complicated by secondary infections and retention of fragments of the stingers in the wound

Case: A 39-year-old-man admitted to emergency department with injury of freshwater stingray sold as aquarium fish. He said that he called poison control center before admitted to emergency department. They suggested him to rub with vinegar and hot water immersion of the stung extremity. He was admitted to emergency department after two hours because of no alleviation in his severe pain. The insertion point and slight erythema were observed on right hand, between second and third finger. He was still complaint from severe pain. Hydration, analgesia and anti-allergic treatment was applied. Tetanus vaccine was administered. There was no foreign body on ultrasound. After analgesia application, he reported alleviation on his pain. He was informed about the potential complications. He was discharged from emergency department with analgesia and antibiotic therapy; suggesting elevation of injured extremity.

Conclusion: Small freshwater stingrays are imported as aquarium fish. They generally use their sting in the tail for self-defense. They not attack with their spined tails, unless provoked. Such injuries are common in fishermen, aquarists and divers. Wounds have a traumatic (puncture) component and a toxic (envenomation) component. Rare puncture injuries to the thorax or abdomen can cause serious injuries and death. Complications such as abscess, delayed healing, tissue necrosis, gangrene, osteomyelitis, necrotizing fasciitis and septicemia can occur. Stingray venom most often causes severe pain on

contact, although the exact mechanism of toxicity is not certain. All stingray injuries should be managed initially with wound irrigation to dislodge retained spine fragments and envenoming tissues and warm water immersion to inactivate heat-labile toxins.

The management depend on the site and depth of injury. Injury to the face, thorax or abdomen requires emergent imaging, close monitoring and surgical management. Treatment at extremity injuries include irrigation, antibiotic prophylaxis, analgesics and local anesthesia. Routine radiographic evaluation is mandatory to rule out foreign body and presence of gas in the soft tissues which may be due to secondary bacterial infection of the wound.

Stingray injuries are usually reported from coastal regions. The injury is caused by the tail spine of the stingray, which can penetrate deep into the soft tissues, and the venom in the tail can cause extensive tissue damage. There is not a definitive therapy that is really effective for injuries by stingrays. The actual treatment uses only symptomatic measures such as hot water for pain control. Hot water immersion should not be used for longer than 90 minutes and is contraindicated in patients who have had local or regional anesthesia for pain control. This case of envenomation call attention to the potential for injury among persons in close contact with venomous pets.

Keywords: Envenomation, stingray, venomous pets, extremities

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[Çevresel Aciller]

BROWN RECLUS SPIDER BITE

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Loxosceles are brown spiders that have a worldwide distribution. *L. reclusa* (The brown recluse spider) occupies the largest geographic area and accounts for the majority of significant envenomations. Although Brown recluse spider bites are most often benign and self-limiting, In a few cases can cause severe necrotic skin lesions and in rare cases, death.

A 78-year –old male was bitten by a yellow insect resembling a spider in the medial part of his left arm three days ago. He developed red margins around the site of bite and subsequently the centre of this area turned into a necrotic lesion (Figure 2). His history only revealed Diabetes Mellitus, panic disorder and valve replacement surgery. His vital signs were in the normal range during the ED stay. In his physical examination, he had erythema in the 1/3 upper medial part of his left arm and there was a 2x2 cm necrotic tissue and a blister formation. He was admitted to hospital and antibiotic treatment (imipenem 4*500 mg) was given. Three weeks later after envenomation skin grafting was required for cosmetic defect.

Loxocelles bites can can occasionally result in a significant cosmetic defect requiring skin grafting.

Keywords: spider bite, necrosis, brown recluse



Figure 1. Brown Reclus Spider (www.wired.com)



Figure 2. Erythema and necrosis and blister formation

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[Çevresel Aciller]

A NEW CAUSE OF RESPIRATORY DISTRESS FOR THE EMERGENCY ROOM: BONZAI

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Introduction: Firstly generated in the Soviet Union as an alternative drug in treatment alcohol dependency, phenazepam (Bonzai) is a synthetic member of the benzodiazepine family. Because of its short duration of action and a highly addictive potential its usage was later abandoned. Years later its usage surfaced again, primarily in England, as a recreational drug.

The usage of Bonzai can lead to several severe adverse effects such as seizures, changes in consciousness, paralysis, multiple organ failure and respiratory or cardiac arrest. By reporting these two cases of Bonzai intake presenting with respiratory failure, we tried to draw attention to this current issue.

Case 1: A 23-year-old male patient was brought by his friends in the Emergency Department with respiratory distress and a worsening in his general condition. Physical examination showed that his general condition was bad, he was confused and his heart was rhythmic but bradycardic. Also, he had respiratory distress. His blood pressure was 60/50 mmHg, O₂ saturation was 82% and respiratory rate was 4-6/min. The patient was immediately monitored, vascular access was established and 0.9%

saline infusion was started. An oxygen mask was provided for the patient but because his breathing became shallow with time, the attending physicians decided to intubate him and to secure the respiratory pathway. After intubation the patient recovered from hypoxemia and bradycardia and he was then admitted to the Intensive Care Unit (ICU). The attending physicians learned that the patient had been using an oral drug known as Bonzai. He was extubated on his second day of hospitalization.

Case 2: A 21-year-old male soldier was admitted to our unit from another medical center because of a worsening general condition. Physical examination showed that his general condition was bad, his Glasgow Coma score was E2M4V1:7. His blood pressure was 90/60 mmHg, O₂ saturation was 76% and his respiratory rate was 6/min. The patient was cyanotic on the lower part of his left knee and no distant pulse was present on that lower extremity. The patient was immediately intubated. His laboratory results were as follows: Ph:7.1, HCO₃:15.5 mmol/L, PO₂:45mmHg, O₂ saturation:75%, K:7.8 meq/L, BUN:32.7mg/dl, Creatinine:2.58 mg/dl, ALT:554U/L and AST:1720U/L. The patient was given insulin and dextrose for his hyperkalemia, was started on IV calcium and was applied hemodialysis. He was then transferred to the ICU in order to be monitored with a mechanical ventilator. As for the cyanotic lesions on his left leg, circulation failure due to applied pressure was the diagnosis of the attending physicians and fasciotomy was performed on the third day of follow-up. On his fourth day of hospitalization the patient was extubated. On the request of his relatives, the patient was transferred to another medical center.

Conclusion: Education and social awareness seems to be of crucial importance in preventing the usage of drugs with deadly adverse effects. Because of its widespread usage nowadays, medics of the Emergency Department should be in an alerted state on the Bonzai topic.

Keywords: bonzai, emergency room, respiratory distress

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[Çevresel Aciller]

SAVE US FROM OKRA TERROR

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Introduction: Many people did not show adverse reactions to foods, unfortunately, the same situation does not occur in others. Such as anaphylaxis, which can be very serious, with a different clinical manifestations. Same called this situation bifazizim. In this case the authors represent a patient with a okra induced dermatitis.

Case: A 45-year-old female patient was admitted to the emergency department (ED) with complaints of itching and redness in both arms. She contacted with okra to prepare the okra food before three hours to ED visit. Swelling and redness occurred in areas with okra contact (Figure-1). She had no history of allergic diseases. On physical examination, vital signs were stable. There were puffy red rashes especially on the distal portions of the forearms. Similar lesions were not detected in other parts of the body and also there was no evidence of uvula edema or

bronchospasm. The patient was discharged after anti-allergic treatments with alleviation of the symptoms.

Conclusion: Allergic contact dermatitis is a delayed cutaneous hypersensitivity or cell-mediated immune reaction to small-molecular-weight chemicals, which act as haptens, must be always on clinician mind with patient known allergic disease history even in a woman preparing okra food.

Keywords: okra, anaphylaxis, allergic contact dermatitis



Figure 1. Puffy Red Rash On Both Forearms

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[Çevresel Aciller]

ONE SERIOUSLY INJURED, TOTALLY SIX POLICE WERE INJURED IN ANKARA LIGHTNING STRIKE

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Introduction: Lightning injuries have been the second most common cause of storm-related death. Far more injuries and deaths occur in tropical and subtropical developing countries. For most thunderstorms, 70-90% of lightning strikes are intracloud or from cloud to cloud. From 10-30% of lightning can be cloud to ground, depending on the storm. The most important characteristic features of lightning injuries are multisystem involvement and widely variable severity. Injuries range from tiny static electricity-like exposures to cardiac arrest. Herein we reported injured six police in a lightning strike.

The Patients: Six patients (21-year-old three man, 27-year-old woman, 23-year-old man and 23-year-old woman) who presented to our hospital with lightning strike injury were reported. Except a 21-year-old confused, non-oriented and non-cooperated man with the 10/15(E2, V3, M5) Glasgow coma scale point (GCS), the patients are oriented, cooperated with 15/15 GCS.

These five patients reported the feelings of the stones were thrown to their head. In these five patients; the patients had minimal hyperemia around the surface of haired head. Laboratory tests, serial ECG analysis, imaging studies were normal in these patients. These patients were discharged home with advises after 12 hour follow up.

The 21-year-old man with low GCS had inlet orifice in 1 cm diameter on vertex and second degree burn injury between two scapulas (25 * 10 cm in size). The patients ECG, initial laboratory test was normal. Computed tomography of head revealed brain edema and other imaging studies (thorax, abdomen tomography, abdomen USG and cervical and chest x-ray) were normal. The patient was admitted to intensive care unit for close follow up.

Conclusion: While sudden death is common because of the huge voltage of a lightning strike, survivors often fare better than victims of other electrical injuries caused by a more prolonged application of lesser voltage. Detailed examination, serial ECG analysis, blood parameters, imaging studies and close hemodynamic follow up are necessary in these patients.

Keywords: Lightning strike; Head injuries; Six patients

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[Çevresel Aciller]

FOAM INJURY OF THE FACE

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Introduction: Polyurethane foam is mostly used in the construction sector for isolation, fill in spaces and provide compression for doors and windows. It is an inexpensive material that can easily be found in many stores and can be applied easily. We discuss a patient that presented at the emergency department with facial injury following the explosion of a polyurethane foam tube within her hands.

Case: A 21-year-old female was brought to the emergency department by his relatives due to facial injury following the explosion of a polyurethane foam tube within her hands. The patient's general condition was good and she was conscious with stable vital signs. There was dried polyurethane form covering especially the right side of the face and extending from the eyebrows and eyelids to the cheeks and chin. The patient's nares were cleared first and nasal O2 was started. We then consulted the burn unit and mechanically cleaned the dry polyurethane foam from the face using a clamp and scalpel. The remaining particles were removed with soap and lots of water. There was 1st degree burns on the skin exposed to polyurethane foam. She was discharge with recommendations of moisturizing cream and avoiding sun exposure.

Conclusion: The easy access and frequent use of spray foam can lead to increased numbers of patients presenting at the emergency department following such accidents. It is much easier to mechanically remove the foam from the skin after it is dry.

Keywords: Emergency Department, İnjury, Polyurethane foam,



Figure 1



Figure 2



Figure 3



Figure 4

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[Çevresel Aciller]

WHEN THE PATIENT IS HEAT-RELATED, THE DOCTOR IS HEATED

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Introduction: Heatstroke is the most severe form of the heat-related illnesses and defined as a body temperature higher than 41.1°C associated with neurologic dysfunction. Immediate cooling and support of organ system functioning are two main therapeutic objectives in patients with heat stroke. We report the case of a patient who developed a severe nonexertional heat stroke with consecutive multiple organ dysfunction and disseminate intravascular coagulation resistant to conventional antipyretic treatment.

Case: 41 year-old woman was admitted to the emergency department with high temperature and altered mental status. Patient history is confirmed by relevant; she had worked under the sun in the field whole day for making tomato paste. Her past medical history was negative and she was taking no medications. Her vitals were as follows; BP:100/46 mmHg, HR:146/min, RR:28/min, temperature:41,7 °C, she was confused; GCS was E2M5VE. No neck stiffness and no lateralizing motor deficiency was found. Her total blood count, liver function tests, renal function tests were as normal, calcium 8.9 mmol/dl and was CRP:0,78. Chest X-ray and urine analyses were normal. Brain computed tomography indicated any intracranial hemorrhage or abnormal mass lesions. Lumbar puncture was performed to exclude CNS infection; it was negative. Although given 1 gr paracetamol, fever response wasn't controlled. Temperature was able to decrease with cooling blankets, infusion of cold saline, aggressive hydration and nasogastric lavage with cold fluids. Her mental status get worsen and we intubated her by endotracheal way. Then she began bleeding from intubation tube and nasogastric tube and urinary catheter and vagina. Control blood analyse and clinical symptoms consisted with DIC and multi-organ dysfunction. FFP and erythrocyte suspensions were transfused but her status was worsen fastly. She died in 31st hours of her treatment. Postmortem follow up, it was not isolated any infection in blood, cerebrospinal fluid or urine culture.

Discussion: Heat stroke and its progression to multiorgan-dysfunction syndrome are due to a complex interplay among the acute physiological alterations associated with hyperthermia (e.g., circulatory failure, hypoxia, and increased metabolic demand), the direct cytotoxicity of heat, and the inflammatory and coagulation responses of the host. This constellation of events leads to alterations in blood flow in the microcirculation and results in injury to the vascular endothelium and tissues. A previous study has suggested that reducing the core body temperature to <38.9°C within 30 minutes improves survival. Aggressive intravenous fluid hydration, cold saline irrigation via a nasogastric tube, and cold saline enema are all management options. Cold-water immersion (CWI) therapy is the optimal field treatment. If immersion is unavailable, evaporative cooling measures should be initiated. Limited studies show minimal benefit in heat reduction when ice packs or chemical cold packs are used alone in this traditional cooling method. No pharmacologic agent has been shown to be helpful as a treatment for heat stroke. Sometimes clinicians erroneously try to treat heat stroke with antipyretic drugs. This class of medications works on inhibition of prostaglandins and lowering the thermoregulatory set point; although this may be elevated in infectious causes of hyperthermia, an these drugs are ineffective and should be avoided.

Keywords: Heat stroke, treatment, antipyretics, DIC

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[Çevresel Aciller]

CORNEAL BURN DUE TO ELECTRIC SHOCK

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Introduction: Electrical burn injuries may occur as a result of heat due to passage of electricity from tissues, explosions, and burning of flammable liquids, clothes and other objects. High-voltage injuries (> 1000 volts) may lead to deep muscle necrosis and risk of sequelae is high. High-voltage-dependent cutaneous burns often occur at the site of contact with electricity. Generally, wounds are seen at the sites of entry and exit. Currently, the number of injuries caused by electric shock has been increasing, due to widespread use of electricity at home and in industry. The most common lesions caused by electrical shocks in eyes are cataracts. Many lesions such as purulent infiltration involving all the cornea in severe cases, burns in the eyelids and eyelashes, conjunctival hyperemia, ciliary injection, chemosis, and temporary corneal opacity may be caused by electric injury. Irritative changes in iris and corpus siliare, globe perforation, phthisis bulbae may also be seen. In this article, we presented a case of corneal injury caused by electric shock.

Case: A 38 year old male patient was brought to the emergency room because of injury due to electric shock. The patient was an electrician and he had electrothermal burns caused by exposure to high-voltage. On physical examination, second-degree burns on the patient's face and both forearms was present. Burns in both cornea that create an appearance of frosted glass which cause blurred vision were seen. Other system examinations were normal. Dressing was made on skin burns. Lavage and eye closure were performed for corneal injury and contamination. Patient was

hospitalized in the burn unit. In the follow-up regeneration in the patient's corneal epithelium was observed.

Conclusion: In patients admitted to the emergency department because of ocular burns, rapid intervention prevents the development of cataracts and permanent vision loss by minimizing corneal epithelial damage.

Keywords: electrical burns, corneal burn, corneal injury



Figure 1. Burns in cornea that create an appearance of frosted glass



Figure 2. Second-degree burns on the patient's face

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[Çevresel Aciller]

CARBONMONOXIDE POISONING AND NARGHILE

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Introduction: Carbon monoxide (CO) is a colorless, odorless gas produced by incomplete combustion of carbonaceous material. Carbon monoxide poisoning has been reported as a result of exposure to various sources of smoke, such as fires, stoves, portable heaters, and automobile exhaust and tobacco smoke. Narghile (water pipe, hookah, shisha, hubble bubble) is a traditional method of tobacco use. In recent years, its use has increased worldwide, especially among young people. We presented a case of symptomatic, moderately carbon monoxide (CO) poisoning in a young man after smoking a narghile.

Case: Our patient was a 26-year-old man and he had no past medical history. He presented to our ED (emergency department) following a respiratory distress. He had been smoking narghile at

home 30 minute prior to presentation. His vital signs revealed a temperature of 36°C, blood pressure of 140/90, pulse rate of 102/min and pulse oximetry reading of 97% on room air. Physical examination revealed that he was alert and orientated to time, place and person. He had a headache, chest pain and anxiety. There were no focal neurological signs or cranial nerve deficits. The baseline electrocardiogram was sinus tachycardia. A carboxyhemoglobin (COHb) level was 20.9%. He was admitted to the observation monitoring area and put on 100% oxygen via a non-rebreather mask. He was placed on 100% oxygen for the next 1–2 h while he was in the ED. Hyperbaric oxygen therapy is recommended in patients with neurologic dysfunction, cardiac dysfunction or a history of unconsciousness. Our patient is not one of them and we didn't transfer to hyperbaric center. His COHb level dropped. The patient was discharged with a follow-up date for psychometric testing and neurological review at the outpatient clinic.

conclusion: Popularity of narghile smoking has been increasing especially among young people recently. Finally, narghile exposure should kept in mind in young patients presenting with chest pain after narghile smoking. This case highlights the importance of considering carbon monoxide exposure in patients presenting with chest pain to the emergency department (ED).

Keywords: carbonmonoxide poisoning, narghile use, chest pain

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[Kanita Dayalı Acil Tıp]

ABDOMINAL PAIN IN YOUNG PATIENTS WITH DIARRHEA ARRIVALS UNTHINKABLE DIAGNOSIS OF ACUTE THROMBUS IN MESENTERIC

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Introduction: Acute mesenteric ischemia (AMI) of the small intestine, the most common acute abdomen and causing a vascular disease with poor prognosis..old patients with significant comorbidities, and cardiac disease in a patient with physical examination findings incompatible with acute abdominal pain, a vascular pathology in mind all clinical.acut SMA thrombosis is usually 12-24 hours develops within acute embolic occlusion of the SMA develops much faster than the clinical. Acute SMA thrombosis diagnosis of the symptoms are unambiguous because of its mostly diagnosis gecikilebilir.b of bowel necrosis led to the development of mortality most important factor determining the bowel necrosis is and necrotic bowel segment.Early diagnosis and treatment success increases.

Case: A 40 year old female patient lasted for three days due to diarrhea, abdominal pain refers to the emergency room. Physical examination of the Throne in the system increased bowel sounds in the normal range but vague abdominal comfortable defensive rebound patient with severe abdominal pain without evidence available. Patients in the story 15 days ago difficulty breathing and left flank pain go with the chest diseases PTA is suspected but IT angiography embolism encounter to the patient Ddim the high levels due to the clex until 0.4 that uses learned.

In later times sitting in the left lower quadrant abdominal pain and rectal examination in patients who are in Reba infected with strawberry jelly görülüyor.wbc 11000; CRP 189; Beta HCG (-)

patients in gynecology and general surgery section danışılıyor. after the examination and research does not offer additional suggestions. They do not think an attempt to acute emergencies. The patient's pain because of increased emergency services taken by IV contrast-enhanced abdominal computed tomography SMA in the central part of acute considered to be partial and complete occlusion leads to thrombi celiac trunk orifice in the critical narrowing (median arcuate ligament syndrome?, Critical stenosis?) Right renal artery orifice in the critical stenosis in the right kidney cortical scar areas SMV acute thrombus small bowel segments diffuse wall thickening (necrosis finding favor not determined) with hepatomegaly and hepatic right lobe nodular calcifications in the spleen infarct simultaneous interventional radiology and Gastroentroloji of patients consulted Gastroentroloji laid on. 3-4% of all arterial embolism SMA affected.

Conclusion: Acute occlusive mesenteric ischemia is often due to acute thrombosis or embolism develops. Patients with sudden onset of abdominal pain or with atypical abdominal complaints may apply. Arrhythmia or other heart disease in a person with sudden onset of severe abdominal pain, nausea, vomiting and diarrhea clinician made in the period blood tests, abdominal X-ray and ultrasound may be helpful in diagnosis. Computed tomography, magnetic resonance imaging and Doppler ultrasound for diagnosis of such methods is limited.

SMA thromboembolism, arterial fibrinolytic therapy in rare cases due to poor implementation is Early diagnosis of ischemia. SMA occlusion in 65% of patients with angiographic diagnosis is provided after the development of intestinal infarction and thrombolysis can be performed in only 35% cases. Acute mesenteric ischemia is a common disease than previously estimated. Therefore, in cases of suspected disease, early diagnosis and immediate angiographic views for thrombolytic therapy should be avoided as the

Keywords: Abdominal pain, Diarrhea. Early diagnosis. Mesenteric Artery Thrombosis, Thrombolytic therapy

Abdominal Color Doppler Arterial



Figure 1. Occluded SMA;turbulent flow in the distal

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[Geriatric Aciller]

WHAT IS THE LOWEST LEVEL OF SERUM SODIUM – STAY ALIVE WITH 96 MMOL/L SERUM SODIUM

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Introduction: Hyponatremia is an electrolyte abnormality that occurs when sodium levels decrease below 135 mEq/L. Hyponatremia is a common clinical problem that when symptomatic may manifest with nausea, disorientation, seizures, coma, cerebral edema and even death. This condition is common in the hospital population. Although hyponatremia affects all races and both sexes equally, it is most commonly found in elderly patients because of the increased frequency of comorbidities that can lower serum sodium levels. Some medications such as diuretics, antiepileptics is the cause hyponatraemia It is essential to diagnose and treat hyponatremia because it can be fatal. The normal range for the Na⁺ ion concentration in the blood is about 135-145 units. Death usually takes place if this level drops below 110 units or rises over 170 units. But this can vary from patient to patient. We report a patient using with 96 mmol/L levels of serum sodium. Old patient with 96 mmol/L sodium level could be able to stay alive.

Case: A 80-year-old woman presented to the emergency department with nausea and vomiting that had occurred for 5 days and slurred speech and consciousness for 2 day prior to presentation. The patient has a history of hypertension and diabetes mellitus. she was using telmisartan, hydrochlorothiazide, spironolakton for hypertension treatment. Physical examination revealed her blood pressure to be 100/65 mmHg; she had no postural drop and had a regular pulse of 112 beats/min. She had no fever and no signs of increased intracranial pressure. Results of further physical and neurological examination were unremarkable and revealed no goiter, pigmentation, or vitiligo. Her laboratory results are sodium level was 96 mmol/L, potassium level was 2,4 mmol/L and chlorine level was 66 mmol/L. Against the possibility of laboratory error blood taken from the patient again. The blood was sent to the laboratory again but the results are as the same as first blood results. Her ECG showed sinus tachycardia. Additional diagnostic tests included chest x-ray, abdominal ultrasound, and brain computed tomography, none of which revealed abnormalities. patients were consulted to internal medicine. Firstly treatment started with hipertonic saline. Hipertonic saline treatment improved the patient's state of consciousness. Then the patient was transferred to the internal medicine service. The patient was hospitalized for 12 days and discharged in a healthy way.

Conclusion: It is important to identify the cause of consciousness disturbance. Severe hyponatremia with a serum sodium level of 96 mmol/L was documented upon our patient's admission. Because coma is a common complication of severe hyponatremia, it is reasonable to assume that the disturbance of consciousness was associated with hyponatremia. The hydrochlorothiazide she was taking played an important role. Thiazides are a common cause of severe hyponatremia. Clinicians should consider the presence of underlying disease and patient's drugs like hydrochlorothiazide especially in cases of consciousness disturbance.

Keywords: Hyponatremia, consciousness disturbance, coma

ESOPHAGUS PERFORATION AND MYOCARDIAL PENETRATION CAUSED BY SWALLOWING OF A FOREIGN BODY AND LEADING A MISDIAGNOSIS OF ACUTE CORONARY SYNDROME: A GERIATRIC CASE REPORT

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Introduction: Esophagus foreign bodies are mostly encountered in childhood. Although they are rarely seen in adults, mortality and morbidity are high in cases of perforation. Most of esophagus perforations are iatrogenic. Perforations due to foreign bodies are rare, and complications are mostly encountered with sharply marginated objects. Foreign bodies in the esophagus should be removed immediately because of the complication risk. Clinical history and radiological evaluation are usually sufficient for diagnosis. Early surgery is the treatment of choice.

AIM: Here we present and share our clinic experience in a case of esophagus perforation due to swallowing of a bone piece, causing acute angina pectoris and leading a misdiagnosis of acute coronary syndrome.

Case: A 73 years old male has referred to another health care center 3 days ago, with complaints of severe chest pain and palpitation that has started right after dinner. The patient underwent urgent coronary angiography with possible diagnosis of acute coronary syndrome. Coronary arteries have been found to be normal. On admission, his abdominal physical examination was normal except mild epigastric tenderness. Respiratory sounds were diminished in left lower hemithorax. In laboratory examination, WBC and CRP was high. Mild prerenal azotemia was found. He had sinus rhythm in Electrocardiography and his pulse rate was 115/min.

Computed tomography (CT) exam was performed to exclude aortic aneurysm or dissection. There were pleural fluid in both sides, air bubble containing pericardial fluid reaching to 2 cm thickness was noted. There were minimally free fluid in perihepatic, perisplenic and retrovesical spaces. Then the CT images were checked again, and a dense linear foreign body with 2 cm's length was found in the posterior aspect of left atrium (Fig-1). Findings suggested perforation of esophagus by a foreign body, and the patient underwent urgent left thoracotomy. At surgery, a sharp contoured piece of bone was found, perforating the 1/3 distal aspect of posterior wall of esophagus. Foreign body was removed. Finally, percutaneous jejunostomy was performed for feeding by laparotomy. He developed no postoperative complication, and discharged from the hospital on 15th day. After 3 days, he admitted and hospitalized again with the complaints of fever and weakness. Contrast extravasation from the primary suture zone was found in the CT exam, then he underwent endoscopic stent. Rapid deterioration in the mediastinitis findings and clinical situation occurred. The patient died due to sepsis.

Conclusion: In conclusion; a piece of bone within the meal can lead esophagus perforation and injure pericardium and myocardium. Taking careful and detailed medical history and

choosing appropriate medical imaging modality is mandatory in order to make prompt diagnosis and early treatment for reducing mortality.

Keywords: esophagus foreign body, pericardial penetration, mediastinitis, misdiagnosis, geriatric patient

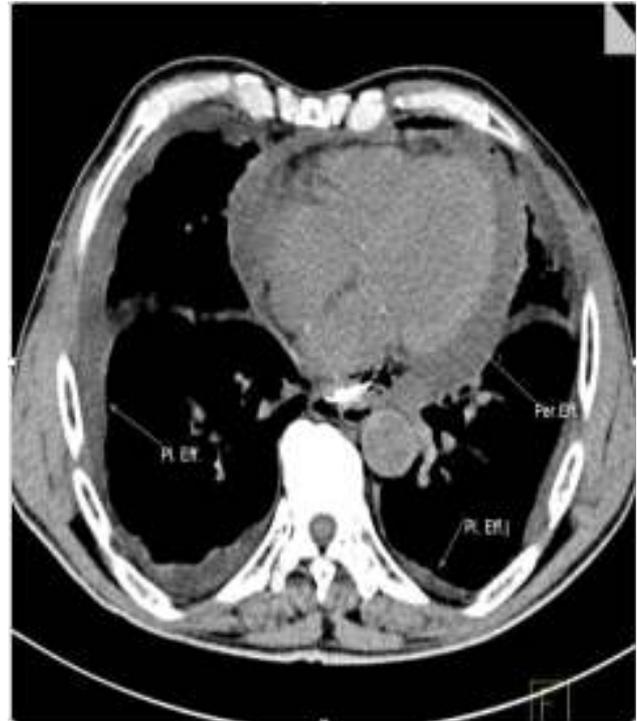


Figure 1. Computer tomography: esophageal perforation and an esophagus foreign body

IDIOPATHIC SPONTANEOUS BLADDER PERFORATION: A RARE CASE

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Introduction: Idiopathic, spontaneous bladder perforation is a very rare and life threatening clinical condition. Bladder perforations are usually iatrogenic or encountered secondary to trauma, malignancies or radiation exposure, extreme bladder distension. Urgent surgery, repairment and drainage are the first choice of therapy. Delay in diagnosis and treatment increase mortality and morbidity. We present a case of idiopathic spontaneous bladder perforation here.

Case: We present a case of a 78-year-old caucasian woman admitted to our hospital with complaints of nausea, vomiting and severe abdominal pain, which began 4 days ago and increased gradually. There were abdominal tenderness, distention and rebound in all quadrants, consistent with acute abdomen. Gastrointestinal perforation was considered with these findings, and the patient underwent urgent laparotomy with midline incision. A perforation in the dome of the bladder, which was 1 cm in size, was found eventually. Bladder was sutured primarily. Though intensive

therapy, sepsis and related multiple organ failure, finally cardiac arrest developed. The patient did not respond to resuscitation and she died the fifteenth day after surgery.

Conclusion: idiopathic, spontaneous bladder perforation is a very rare and life threatening clinical condition that is difficult to recognise preoperatively. The possibility of it should be kept in mind among other acute abdomen reasons.

Keywords: idiopathic, spontaneous, bladder perforation,geriatric patient, skipped diagnosis



Figure1. A perforated about 1 cm was discovered at the dome of the urinary bladder (Intraoperative)

Table 1. Previous publications: Patient age, type of operation, mortality and morbidity

Cases	Age	Comorbidity	Diagnosis	Surgery	Operation	Mortality	Morbidity
Wieloch M et al.(1)	84/F	HT+AF	perop	open	primer sutur	Yes	No
Ahmed J et al. (4)	47/F	No	perop	open	primer sutur	No	No
Al-Qassim Z et al.(6)	33/F	No	perop	lap	primer sutur	No	No
Limon O et al(5)	F	Diabetic	perop	open	primer sutur	Yes	No
Cusano A et al (3)	60/F	No	perop	open	primer sutur	No	No
Current Case	78/F	HT	perop	open	primer sutur	Yes	No
Albino G et al.(2)	73/M	No	perop	open	primer sutur	Yes	No

HT: hypertension, AF: atrial fibrillation, F: female, M: male, lap:laparoscopic

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[Geriatric Aciller]

HYPERNATREMIC DEHYDRATION DUE TO ORAL INTAKE DISORDER

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Hypernatremia is defined as serum [Na+] >150 mEq/L. It is caused by a decrease in TBW or, less commonly, an increase in sodium. Some patients, however, cannot respond to their thirst drive. Infants and elderly patients who are debilitated depend on caregivers to provide fluids. Similarly, institutionalized patients may have limited access to water secondary to either external or internal constraints. Intrinsic water losses cannot be avoided, and some urine must be produced, even if it is maximally concentrated. Without access to water, these patients encounter a free water deficit, and their serum sodium level increases. Symptoms of hypernatremia tend to be nonspecific. Anorexia, restlessness, nausea, and vomiting occur early. These symptoms are followed by altered mental status, lethargy or irritability, and, eventually, stupor or coma. Musculoskeletal symptoms may include twitching, hyperreflexia, ataxia, or tremor. Neurologic symptoms are generally nonfocal (eg, mental status changes, ataxia, seizure), but focal deficits such as hemiparesis have been reported.

The mortality rate from hypernatremia is high, especially among elderly patients. Mortality rates of 42-75% have been reported for acute changes and 10-60% for chronic hypernatremia. Because patients with hypernatremia often have other serious comorbidities, precisely evaluating the degree of mortality directly due to hypernatremia is difficult. Morbidity in survivors is high, with many patients experiencing permanent neurologic deficits.

Our case study 45 years old tetraplegic, bedridden, female patient presents emergency department with oral intake disorder and weakness. On the physical examination there were poor skin turgor, dry mucous membranes and hypotension. There was a decubitus ulcer on the back of patient. Caregiver said that patient oral fluid intake was 700 cc all day. At the laboratory results of patient was NA: 179 mmol/L and other result was normal. Hypovolemic hypernatremia treatment was started and admitted to intensive care unit. Hypernatremia was corrected to 12 mEq per 24 hour. with isotonic sodium chloride solution. Sodium level was 145 mmol/L in third day at the intensive care unit but patient did not eat anything oral way. Patient was transported to another clinic for family request.

Hypernatremia should not be corrected at a rate greater than 1 mEq/L per hour. Carefully monitor all patients inputs and outputs during treatment. Consider CNS imaging to exclude a central cause or to identify CNS bleeding from stretching of veins. Using isotonic sodium chloride solution, stabilize hypovolemic patients who have unstable vital signs before correcting free water deficits because hypotonic fluids quickly leave the intravascular space and do not help to correct hemodynamics. Once stabilization

has occurred, free water deficits can be replaced either orally or intravenously.

Keywords: Internal Medicine, Hyponatremia, Bedridden

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[Geriatric Aciller]

USAGE OF BARTHEL INDEX IN GERIATRIC PATIENTS WHO ADMITTED TO THE EMERGENCY DEPARTMENT WITH FEVER

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Introduction: Fever causes %10 of emergency department admittances of geriatric patients. Of these patients %70-90 require hospitalization and the mortality risk is greater 10 times than adults. Functional disability is a common condition in geriatric patients. Age-related changes may occur due to social factors or diseases. Determination of the patient's baseline physical level and the detection of decline that may develop during follow-up may be a precursor of some diseases.

Objective: Aim of this study is to analyze the geriatric patients who have admitted to the emergency department with complaint of fever and impact of those patients' physical dependence levels to their short term prognosis (one month).

Methodology: In this prospective cross-sectional, analytical study, the patients who older than 64 years and admitted to the emergency department with fever ($\geq 38^{\circ}\text{C}$) between October 2012 and April 2013 were included. The patients' Barthel Indexes as one week before, present and one month after admittance were recorded. All patients prognosis were investigated one month later by phone. The data was analyzed with SPSS 16.0 statistics programme. The variables were investigated using analytical methods (Kolmogorov-Smirnov test) to determine whether or not they are normally distributed. Descriptive analyses were presented using medians and interquartile range for the non-normally distributed variables. Friedman tests were conducted to test whether there is a significant change in the Barthel Index due to violations of parametric test assumption (non normal distribution) on patients who lived for one month. The Wilcoxon test was performed to test the significance of pairwise differences using Bonferroni correction to adjust for multiple comparisons. Mann-Whitney U Test was performed for Barthel Index groups which contain ordinal variables to test differences between patients.

Results: One hundred and forty nine patients were included to study. The number of men and women were, 75 (%50.3) and 74 (%49.7), respectively. Mean age was 74,9 (min:65, max:96). Twenty three people (%15,4) have died at the end of the first month. The patients' Barthel Indexes as one week before, present and one month after admittance didn't indicate normal distribution ($p < 0,001$). The patients' Barthel Indexes which calculated for one week before, present and one month after admittance showed differences ($p < 0,001$). Statistically significant differences were observed between one week before and present values and present and one month later values ($p < 0,001$), but there was no difference between one week before and one month later values ($p: 0,140$). Statistically significant difference was

observed between Barthel Index groups in patients who were died or survived for one month ($p < 0,001$).

Conclusion: Fever increases physical dependence level of geriatric patients. Barthel Index could be use as a objective tool for evaluation of geriatric patients admitted to the emergency departments with complaint of fever. Reasons that lead to fever can cause an increase in one-month mortality in complete and advanced dependent patients.

Keywords: Geriatric patients, Fever, Barthel Index, Physical dependence

Table 1. Frequencies of The Actual Barthel Index Groups

Mortality			
Yes	N		23
	Median		1,0
	Percentiles	25	1,0
		50	1,0
No	N		126
	Median		3,0
	Percentiles	25	2,0
		50	3,0
	75	5,0	

Patients in the mortality group showed more dependence.

Table 2. Ranks of The Actual Barthel Index Groups

Mortality	N	Mean Rank	Sum of Ranks
Yes	23	33,13	762,0
No	126	82,64	10413,0
Total	149		

Mann-Whitney U test was used to compare mortality groups, $p < 0,001$

Table 3. Relationship of The Actual Barthel Index and Mortality

Mortality	Barthel Index	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	Complete Dependent	15	65,2	65,2	65,2
	Nearly Complete Dependent	5	21,7	21,7	87,0
	Moderate Dependent	2	8,7	8,7	95,7
	Nearly Independent	0	0	0	95,7
No	Independent	1	4,3	4,3	100
	Complete Dependent	17	13,5	13,5	13,5
	Nearly Complete Dependent	25	19,8	19,8	33,3
	Moderate Dependent	27	21,4	21,4	54,8
	Nearly Independent	5	4,0	4,0	58,7
	Independent	52	41,3	41,3	100

Actual Barthel Index levels of mortality patients were more severe.

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[Geratrik Aciller]

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Introduction: Elderly patients admitted to the emergency medicine because of mental status changes. The causes of mental status changes are hypoglycemia, hypertension, hypoxia, renal failure, heart failure, poisoning, dementia, stroke, trauma etc. These reasons may be not only alone but also combine. Elderly patients and their family or caretakers can not remember the trauma they spend. Drugs such as warfarin used by them were convert minor trauma into fatal trauma. In this report, we wanted to talk about an elderly patient who had mental status change.

Case: 60 year old male patient was brought to the emergency department by ambulance due to poor general condition and mental status change. It was learned that his oral intake is impaired in the last three days and drug intake was incompatible in the last 15 days, in the event his general condition and mental status were deteriorated. A month ago, he operated for bilateral deep leg vein thrombosis and postoperative warfarin 5 mg tablet PO 1x1 was began. Patients with coronary artery disease and COPD used salmeterol, ipratropium bromide inhaler and furosemide PO. There is no his family history. On physical examination, cooperation could not be achieved. BP: 160/70 mmHg, pulse rate 98 beats/min, RR: 26/min, core temperature: 37.0C, saturation of O₂: 84%, fingertip blood glucose: 45 mg/dL, GCS: 10, PR: +/+, pupils were isochoric, no evidence of lateralized annoying. Rhonchi were detected in the lower region of the lungs. Other system examinations were normal. ECG was normal sinus rhythm. Intravenous 20% dextrose was given because of hypoglycaemia. His vital signs were monitored. Although regulation of blood glucose was achieved, patient's conscious was not improved. Whereupon brain computed tomography (BCT) was planned. It is detected in the BCT that "subacute and chronic subdural hematoma in the neighborhood of left cerebral hemisphere and convex shaped hyperdens acute hematoma in chronic subdural hematoma and shift of rightward of midline structures (Figure 1)". 20% mannitol was initiated. The patient who had subdural hematoma and epidural hematoma? which can not be ruled out was transferred to the neurosurgery department.

Conclusion: Multiple etiologic factors may play a role in elderly patients with mental status changes. In our case, clinical improvement could not be achieved despite the correction of hypoglycemia. And in the advanced examination, intracranial hemorrhage was demonstrated. Even if the detection of disorders such as hypoglycemia, metabolic disorders affecting consciousness in elderly patient who had multiple comorbid conditions, especially used warfarin, central nervous system pathologies like bleeding should be ruled out quickly.

Keywords: elderly patients, emergency department, mental status changes, warfarin, subdural hematoma, hypoglycemia



Figure 1. Subacute and chronic subdural hematoma in the neighborhood of left cerebral hemisphere and convex shaped hyperdens acute hematoma in chronic subdural hematoma and shift of rightward of midline structures

P-204

[Geratrik Aciller]

DOMESTIC VIOLENCE RATES AMONG THE ELDERLY IN THE CITY OF CLEVELANDErkan Gunay¹, Da Hee Lee², Gunnur Karakurt³¹Department of Epidemiology and Biostatistics MPH Program, Case Western Reserve University, Cleveland, OH, USA²Department of Emergency Medicine, Case Western Reserve University, Cleveland, OH, USA³Department of Family Medicine and Community Health, Case Western Reserve University, Cleveland, OH, USA

Intimate partner violence can be broadly defined as "abusive behaviors perpetrated by someone who is or was involved in an intimate relationship with the victim" (1). Approximately 1.3 to 5.3 million women in the United States are victims of intimate partner violence each year (1). A Nationwide Emergency Department Sample from 2006–2009 revealed that there were approximately 28,000 ED visits per year due to intimate partner violence in the United States (2). Intimate partner violence has been studied mainly as a problem towards younger women. Although not readily studied, the elderly population should not be disregarded as victims of IPV. At a review by Kleinschmidt it was stated that elder abuse receives less attention than other forms of domestic violence (DV), and fewer than 10% of cases are reported (3). In this study we present the DV rates in the last two decades for the city of Cleveland.

DV data was obtained from the social and economic data system of the Center on Urban Poverty and Community Development at Case Western Reserve University Mandel School

of Applied Sciences. Data was available from 1990 until 2010 for the city of Cleveland and was based on the police reports on DV assault cases.

Total DV assault numbers were raised from 3563 to 7341 from 1990 to 2000 and declined to 5715 in 2010 for the entire population. The highest number of DV assaults were recorded for the age groups of 18-34 while the lowest numbers were recorded for the population over 65. The age adjusted DV rates per 100.000 were as follows for the age groups for years 1990, 2000, 2010 respectively; 18-34 age group 1770.07, 3701.93, 3499.10, 35-64 age group 522.44, 1460.10, 1226.73 and for over 65 population 48.05, 143.39, 149.46. A continuous increase for the rate of the DV assault numbers was only recorded for the geriatric age population. When comparing the difference of the DV rates for 1990, 2000 and 2010 a statistically significant increase was calculated for over 65 population in comparison to the 34-65 population.

DV is an important problem especially for the vulnerable populations like elderly. DV rates for the city of Cleveland have been increasing since 1990s and elderly DV rates have increased significantly in comparison to the other age groups. Underlying factors for this increase can be linked to the recent socioeconomic problems of the region and also can be described as an increase on the report rates for this problem. Emergency physicians must be aware of this problem for proper management of geriatric patients especially with suspicious symptoms. In order to explain the underlying factors for this topic future studies can be designed in the emergency department settings.

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Keywords: geriatric patient, domestic violence, abuse

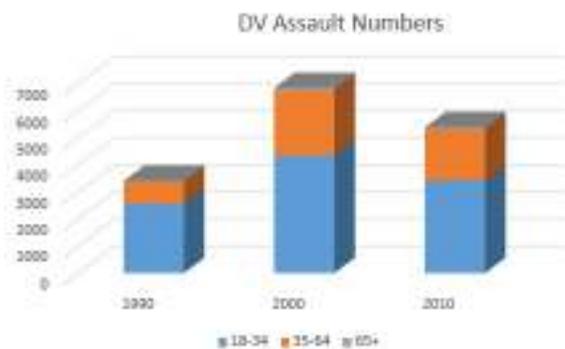


Figure 1. DV Assault Numbers

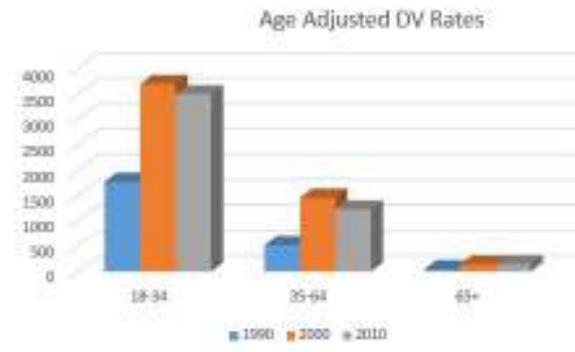


Figure 2. Age Adjusted DV Rates

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[Geriatric Aciller]

URINARY BLADDER RUPTURE IN A GERIATRIC PATIENT

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Background: High risk for and subtle presentations of serious pathologic conditions in the elderly patient who has abdominal pain require careful, timely evaluations and aggressive management. The elderly patient who has abdominal pain consumes more time and resources than any other emergency department (ED) patient presentation. Complications of recent surgery could be the cause

Case: A 62 years old female was brought to ED due to abdominal pain by 112 team. She had urinary bladder carcinoma, anemia and Alzheimer’s disease. 5 days ago she had trasurethral resection and discharged 2 days ago. After that she had nausea, vomiting and abdominal pain. Her vital signs were as follows: Blood pressure 120/80 mm Hg, pulse 98 bpm and regular, respirations 18 /min, body temperature 38,9°C and oxygen saturation with pulse oximetry 98%. In her physical examination tenderness at lower quadrants, and suprapubic area was noted. There were no defence and rebound. Other systemic examination was normal. Her laboratory results were as follows: white blood cell count 10500/µL (normal 3,9-10,7*103 cells/µL); C-reactive protein 2 mg/dl (normal <0,5 mg/dl); creatinine 1,4 mg/dl (normal 0,7-1,3 mg/dl); blood urea nitrogen 56 mg/dL (8–20 mg/dL). Her urine analysis gave these results Protein ++; hemoglobin +++; leukocyte +; erythrocyte 23/mm3. She had abdominal computed tomography with intravenous and intravesical contrast material and diagnosed as urinary bladder perforation (Figures 1,2 and 3). Then she hospitalized.

Conclusion: Patients with postprocedural issues will likely present to the emergency department for evaluation and treatment. Whenever diagnosing a patient with acute peritonitis symptoms, in whom the predominating symptoms include sudden abdominal pain, peritoneal cavity fluid presence, hematuria, oliguria, and coexisting increased urea, creatinine, and potassium levels, one should consider the possibility of urinary bladder rupture.

Keywords: urinary bladder, rupture, complication



Figure 1.



Figure 2.

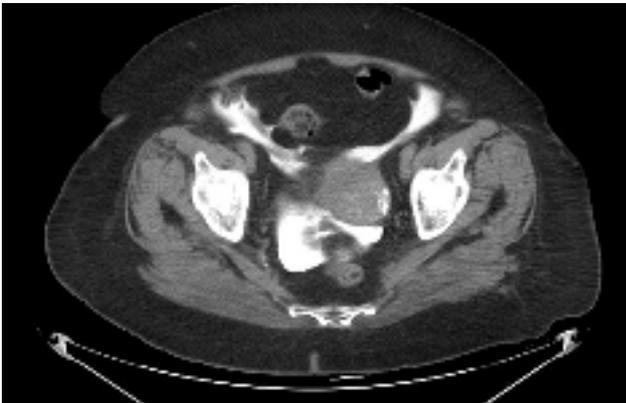


Figure 3.

mortality rates and ouster of outnumber diseases in differential diagnosis lead long hospital stay and difficult diagnosis for coronary syndromes. Patients with chest pain and/or dyspnea admitting emergency department may be sometimes diagnosed with rare seen diseases.

Case: A 73-year-old female suffering from right inferior thoracic pain and dyspnea was admitted to emergency department. History revealed hypertension and coronary artery disease. According to her statement, her pain was intermittent and exacerbating for last 3 hours. On admission her vital signs were within normal range. Decreased breath sounds on the base of right lung were present on physical examination. No other pathologic results of the physical examination were obtained. Laboratory findings including cardiac enzymes were within normal range. Her chest radiograph revealed atelectasis in the lower zones of the right lung. Thoracic CT revealed elevated colonic loops and mesenteric adipose tissue pointing Morgagni hernia. She was referred to thoracic surgeon.

Conclusion: Morgagni hernias are rarely encountered and are usually congenital anomalies. Morgagni hernia, much less common in the geriatric age groups, is difficult to diagnose until adulthood. Generally respiratory complaints are in the forefront and may be accompanied by chest pain. Though patients presenting with similar complaints are in the older age groups, Morgagni hernias should be considered in differential diagnosis, tomography should be planned in those with X-Ray including suspected lesions.

Keywords: Geriatric patient, chest pain, Morgagni hernia



Figure 1.

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[Geriatric Aciller]

GERIATRIC PATIENTS WITH CHEST PAIN AND DYSPNEA: MORGAGNI HERNIA

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Introduction: Chest pain and shortness of breath while holding an important place in emergency room visits, creates remarkable difficulty for patients and physicians. Having high

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[Geriatric Aciller]

INTRAABDOMINAL MULTIPLE ABSCESES BECAUSE OF PERITONEAL DIALYSIS

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Background: Infection is a common cause of morbidity and mortality in dialysis patients. Although peritoneal dialysis mostly lead to peritonitis, cellulitis at the catheter site, infection in the tunnel site itself, intraabdominal abscesses should be kept in mind. Here we represented a case of multiple intraabdominal abscesses who was a peritoneal dialysis patient.

Case: A 72 years old male admitted to emergency department with complaints of high fever, going hot and cold all over. His past medical history revealed hepatitis C, hypertension, chronic renal failure. He was undergoing peritoneal dialysis for last 10 years. He was routinely using levocarnitin, vitamin D3, valsartan, calcium acetate, sodium hydrogen carbonate. His vital signs were as follows: Blood pressure 110/70 mm Hg, pulse 98 bpm and regular, respirations 18 /min, and body temperature 37,8°C. In his physical examination oropharyngeal hyperemia and abdominal tenderness were noted. Nor defence neither rebound was positive all over the abdomen. Other systemic physical examination revealed no pathology.

His laboratory resulted as follows: white blood cell count 27100/ μ L (normal 3,9-10,7*10³ cells/ μ L); platelet count 78000/ μ L (normal 150,000-350,000/ μ L); creatinine 6,06 mg/dl (normal 0,7-1,3 mg/dl); potassium 6 mEq/L(normal 3,5-5 mEq/L); sodium 134 mEq/L (normal 136-145 mEq/L); C-reactive protein 36 mg/dl (normal <0,5 mg/dl). Air-fluid levels had been noted in his chest X-ray and plain abdominal radiography. At first it was thought that he had secondary bacteriel peritonitis. His intravenous contrast abdominal computerized tomography revealed multiple intraabdominal abscesses and perforation of small intestine (Figure 1, 2 and 3). After consultation with general surgery he had undergone emergent laparotomy and given antibiotics.

Conclusion: When a patient undergoing peritoneal dialysis admits to emergency department with infectious symptoms, although rare intraabdominal abscess should also be considered besides peritonitis. Early diagnosis would prevent progression to sepsis.

Keywords: intraabdomianl abscesses, peritoneal dialysis, infection

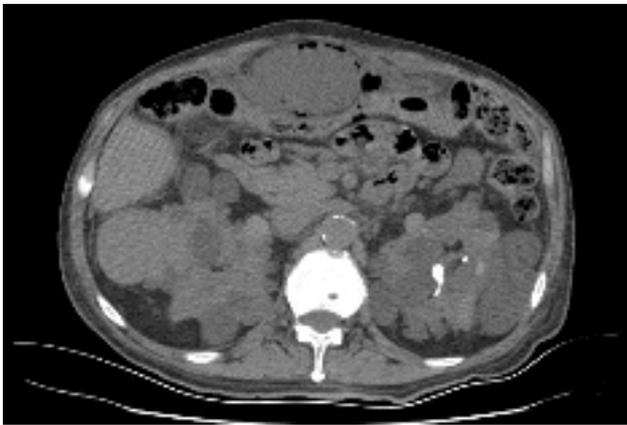


Figure 1.



Figure 2.

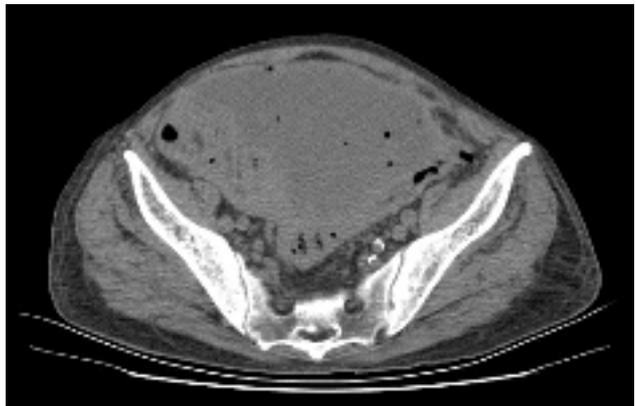


Figure 3.

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[Infeksiyon Hastalıkları]

A CASE REPORT: COLON NECROSIS DUE TO NEUTROPENIC ENTEROCOLITIS

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Introduction: Neutropenic enterocolitis is one of the high mortality diseases that occur in the immunodeficient patients. It is also named as typhilitis, necrotizing enterocolitis and ileocecal syndrome. Main symptoms are defined as hyperthermia, abdominal pain and the damage of intestinal mucosae with cytotoxic agents and decreased inflammatory responses that are found responsible for this situation.

Case: A patient aged 40 with a history of invasive ductal breast cancer, getting one cure epirubicin and docetaxel; admitted to emergency department with the complaint of abdominal pain that she has had for 2 days. The patient's general appearance was medium-well, blood pressure: 90/60 mmHg, heart rate: 90/minutes and body temperature was 36,7°C. In physical examination; the bowel sounds were decreased, defecation was done one day ago, abdominal tenderness was found however there was no rebound tenderness. Nasogastric tube was placed and enteric content was drained. Other systemic examinations, posteroanterior chest radiographs and abdominal radiographs revealed no special characteristics. Except neutropenia other laboratory tests were normal. In abdominal ultrasonography,

intraabdominal unretained fluid was observed, increase in the thickness of the wall of the right colonic anses and neighbourhood small bowel was measured and also there was contamination in mesenteric tissues. Abdominopelvic Computerized Tomography with contrast material was performed to the patient and neutropenic enterocolitis in small and large bowel anses together with ischemic-necrosis related signs that occurred secondary to this situation were observed. The patient was examined by general surgery, infection and oncology department also antibiotic regimen was started. In clinical prognosis, dopamin was given as the patient's blood pressure and urinary output were less than normal values. Finally the patient was admitted to intensive care unit by the general surgery as to perform an immediate operation.

Conclusion: Neutropenic enterocolitis is a diffuse necrotizing enterocolitis without a known etiologic factors that takes place in terminal ileum and caecum. Infection is believed to be polymicrobial generally and the whole layers could proceed to infarction and perforation. Although 70-80% of the cases respond to the wide spectrum antibiotics, in some cases surgery is crucial. Neutropenic enterocolitis is especially seen in deep and prolonged neutropenic patients following the chemotherapy regimens. This diagnosis should be kept in mind for the patients that are admitted to emergency department with the abdominal pain and hyperthermia.

Keywords: Abdominal pain, Neutropenic enterocolitis, Emergency department.



Figure 1. Abdominal CT

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[Infeksiyon Hastalıkları]

FEVER AT EMERGENCY SERVICE; ADULT ONSET STILL'S DISEASE

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Introduction: Adult onset Still's disease (AOSD) is a rare systemic inflammatory disorder with a typical evanescent salmon-pink nonpruritic maculopapular rash, leukocytosis ($\geq 10,000$ WBC/mm³) with at least 80% neutrophils, fever,

and arthralgias/arthritis. We present a case of AOSD who was admitted to our emergency department.

Case: A 20-year-old male applied with fever, sore throat, arthralgia, weakness for a period of a month. Weight loss and left knee joint swelling has been added last ten days. There was a past medication history which was given another hospital a month ago. On examination, he was slightly lethargic and was noted to have fever of 39.5°C, left knee swelling, diffuse arthralgia and cervical lymphadenopathy. Abdominal examination showed hepatomegaly. The patient was admitted to infectious disease clinic with diagnosis fever of unknown origin. Complete blood count showed leucocyte count of $15.7 \times 10^3/\mu\text{L}$ (%89 gran.), hemoglobin 10.8 gm/d and sedimentation rate was 55 mm/h. Other laboratory data showed mildly elevated transaminases (AST: 51 U/L, ALT: 106 U/L) and markedly elevated ferritin levels (1284 ng/mL). Ultrasound of the abdomen showed hepatomegaly (195 mm). After extensive work up including negative rheumatoid factor, negative antinuclear antibody, negative CRP, negative HIV and other acute viral illness, patient was diagnosed with AOSD based on Yamaguchi diagnostic criteria. He had met three major and four minor criteria. Indometacin (3x50 mg) and lansoprasole treatment was started. After 3 days of treatment his complaints began to drop back and liver enzymes began to trend down. He was discharged in a stable condition with normal liver function tests after 22 days of hospitalization.

Conclusion: Clinical course of AOSD is usually benign. Rarely, serious complications such as acute liver failure, macrophage activation syndrome/hemophagocytic syndrome, pericarditis, cardiac tamponade, disseminated intravascular coagulation, serous peritonitis, pleuritis, and respiratory failure are seen. AOSD, though a rare entity, must be kept into consideration in unclear cases occurring in an emergency medicine department.

Keywords: Fever, Adult Onset Still's Disease, Infectious

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[Infeksiyon Hastalıkları]

SKIN LESION; ANTHRAX

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Introduction: Anthrax is a rare disease cause by Bacillus anthracis, a Gram-positive, rod-shaped endospore-forming capsuled bacterium. Anthrax is manifest in three primary forms: cutaneous, respiratory, and gastrointestinal. Cutaneous anthrax accounts for approximately 95% of all cases of anthrax in humans. Here, we present a case of Cutaneous anthrax who was referred to our emergency department.

Case: A 21-year-old male applied with lesions on the skin of the both legs for a period of four days. On examination, there were few painless papules and some of them had become large bullae and blackish eschar developed over the lesion. He had a history of living outside for a week. The patient had no fever. Complete blood count showed leucocyte count of $12.2 \times 10^3/\mu\text{L}$ and sedimentation rate was 18 mm/h. C-reactive protein was positive. The lesions were characteristic and smears from the lesions were investigated which confirmed the causative agent B. anthracis. The patient was admitted to infectious diseasea clinic with diagnosis of cutaneous anthrax. He was treated with oral

Ciprofloxacin (500mg) twice daily for seven days which cured the infection as observed on his subsequent follow up visits on 7 and 14 days later. Oral Ciprofloxacin is found effective as recommended by the World Health Organization.

Conclusion: Although the prevalence of anthrax is a decreasing worldwide, it remains a significant problem in developing countries. Rapid identification of the signs and symptoms of cutaneous anthrax is essential for effective treatment. Early supportive treatment and appropriate antimicrobial measures are necessary to address this potentially life-threatening disease.

Keywords: Anthrax, skin lesion, cutaneous lesion



Figure 1. Anthrax skin lesion



Figure 2. Lesion under treatment

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[Infeksiyon Hastalıkları]

EMPHYSEMATOUS CYSTITIS: REPORT OF ONE CASE

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Introduction: Emphysematous cystitis (EC) is an uncommon condition characterized by the presence of air within the bladder wall and lumen. Although it is an uncommon clinical entity, with an associated mortality of 7%.

Case: A 58-year-old man who was a known case of uncontrolled diabetes mellitus type 2 for last 15 years, presented

in our Emergency Department (ED) with fever, diffuse abdominal complaint and shortness of breath for the last one week. His past history included hypertension and hemorrhagic stroke one month back. Investigations showed anemia (Hb 7.9 gm/dl), leukocytopenia (total leukocyte count 1800 cells/mm³) with 67.4% neutrophils. Serum creatinine was 1,6mg/dl, and urea 210mg/dl. A lung and abdomen CT was carried out which described intraluminal and intramural gas in the bladder with thickening of bladder wall and formation of an air- fluid level (Figures A/B/C). Urinary bladder catheterization was performed. Intravenous therapy with ceftriaxone (2 g/d) and ciprofloxacin (800mg/d) were started empirically. The patient was admitted in the hospital. Urine and blood cultures were positive for multi-susceptible Escherichia coli.

Conclusion: EC is a rare entity, most common in diabetic women, which results from infection of the urinary bladder with gas-producing pathogens, mainly E.coli. Early recognition of EC in the ED can prevent morbidity and mortality. Known predisposing factors are older age, female gender and presence of diabetes. The management consists of broad-spectrum antibiotics, strict glycemic control and bladder drainage.

Keywords: Emphysematous Cystitis; Antibiotic Therapy; Emergency Medicine



Figure 1. Computed tomography scan of the abdomen showed air in the bladder (asterisk) and the thickened bladder wall, associated with air in right kidney (arrow).

P-212

[Infeksiyon Hastalıkları]

A RARE DIAGNOSIS THAT SHOULD NOT MISSED OUT IN EMERGENCY DEPARTMENT: FOURNIER'S GANGRENE

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Introduction: Fournier's gangrene (FG) is an extremely aggressive and rapidly progressive polymicrobial soft tissue infection of the perineum, anal area or genital regions leading to sepsis and death, if not rapidly treated. This urgent disease is generally seen with poor hygiene of genital area of immunosuppressed old patients and patients with diabetes mellitus (DM). Risk factors are DM, immune compromise, obesity, drug use, genital trauma. In this case report, we aimed to indicate that we must be alert for FG at diabetic and morbid obese patients.

Case: A 38-year-old male patient presented to our emergency department with hyperglycemia and darkening and pain on his leg for one day. Physical examination revealed 0,5x2 cm of necrotic and hyperemic area at right anterior inguinal region. There was subcutaneous crepitation. He had had only DM. His blood glucose was 668 mg/dl. The patient was diagnosed with isolated inguinal FG and consulted to general surgery earlier and initially treated with 2000 cc normal saline intravenous bolus and clindamycine, fluoroquinolones, metronidazole, insulin

intravenously. Debridements and resections was performed by surgeons. Meropenem and daptomycin added to the regimen. He was discharged healthy after 56 days after hospitalization.

Discussion: Jean Alfred Fournier described FG as necrotizing fasciitis of male genitalia first. FG is relatively uncommon. Early diagnosis, surgical debridement and aggressive fluid therapy are significant prognostic factors in the management of FG. Anorectal, genitourinary and cutaneous sources of infection are the most common causes of FG, with DM being the most common risk factor. Age and gender are not significant factors influencing mortality. Goh et al reported nine case series with FG. They were selected, with a total of 1463 patients. DM was a co-morbidity in 44.5% of patients. Our patient was morbidly obese and he had DM. He was also hyperglycemic and had leukocytosis. Patients with FG usually present with the triad of pain, swelling and erythema. It is often misdiagnosed as cellulitis or abscess. Laor and colleagues have formed a scoring system named Fournier's Gangrene Severity Index (FGSI) to evaluate the prognosis of FG patients. According to this scoring system, body temperature, pulse, respiration rate, serum sodium, serum creatinine, hematocrit, leukocyte and bicarbonate levels are evaluated. Scores ≤ 5 are recorded as low, 6-7 as intermediate and ≥ 8 as high scores. FSGI score >9 indicates 75% death and ≤ 9 indicates 78% survival rates. Our patient had a FSGI score of 8. The diagnosis of FG is usually clinical. Treatment of FG is based on a multimodal approach which includes intensive fluid resuscitation to stabilize the patient and correction of electrolyte imbalance, if any. This is followed by extensive debridements and resections in order to remove all necrotic and infected tissue, wide spectrum antibiotics and reconstructive surgery, whenever required. In our case we diagnosed with clinical situation and physical examination and confirmed excisional biopsy. Hyperbaric oxygen treatment can be useful for the treatment of FG.

Conclusion: FG is often misdiagnosed as cellulitis or abscess. Emergency physicians should consider this necrotizing infection in patients with perineal erythema, pain, increase in temperature, especially poor hygiene of genital area of immunosuppressed patients like patients with DM.

Keywords: Fournier's gangrene, emergency department, diabetes mellitus



Figure 1. Necrotic and hyperemic area at right anterior inguinal region of the patient.



Figure 2. Necrotic and hyperemic area at right anterior inguinal region of the patient.

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[İnfeksiyon Hastalıkları]

A VERY RARE CAUSE OF ACUTE ABDOMEN: SPONTANEOUS LIVER CYST HYDATID RUPTURE

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Introduction: Hydatid cysts typically located on the liver. Direct contact with infected stool of dog or sheep causes parasitary infection. Patients were usually asymptomatic or may be presented with sudden onset right upper quadrant pain, hepatomegaly or complicated with rupture.

Spontaneous intraperitoneal rupture with biliary peritonitis in a case of hepatic hydatid cyst is extremely rare but serious complication. Rupture can be formed spontaneously but it also can result from blunt trauma. Increase in cyst diameter and intracystic pressure are reported risk factors. Intraperitoneal dissemination leads to chemical peritonitis which can cause anaphylaxis. In case of biliary contamination of ruptured cyst biliary tree should be explored and urgent surgical intervention must be performed.

Case: 45 years old woman was presented to emergency unit with sudden onset abdominal pain and nausea. She had not any known disease and had not any medical use yet. Physical examination revealed rigid tenderness in all quadrants and showed acute abdominal state by palpation. She had mild leukocytosis ($13000 \text{ } 10^3/\text{mm}^3$) and elevated liver enzymes (AST:77 U/L, ALT:102 U/L). Abdomen CT showed type 2-3 cyst hydatid on left liver lobe 8 cm in diameter. Subhepatic 35x15 mm fluid collection was seen on CT. Patient underwent urgent laparotomy after these findings. Pericystectomy and marsupialization were performed. Cystic fluid contained biliary content so it warranted exploration for biliary leakage. A minor biliary canal found and ligated. Postoperative ninth day patient discharged from hospital with complete healing. Andazol antibiotherapy had been started for three months.

Conclusion: Through rare, cyst hydatid rupture should be considered for differential diagnosis of acute abdomen in endemic areas. Biliary peritonitis should be remembered for icteric patients which radiologic findings suggest cyst hydatidosis preoperatively.

For these cases urgent surgical intervention is necessary as well as specific surgical technique should be selected case-by-case.

Keywords: Acute abdomen, liver cyst hydatid, rupture



Figure 1. Intraoperative picture

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[Infeksiyon Hastalıkları]

MILIARY TUBERCULOSIS

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Purpose: Pulmonary tuberculosis (PT) is a notifiable disease that commonly seen in developing or non-developed countries. Especially at communal life conditions in third world countries it is very contagious. It has long-term treatment. We will present you a young male patient with tuberculosis who works at food industry and doesn't know his disease.

Case: 20 years old male patient that doesn't have comorbid disease and works at food industry admitted the emergency department with night sweating and hematemesis for 2-3 days. There was no evidence of upper gastrointestinal bleeding at rectal examination, nasogastric lavage and aspiration and evaluation by general surgeon. There was miliary tuberculosis like images at the patients pulmonary radiography and thorax CT. The patient was transferred to thoracic diseases department diagnosed with miliary tuberculosis

Result: Doing routine medical inspections periodically and with care, and treatment of the contagious diseases of the employees whom works at industries that has risk for community health like food industry, are the most important protection precedures to avoid community contaminations.

Keywords: Pulmoner tuberculosis, food industry, third world countries

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[Infeksiyon Hastalıkları]

A RICKETTSIA CASE

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Introduction: Inflammatory diseases with fever and rash are commonly seen in emergency services. The diagnosis list can vary between an upper respiratory infection and a more complicated disease like rickettsia. Rickettsial infections are caused by obligate intracellular gram-negative coccobacilli and most pathogens are transmitted by ectoparasites such as fleas, lice, mites and ticks during feeding or by scratching crushed arthropods or infectious feces into the skin. Inhaling dust or inoculating conjunctiva with infectious material may also cause infection. Common symptoms that typically develop within 1-2 weeks of infection include fever, headache, malaise, skin rash and sometimes nausea and vomiting. Most symptoms associated with acute rickettsial infections can be nonspecific.

Case presentation: A 37 years old otherwise healthy male patient was admitted to the emergency service with fever and a rash on the upper extremities. When interviewed, he reported using analgesics five days ago when his fever and headache started. The next day he realized the rash on his both arms. Because of the persisting fever and the increasing rash he came to our emergency service. At the patient's arrival, his fever was 39,1°C. On initial examination he appeared unwell with a maculopapular and petechial rash on his arms bilaterally simetrical including his palms. There was no hepatosplenomegaly or significant lymphadenopathy. Initial laboratory test results indicated thrombocytopenia (platelet count, 97.000/µL) and elevated transaminase levels (aspartate aminotransferase, 114 IU/L; alanine aminotransferase, 120 IU/L). As we further questioned the patient, we found out, that he had acquired two budgerigars about two weeks before the onset of the illness. The patient was consulted and interned to the infection service with the prediagnosis of Rickettsia, Syphilis, and Acquired Immune Insufficiency Syndrome. On the fifth day of his hospitalisation Rickettsia was diagnosed by the PCR analyses of the biopsy of his lesions.

Conclusion: Since a rickettsial disease is not being considered too often, a late diagnosis may occur. This may cause a delay in the medical treatment of the disease and can lead to an increasing morbidity and mortality. That's why a thorough anemnesis and an attentive examination at emergency services with the right diagnosis and the treatment thereafter plays a lifesaving role.

Keywords: fever, rash, rickettsia

AN UNCOMMON CAUSE OF PARAPLEGIA: PSOAS ABSCESS

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Figure 1. Budgies



Figure 2. Maculopapular rash on the arms



Figure 3. Maculopapular rash on the arms

Objective: Psoas abscess (PA) is an uncommon and which can generally be missed or diagnosed hardly. PA is more common in children and early adults, but rarely seen in the elderly. The nonspecific and insidious emergence of the disease causes delay in the diagnosis.

Herein, we present a case of PA that applied to our department with lower back and abdominal pain, fever and weakness in both lower limbs. After the investigation, the cause of paraplegia was detected to be a PA which led to transforaminal spread and an epidural abscess.

Case: A 62 year-old male patient applied to emergency department with complaints existing for 5 days; an increasing back pain and abdominal pain, weakness in both lower limbs, malaise and inapetence. In the history, we learnt that he had been operated for nephrolithiasis and he had no concomittant diseases or drug use. On physical examination, his general state was moderate, he was conscious with a diminished orientation and cooperation and was dehydrated. He had tenderness with palpation through the levels of L1-5. Bilateral muscle strengths in the lower limbs were 1/5. There were no abnormalities in other systemic examinations and vital signs except hypotension.

The laboratory findings were as follows; WBC: 26000, Hgb: 12,4, INR: 1,2, Glucose: 487, Creatinin: 2,37, BUN: 74, K+: 3,43, Na: 129, Cl: 85, T.Prot: 5,7, Alb: 2,1 CRP: 44 and pH: 7,35. In the abdominal CT, abscess formations with air fluid levels were detected in paravertebral regions and within the psoas muscles bilaterally. In the MRI, an epidural abscess located between L1-4 levels (Figure:2) and multiloculated abscesses within the paravertebral and the psoas muscles bilaterally (Figure:1) were observed.

In the emergency department, treatments for hyperglycemia, dehydration and infection was started. The patient was hospitalized by neurosurgeons for lumbar epidural abscess and PA. The abscesses were drained through anterior and posterior surgical approaches. Postoperatively there was a dramatic improvement in the patient's clinical signs and blood values.

Conclusion: PA is an extremely rare entity currently. Although its prognosis is favorable when diagnosed earlier and treated with broad spectrum antibiotics, its mortality rates are increased in patients with delayed diagnosis. Typical clinical findings of PA include low back and leg pain and difficulty while walking. It can sometimes cause an atypical clinical manifestation, as paraplegia, by compressing medulla spinalis. Those cases may be missed or a delay in diagnosis may occur but rapid improvements can be achieved with urgent surgical interventions and proper antibiotherapy and the deficits may be reversible.

Keywords: Psoas, epidural, abscess

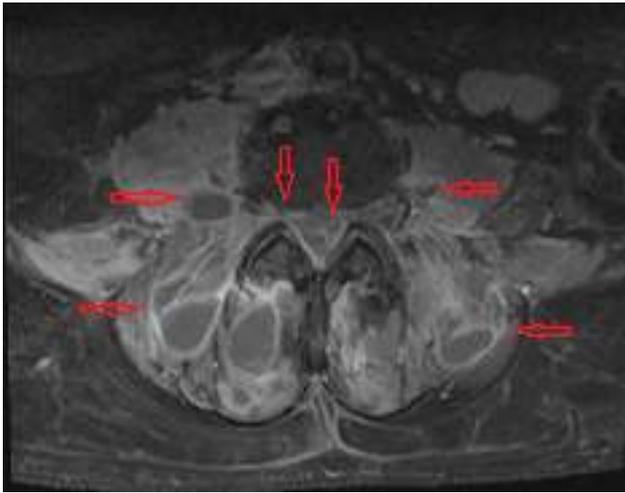


Figure 1. Multiloculated abscesses within the paravertebral and the psoas muscles



Figure 2. Epidural abscess located between L1-4 levels

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[İnfeksiyon Hastalıkları]

TWO UNUSUAL CASE IN EMERGENCY DEPARTMENT: HYDATID CYST MULTILOCULARE

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Hydatid cyst caused by *Echinococcus granulosus* is a parasitic disease, which can be present with an unusual location. Here are two case presented whose referred to the emergency department with the complaint of pain in unusual locations. Although the disease frequently involves the liver and the lungs, other organ involvements can be encountered. Emergency physician should

evaluate the pain, and must exclude the hydatid cyst rupture as the source of pain. Therefore the physician must perform imaging studies. Most of these cases do not undergo an emergent surgery.

Keywords: Hydatid Cyst,unusual cyst localization, emergency imaging

Figure 1-6

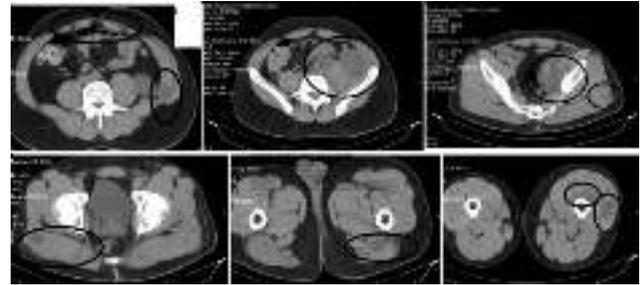


Figure 1-6.Unusual loculated cysts seen in abdomen retroperitoneal and on limbs. Hydatid cysts localised on the right and left femur among the femoral muscular facias.

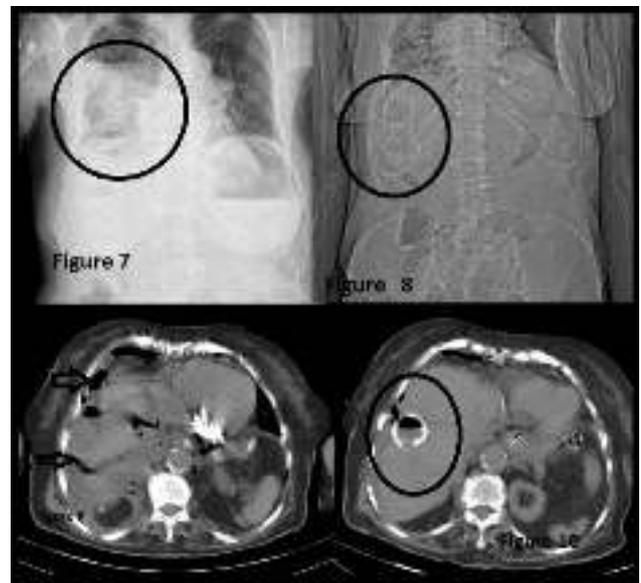


Figure 7-10. The figures 7-10 shows on the lung X ray, and computerised tomography right sided complicated hydatid cyst.

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[İnfeksiyon Hastalıkları]

EXTENSIVE BILATERAL LOWER EXTREMITY CELLULITIS DUE TO TRADITIONAL THERAPY WITH LEECHES

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Introduction: Medicinal leeches (*Hiruda medicinalis*), blood-sucking hermaphroditic parasites, has been used in traditional therapy since ancient times. Cellulitis is a cutaneous reaction which is inflammatory, painfull, nonnecrotizing, erythematous that involves the deeper dermis and the subcutaneous tissue. It is usually occurs unilaterally on side of the arm, leg, and face. In literature, prolonged bleeding following leech application was reported, but there is not enough report about its cutaneous reactions. Complications related to leech bites are not commonly

seen in emergency departments. We here reported case of cellulitis bilaterally occurring on lower extremity due to leech bite.

Case: A 32-year-old male was admitted to emergency department with complaints of both lower extremities painful and itchy lesion. His patient's past history revealed that he had adhered leech to the both legs to relive knee and leg pain about 2 weeks ago. On physical examination: fever 37.8 C, Blood pressure: 120/70 mmHg, and Heart Rate: 110 ppm. There were erythematous skin lesions which initiating ankles and extending to beyond upper limits of knees and terminating with sharp margin on anterior areas of the both legs. The lesions were containing local temperature increase, edemas, and 2-3 number papules. WBC: 18.000 K/uL, erythrocyte sedimentation rate 45 mm/hour. Doppler USG showed bilateral normal arterial and venous flow. We thought that the patient has bilateral leg cellulites caused by leech bite. The patient was transferred of infectious diseases ward with diagnose of cellulites and treated by ampicillin-sulbactam.

Conclusion: Leech bite can lead to unexpected cutaneous reactions.

Keywords: leech bite, cutaneous reactions, cellulitis



Figure 1. Bilateral erythematous skin lesions on both lower extremities

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[İnfeksiyon Hastalıkları]

BE CAREFUL IT WAS PSOAS ABSCESS

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introduction: Psoas abscess is a rare clinical presentation, often with nonspecific clinical symptoms and signs. Psoas abscess may be classified as primary or secondary, depending on the presence or absence of underlying disease. Primary psoas abscess occurs probably as a result of haematogenous spread of an infectious process from an occult source in the body. Primary psoas muscle abscess can occur in patients with diabetes mellitus, intravenous drug abuse, AIDS, renal failure, immunosuppression. The classical clinical triad consisting of fever, back pain, and limp is present in only 30% of the patients with psoas abscess. Other symptoms are vague abdominal pain, malaise, nausea, and weight loss. Secondary causes are a result of direct spread from adjacent structures, most commonly due to Crohn's disease or any surgical or instrumentation of adjacent anatomical structures.

Case: A 89-year-old male patient presented to the Emergency Department (ED) with limp and back pain. His children

mentioned that admitted to hospital three weeks ago because of urinary tract infection. The patient had a history of Type II diabetes, Alzheimer's disease, hypertension, congestive heart failure, benign prostatic hyperplasia. Her vital signs were: body temperature 36,5°C; blood pressure 149/77 mmHg; respiratory rate 15 per minute and heart rate 77 beats per minute. General examination was within normal limits. Laboratory studies were obtained, including hemoglobin 10,2 g/dL (normal range [NR]: 12-18), white blood cells 7,9 K/uL (NR: 4,8-10,8), platelets 343 K/uL (NR: 130-400), creatinine 1,3mg/dL (NR: 0,72-1,25). CT scan of the lumbar spine was obtained and revealed normal spinal cord and vertebrae. Patient's symptoms were well controlled in our department in a day and he was discharged.

Patient presented to our ED again with the same complaint after a day. His children mentioned that they took him to orthopedics clinic and MRI of the lumbar spine was obtained. MRI showed 4 cm right psoas abscess. Percutaneous drainage was performed with the insertion of an ultrasound-guided pigtail catheter and patient admitted to infectious diseases clinic. The patient was started on empiric intravenous antibiotics. Escherichia coli isolated from abscess. He was discharged without complications 51 days later.

Conclusion: Percutaneous drainage remains the primary initial treatment modality. It is impossible at this point to establish a general treatment plan applicable for all patients, associated conditions should be considered when planning therapeutic management of psoas abscess. Open surgical drainage can be preferred, if necessary.

The clinical presentation of psoas abscess is often variable and non-specific. Emergency physician must remember psoas abscess in patient that presented with fever of unknown origin or back pain or limp.

Keywords: Limp, Percutaneous drainage, Psoas abscess



Figure 1.

LISTERIA MONOCYTOGENESIS BACTEREMIA IN A PATIENT WITH BRAIN TUMOR: A CASE REPORT

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Introduction: In healthy individuals, *Listeria monocytogenes* infection is usually asymptomatic or self-limiting diarrhea with fever, however, in people immunodeficient, can cause invasive listeriosis cases, such as bacteremia, central nervous system infection and maternofetal infections. It is also an example of a severe condition with high mortality (20–30% in high risk individuals) being effectively treated even with rapid and appropriate medical management. We report on a case of bacteremia due to *L. Monocytogenes* in a patient who was with recurrent brain tumors operated and admitted to the emergency department with diarrhea and vomiting.

Case: A 69- year-old woman patient was admitted to Mugla Sitki Kocman University Emergency Department with a 24 hour long diarrhea (8 times a day) and vomiting. When we questioned the history of the patient, we learned that she was operated due to metastatic brain tumor about 1 year ago and had been under follow-up by the medical oncology unit since that time. She was taking dexametazon (4 mg every 12h, po) and levetirastam (500 mg every 12h, po.). On physical examination in admission; her temperature was 37,1 oC. The patient was lethargic but able to follow commands. No stiffness of the neck and meningeal irritation findings was detected. The remainder of the systemic examination was unremarkable. Patient's laboratory tests, WBC 1800 (66.7% PNL), Hgb 12.9 mg/dL, platelets 153000, in stool microscopic examination no leukocytes, erythrocytes, parasite cysts and eggs were detected. The patient was hospitalized in the infectious disease department. Parenteral fluid and symptomatic medical treatment was performed to the patient. On the second day of hospitalization focal convulsions occurred on the right arm and fever increased to 39 oC and mental status altered. No skin rash was present. There were no signs of meningeal irritation in the patient. Lumbar puncture was not performed due to increased intracranial pressure, so meningitis could not be ruled out. Blood cultures were taken before antibiotics administered. She was immediately given meropenem (1g every 8h. IV) and vancomycin (1g every 12h.IV). Upon closing of the patient's consciousness she was intubated and transferred to intensive care unit. Blood cultures yielded pleomorphic Gram-positive bacillus after two days incubation (Figure 1-2). The isolate was identified as *L. Monocytogenes* was in accord with growth characteristics of β -hemolytic colonies on sheep blood agar subcultures and BD Phoenix automated microbiology system. The identification result confirmed by *Listeria* API System (Bio Merieux, France) (Figure 3). Ampicillin (2 gr every 4 h IV) was added to existing therapy. At the end of 14 days of treatment, the patient responded well above mentioned therapy. The fever subsided and laboratory findings returned to normal. The patient transferred to medical oncology department for her brain tumor's follow-up.

Results: Listeriosis is a serious infection disease because it is common in the foodborne sources and is grow and survive in hard conditions. Bacteremia caused by *L. monocytogenes* is the most common clinical presentation in individuals with compromised immune system, however focus of infection is usually uncertain. Therefore, diagnosis of bacteremia due to *L. monocytogenes* is difficult. Clinicians should be aware of the atypical pathogens especially in immunocompromised patients and should take a good history and complete exploration.

Keywords: *Listeria monocytogenes*, bacteremia, brain tumor



Figure 1. *Listeria monocytogenes* colonies on sheep blood agar

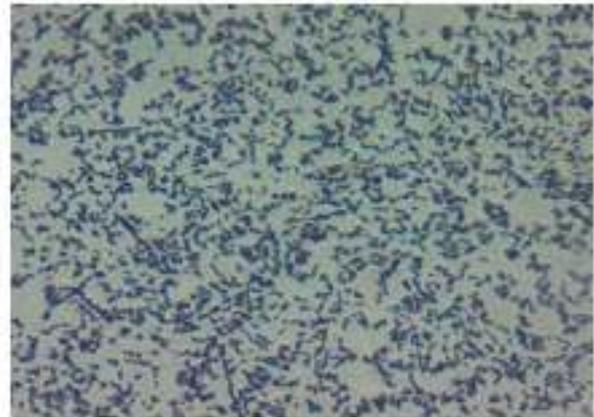


Figure 2. *Listeria monocytogenes* bacteria on Gram stained microscopy.



Figure 3. Phenotypically identification of *Listeria monocytogenes* with *Listeria* API

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[İnfeksiyon Hastalıkları]

A CASE OF HYDATID CYST OF THE LIVER PRESENTING WITH EPILEPTIC SEIZURE

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Hydatid cyst is a globally widely distributed zoonosis. It is generally asymptomatic in the initial period, and cysts do not produce symptoms so long as they do not reach a specific diameter. Clinical findings consist of pressure by cysts on surrounding tissue, infection and rupture of cysts. Ruptured cysts exhibit differing clinical features depending on the tissue where they rupture. Symptoms such as pressure-related abdominal pain, dyspnea, hemoptysis, cough, rupture-related anaphylaxis, skin eruption, urticaria, bronchospasm, tachycardia, hypotension, pneumothorax, infection-related fever and inability to clear phlegm may be observed. Our report describes a rare case of a 19-year-old patient presenting with seizure and anaphylaxis and diagnosed biliary rupture associated with hydatid cyst of the liver. Epileptic seizure is a rare cause of hospital presentation in cases of hydatid cyst. It is generally seen in cases with involvement of the brain, and epileptic seizure associated with rupture of hydatid cysts into the biliary passage is a rare condition. In the presence of abdominal pain accompanying seizure and anaphylaxis, as in our case, the examining physician must assess the patient in detail with good anamnesis and physical examination in order not to overlook diagnosis.

Keywords: hydatid cyst, seizure, zoonosis

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[İnfeksiyon Hastalıkları]

A RARE CAUSE OF ABDOMINAL PAIN IN THE EMERGENCY DEPARTMENT: TYPHLITIS

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Typhlitis, or neutropenic enterocolitis, is a life-threatening gastrointestinal complication of neutropenic diseases characterized by abdominal pain and fever. It is frequently seen in leukemia and lymphoma. Typhlitis should be considered in patients with malignancy in the presence of neutropenia, fever and right lower quadrant pain. Since typhlitis can lead to high levels of morbidity and mortality, early diagnosis and treatment are important. Treatment is medical, but surgery may be required depending on complications. A 45-year-old woman presented to our emergency department with abdominal pain and swelling that had commenced 4 days previously. The patient had been diagnosed with T cell lymphoma 1 year previously and received chemotherapy. Physical examination revealed icteric sclera, abdominal distension and sensitivity in the right lower quadrant. **There was no defense or rebound. Laboratory results were Hb: 9.4 mg/dl, Htc: 27.8 mg/dl, thrombocyte: 55,000/mm³ and WBC: 7,400 (neutrophil 65.8%).** Chest x-ray was normal. USG of the abdomen revealed wall thickening up to 14 mm in the cecum (typhlitis) and widespread acid in the abdomen. CT of the abdomen revealed diffuse wall thickening in the cecum, ascending colon and rectosigmoid junction (typhlitis). While the cecum is most commonly affected, the ascending colon and

ileum may also be involved. Fever, abdominal pain and diarrhea represent the triad in the diagnosis of typhlitis. Typhlitis is an oncological emergency affecting the cecum, ascending colon and ileum. Typhlitis should be considered in cases of malignancy in the presence of abdominal pain, fever and diarrhea. This report describes a case of typhlitis, a rare oncological emergency, in the emergency department.

Keywords: Abdominal Pain, Typhlitis, Neutropenic enterocolitis



Figure 1. diffuse wall thickening in the cecum, ascending colon and rectosigmoid junction

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[İnfeksiyon Hastalıkları]

EMPHYSEMATOUS CYSTITIS IN EMERGENCY DEPARTMENT

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Introduction: Emphysematous cystitis is a distinct complicated lower urinary tract infection (UTI) characterized by air within the bladder wall and lumen. The disease is most common in middle-aged diabetic women. Patients with chronic UTIs, indwelling urethral catheters, urinary tract outlet obstruction, or neurogenic bladders are predisposed to complicated UTIs such as emphysematous cystitis. Air within the urinary tract can also occur due to instrumentation, fistula to a hollow viscus, tissue infarction with necrosis. Patients might have varied presentations, ranging from incidental diagnosis on abdominal imaging to severe sepsis. Gas forming infections or emphysematous conditions of the urinary tract are potentially life-threatening, and require prompt evaluation and management. We describe a case of emphysematous cystitis.

Case: A 68-years old woman presented to emergency service with the complaint of nausea, vomiting, and abdominal pain. She had no trauma history. She has known coronary artery disease, hypertension, diabetes, chronic renal failure, she has three times /a week hemodialysis. Her vital signs were normal. On physical examination, she was dehydrated; she has abdominal tenderness especially in left upper quadrant. She had neither costovertebral angle tenderness nor suprapubic tenderness. In lab Wbc: 18.000, Cre:4.31, BUN:30, K:5.5, Na:133, Glucose:327, no metabolic or respiratory acidosis in blood gas analysis. In

urine analysis there was no ketosis, had +3 leukocytosis. For the differential diagnosis of her abdominal pain computed tomography (CT) scan ordered. There was emphysematous cystitis. A antibiotic treatment ceftriaxone was started.

Discussion: Emphysematous cystitis is a relatively rare form of complicated urinary tract infection characterized by presence of gas within the bladder wall and lumen. Emphysematous urinary tract infections are usually caused by gas-producing organisms. They should be suspected in diabetic patients with urinary tract infections and worsening of renal function. The clinical signs of EC are highly variable, ranging from asymptomatic to severe sepsis. The most common symptom is abdominal pain, occurring in 80% of patients. Computed tomography (CT) is also commonly used and is necessary for diagnosis. CT also reveals the severity of the clinician to monitor the urinary status. CT scan is the method of choice for diagnosis and follow-up. Medical therapy consists of antibiotics, bladder drainage and treatment of predisposing conditions. Surgery is required in patients exhibiting a poor response to initial medical management or those with severe necrotizing infections.

Keywords: Emphysematous cystitis, diabetes, renal failure, abdominal CT

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[İnfeksiyon Hastalıkları]

A HARD DIAGNOSED TETANUS CASE: ATAKAN YILMAZ¹, ÖMER AKDAĞ¹, ADEM TOPKARA², HAYRİ ELİÇABUK¹, MUSTAFA SERINKEN¹

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Background: Tetanus is an infectious disease which develops with the toxin of Clostridium tetani, progresses with tonic muscle spasms, and manifests a high mortality rate. The disease usually appears as a result of traumas that will lead to necrosis through bodies that consist of Clostridium tetani spores. The patients may not always possess a marked traumatic history.

Case: The 59-year-old male patient was admitted to our emergency service with his complaints about pain throughout his body, sense of contraction in his legs, and malaise. The patient had HT and DM history. The patient's complaints actually started to manifest with back pains 10 days ago, followed by failure to swallow, chill, shivering, and jaw pains. In the hospital he was admitted, the neurologist asked for his cranial MR. Informed that his other examinations were normal, he was given a symptomatic therapy. Afterwards, his complaints grew bigger and he began to suffer from difficulty in walking. The vital symptoms when he arrived were stable (body temperature: 36,5 °C, pulse: 70/min, blood pressure 120/80 mmHg, respiratory rate: 18/min), and his overall medical condition was well. During his physical examination, restriction in his left hip and knee movements as well as limitation in jaw movements was observed. His other system examinations turned out to be normal.

After a comprehensive anamnesis, it was found out that he had visited the emergency service owing to onychia on his left toe 18 days ago and got it pulled out. Suspected that the patient might have tetanus, he was consulted with the infectious diseases clinic. The patient, in the mean time, was administered IV 5 mg benzodiazepine (diazepam) and was injected with one dose of

tetanus vaccine. The patient was hospitalized in the infectious diseases department and administered with tetanus IG and antibiotherapy. Once his complaints about the contractions and malaise grew less 10 days after his hospitalization, he was discharged with full recovery. The patient was recommended with tetanus boost vaccination one month and six months after his discharge.

Discussion: Tetanus patients may visit emergency services because of malaise and restriction on their articular movements as well as facial and extremities contraction. If the patient has no history of trauma, or if the anamnesis has not been properly questioned, tetanus may not come to our mind in the differential diagnosis.

Keywords: Tetanus, Hard-diagnosed, Onychia, Emergency Medicine

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[İnfeksiyon Hastalıkları]

ORF (ECTHYMA CONTAGIOSUM) CASES AFTER EID AL-ADHA*

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Introduction: Orf (ecthyma contagiosum) is an infection of the skin caused by the orf DNA virus, which belongs to the genus Parapoxvirus and family Poxviridae. Skin lesions are polymorphous (vesicles, blisters, pustules, erosions, ulcers, papules, nodules) and occur at sites of inoculation of the virus 3–10 days after contamination. Hands are the most common site of infection. The disease spontaneously heals within 6 weeks, although lingering pain, bacterial super infections, and regional lymphadenitis are possible. The treatment is based on the application of topical antiseptics and administration of prophylactic systemic antibiotics. Imiquimod is also effective. The virus infects primarily sheep and goats. We present two cases of orf acquired during religious practices.

Case reports: Case 1: A 29-year-old man from Izmir/Turkey was admitted our department because of an ulcerated nodular lesion with hemorrhagic bullae located on the left hand. The patient stated that he was in good general health and that he was not receiving therapy with systemic drugs. He also stated that the lesion had appeared 7 days earlier. The medical history revealed that the patient had handled lamb meat during the "Feast of Sacrifice." dermatological examination revealed an inflammatory nodule with a central ulcer; this nodule had a round shape and wash hemorrhagic bullae, with a diameter of 1.5 cm (Figure. 1).

Case-2: 35 year old male patient, admitted to emergency department for lesions on his bilateral fore arm and left hand. He reported a superficial skin trauma on his left hand while chopping sheep meat at Eid al-Adha a few days before. A sheep bone particule was taken out from his left hand at previous hospital. He was healthy previously and he denied any medication or illicit drug abuse. His vital signs were normal and neurologic and systemic examination were normal. He had nodular lesions with hemorrhagic bullae and some bullae was surrounded with erythematous tissue on his forearms bilaterally (Figure 2).

Two cases were diagnosed with orf because of history of sheep meat contact, normal vital signs without any sign of

systemic infection. Antibiotics for prophylaxis and skin ointment prescribed and outpatient follow up advised to patients.

Orf acquired during religious practices was first reported in 1982 by Gunes et al. who described 31 cases observed in the period 1979–1980 in Turkey. Other cases were subsequently observed in France, Belgium, Turkey, USA, and Tunisia. Some small epidemics have also been reported: 23 cases in Belgium in 2000, 44 cases again in Belgium in 2001, nine cases in Turkey in 2005, and 29 cases in Turkey in 2009. In most of the orf patients described in these studies, manifestations of the condition appeared days or weeks after the Muslim “Feast of Sacrifice”. This feast is celebrated 4 days after the end of Ramadan: therefore, the exact day of this feast varies from year to year. During this feast, several Muslim families kill a lamb, which has to be alive at the time of slaughter and allowed to bled to death.

Conclusion: Orf disease must be in differential diagnosis in patients with bullous lesions with multiple vesicles and nodules with ulcerated centers especially on forearms, accompanying history of close contact with animals sacrificed in religious days.

** a religious festival for sacrifice in muslim world*

Keywords: Orf, ecthyma contagiosum, after Eid al-Adha



Figure 1. Ulcerated nodular lesion with hemorrhagic bullae located on the left hand.



Figure 2.



Figure 3. Left hand volar view.

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[Infeksiyon Hastalıkları]

AN EXTRAORDINARY CASE OF HEADACHE: ZONA ZOSTER UNDERCOVER

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Introduction: Although recent technological advances (CT, MRI, US) have shortened the time to reach the true diagnosis, the main standpoint in evaluating, diagnosing, and managing the disease of a patient is still proper patient history and physical examination. ED crowd and shortage of medical staff may sometimes mandate vast use of diagnostic work-up over physical examination, but this approach may end up with missed diagnosis and decreased patient satisfaction. Here we present a case to highlight the opportunity to diagnose some diseases solely via inspection.

Case Report: An 82 year old female patient presented to the emergency room with a burning sensation and pain in the left fronto-parietal area. The patient attended to a medical care facility at the third day of heard headache, a cranial CT was ordered and showed no pathologic findings, and the patient was then discharged with analgesics. She sought care in another facility due to un-resolving pain; IV morphine sulphate was injected, and discharged again. Third time she attended to the first health care provider, a control CT was taken and reported to be within normal ranges. The patient visited the neurology clinic and Gabapentin was prescribed. The patient attended to our ER with continuous pain with no relieving or provoking factors. The patient had no history of chronic illnesses. She was oriented and cooperative, and vitals were within normal range. Her detailed neurological evaluation was also normal. During physical examination, when the headscarf covering her head, ears, chin and neck was removed vesicular lesions covering her left fronto-parietal area and ear were noticed (Şekil). Otoscopic examination revealed a normal external auditory canal and tympanic membrane. The underlying cause of the headache was defined as Herpes Simplex (Zona Zoster) infection, and the patient was referred to Dermatology clinic.

Discussion: Diagnosis of a disease does sometimes require no more than basic history and examination skills. A medical practice

based on these skills and use of diagnostic tests and imaging studies only where absolutely necessary will not only be more cost effective, but also more medically efficient.

Keywords: Zona Zoster, Physical examination, Emergency Medicine



Figure 1. vesicular lesions on the left fronto-parietal area



Figure 2. Vesicular lesions on the left fronto-parietal area

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[Acil Tıpta Adli/Medikolegal Konular]

ASSESSMENT OF MOBBING PERCEPTION LEVEL AMONG EMERGENCY DEPARTMENT RESIDENTS

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Background: Mobbing has been defined as a psychological terror act practiced systemically by one or more person(s) on other person(s) via hostile and ethical methods.

Methods: This study was a cross-sectional study designed to determine mobbing levels and influencing factors among emergency department residents in Turkey. The sociodemographic features, descriptive statistics related to scale scores, and relationship between the variables were assessed in 161 emergency department residents.

Results: Majority (44,7%) of the volunteers who participated in our study were of the 24-28 years age group. Of the participants,

50,3 % were male and 49,7 were female. The mean mobbing perception score of the participants was 70,26 which corresponded to the choice "never".

There was no significant difference between sex, age, marital status, childbearing status, the institution of the resident, year in the profession, and the number of days on duty with respect to mobbing perception level scores. There existed a significant drop in the mobbing perception scores as the number of colleagues with whom the participants worked together increased ($p=0.036$). There was a significant decrease in the mobbing perception level as the number of personnel with whom the participants worked together increased ($p=0.007$). The group with 2 academic members with whom the participants worked together had a lower mobbing perception level compared to other groups ($p=0.047$). In our study 28,6% of the participants were of the opinion that the source of mobbing was the administrative staff they are responsible to and 24,9% held that the colleagues practiced mobbing.

Conclusion: In our study it was observed that the mobbing perception level was very low among emergency residents in Turkey.

Keywords: Emergency Department, Healthcare staff, mobbing

Table 1. Marital status and age-level comparison of the perception of mobbing

	n(%)	Lowest Score	Highest Score	Median
Male	80(50,3)	47.00	155.00	100,50±26,48
Female	79(49,7)	46.00	166.00	102,00±27,94
Married	75(47,2)	46.00	166.00	102,00±28,70
Single	84(52,8)	47.00	151.00	102,00±25,78

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[Acil Tıpta Adli/Medikolegal Konular]

VIOLENCE TOWARDS EMERGENCY MEDICINE RESIDENTS: ITS LEVELS, CAUSES AND CONSEQUENCES

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Background: In our study, it was aimed to determine the opinions of the emergency medicine specialization students in Turkey about the causes, effects, and consequences of violence and their suggestions for solution

Methods: This study was a cross-sectional study designed to determine causes of violence and influencing factors among emergency department residents in Turkey. The sociodemographic features, descriptive statistics related to scale scores, and relationship between the variables were assessed in 146 emergency department residents.

Results: The majority of study population comprised age groups of 29-33 (52.7%) and 24-28 (28.8%) years. Of these, 67.8% were male and 32.2% were female. It was observed that, 95.2% of the participants did not receive any training/course regarding violence before, while 85.8% regarding stress,

conflict management, and communication issues throughout their education. It was seen that, 96,6% of the participants were subjected to at least one type of violence, so that 38,4% to physical violence and 93,8% to verbal violence. It was seen that men (%80.4) incurred more violence than women (%19.6) ($p=0.010$). Among participants, 82.9% of the ones who incurred verbal violence, and 31.5% who incurred physical violence have stated that violence was committed by patients relatives. Of the armed attacked participants, 100% have stated that metal detector was not used and there was no frisk search. Following the incurrence to violence, it was observed that 16% of the respondents have been injured and 37.5% had formally received treatment upon injury. It was observed that the ones who have suffered physical violence ($p=0.018$) and the ones who have been working in the emergency service for 1-2 years ($p=0.016$) had more anxiety. Of respondents 41.1% stated that a colleague working in their department resigned due to violence.

Conclusion: In our study, 69% of the respondents proposed imprisonment, whereas 64,4% fines, and 37% working in public places as punishment for people who use violence. The health policies, uncontrolled entrance and exit of the patients' relatives, problems related to security and education were determined by the participants as the factors that contribute the most to physical and verbal violence.

Keywords: Emergency Medicine, Healthcare Workers, Violence

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[Acil Tıpta Adli/Medikolegal Konular]

AN ELDERLY ABUSE CASE IN THE EMERGENCY DEPARTMENT

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Introduction: Elder neglect is the infliction of physical, emotional/psychological, sexual or financial harm on an older adult. Elder abuse/neglect can also take the form of intentional or unintentional neglect of an older adult by the caregiver. It can also take the form of depriving someone from eating, dressing, heating and of basic medical service. In this report we will discuss the case on an old patient who had had a thorn pricking in her left eye a year prior to her admission. Because the condition was left untreated, the patient had lost her left eye.

Case: An 81-year-old female patient was brought to the Emergency Department with a lesion on her left eye. On an initial physical examination her situation was found to be fair and she was partially cooperative. Her vital signs were stable. On her left orbital cavity the entirety of her eye globe was partial and necrotic and the region extending towards her nose was apparently infected (Fig.1). The patient was accompanied by her neighbors who revealed to the medics that her eye lesion had been present for a year now. In the following hours the medics understood that the so-called neighbors were actually the patient's husband and son. It was then learned that a year ago a thorn had pricked the patient's eye. A rash and swelling had followed but it had not been treated. The patient was started on IV antibiotics and was hospitalized for a following necrotic debridement. The social services were eventually notified of the case.

Conclusion: Medical services take always precedence in an Emergency Department. In spite of this, legal and social responsibilities should not be neglected.

Keywords: neglect, elderly, emergency department



Figure 1.

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[Acil Tıpta Adli/Medikolegal Konular]

A SHAKEN BABY SYNDROME CASE WITH INTERHEMISPHERIC SUBDURAL HEMATOMA

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Objective: Aim of this study is to take attention identifying the patients with shaken baby syndrome, in case of an inattentive routine emergency medicine practice, is easy to overlook. If there is a mismatch with physical examination and history of young patients, it is emphasized that shaken baby syndrome should be kept in mind in differential diagnosis.

Introduction: shaken baby syndrome occurs as a result of holding and shaking young children and infants from their limbs or chest. In the meantime, typically, retinal hemorrhage, bone fracture, subdural and subarachnoid hemorrhage and diffuse axonal damage may occur. Shaken baby syndrome is a type of physical abuse of children. Sometimes shaking is accompanied by blunt trauma. Combination of a good medical history, physical examination and radiology are needed for diagnosis. Commonly in the history given by parents or guardians there is no trauma or have a history of minor trauma.

Case: 11 months old boy was brought to the emergency department with a complaint of fall into place. On admission, the general condition was good. Physical examination was natural, neurological examination was normal except a reduction of environmental communication with the outside and apathic appearance. While deepening the history, contradictions of parent's statements were attention getting. After a brief questioning, the parents told he didn't fall. The parents told they might have shaken the baby but they changed the statement

and refused it too tearfully. Intracranial computed tomography in the occipital interhemispheric subdural hematoma was detected. Patient was neurologically and physically stable and there was no enlargement in bleeding in control computed tomography. The patient was admitted to the neurosurgery service in order conservative treatment. After five days the patient underwent computed tomography and completely absorption of subdural hematoma was detected. The patient was discharged with outpatient control

Results: It is important to be skeptical about the shaken baby syndrome due to its hardness to diagnose it because of different stories, contradictory statements and admitting a different healthcare provider each and every occurrence. In the suspected child abuse and neglect cases, for the diagnosis, imaging technology is important. The subject of prevention of child abuse, which with the causes and consequences affects children and consequently the whole society, requires multidisciplinary approach. To increase social awareness, increase in cooperation of civil society organizations and government agencies has great importance.

Keywords: Shaken baby syndrome, Interhemispheric subdural hematoma, Child abuse

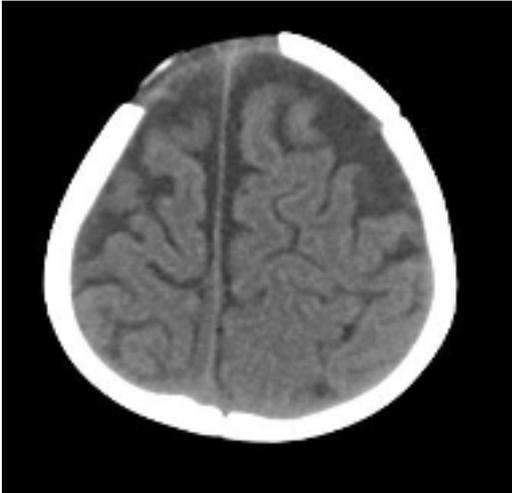


Figure 1. After treatment

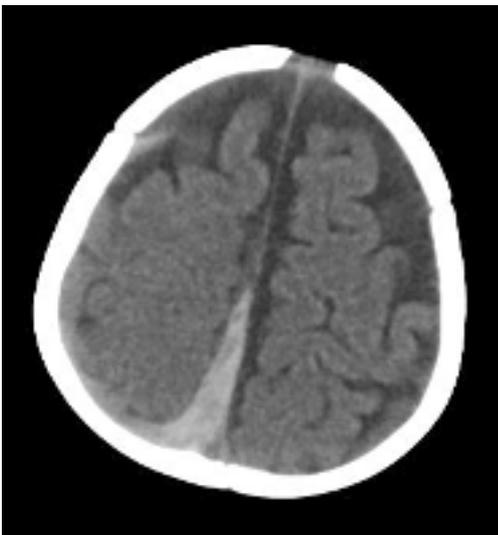


Figure 2. Interhemispheric subdural hematoma

NEW ONSET SEIZURES STARTED AFTER A TRAFFIC ACCIDENT, IS IT PSYCHOGENIC SEIZURES OR NOT REAL SEIZURES?

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Psychogenic seizures, also known as pseudoseizures, are diagnosed when disruptive changes in behaviour, thinking, or emotion resemble epileptic seizures, but no paroxysmal discharges are seen on electroencephalogram and do not originate from another medical illness. We report a patient with traumatic head injury who developed paroxysmal behavioral and motor episodes after head trauma and received a diagnosis of refractory epilepsy for 2 years until he underwent Video-EEG confirming the diagnosis.

A 29-year-old man was visited to the emergency service because of refractory seizures. In the history Seizures had began 2 years ago, after a car accident. The tests conducted after the accident were normal. Although he had head trauma after accident cranial CT and MRI results were normal. Two months, after the accident seizures began, were characterized by paroxysmal behavioral and motor episodes with a frequency of two to three seizures in a week. He also had absences and sometimes got lost in the street. He received a diagnosis of posttraumatic epilepsy and was treated with antiepileptic drugs. Despite this medication, seizures continued. He had seizures 2 more times in the emergency department while under follow-up. The blood tests and imaging results were appeared perfectly normal. Patients were consulted to neurology department. After evaluation by the neurology department, the patient was hospitalized for further evaluation. Video-EEG was performed in an another hospital he underwent Video-EEG. With the results of video-EEG and further evaluation he received a diagnosis of Psychogenic Seizures after head trauma. Antiepileptic medication was tapered to discontinuation. At this point she was referred to psychiatrist. After psychiatric assessment the patient was told about the emotional origin of his seizures. Because of his psychiatric disorder he was prescribed paroxetine, and he was referred to psychotherapy.

Additionally, between 20 and 40 percent of refractory epileptic patients should be diagnosed with Psychogenic nonepileptic seizures. However when there is a history of traumatic head injury, the onset of seizures is less suspected to be from psychological origin and is usually thought to be from epileptic origin. As a result, Psychogenic nonepileptic seizures are often mistaken for epilepsy and treated unsuccessfully with antiepileptic drugs. So patients undergoing post-traumatic seizures, must necessarily be evaluated by the department of neurology and psychiatry before starting treatment

Keywords: Seizures, traffic accident, Psychogenic

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[Nörolojik Aciller]

RECURRENT SEIZURES AFTER CHEMOTHERAPY(CISPLATIN AND 5- FU)

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Introduction: Seizures occur in fewer than 1% of patients treated with systemic chemotherapy and can occur as a manifestation of the neurotoxicity of chemotherapeutic agents. In general, chemotherapy-associated neurotoxicity is related to specific drugs or drug combinations. The chemotherapeutic agents most commonly reported to cause central nervous system (CNS) toxicity are cisplatin, methotrexate, L asparaginase, busulfan, 5-Fluorouracil. A few studies have reported cases of several patients who developed recurrent complex partial seizures after the initiation of chemotherapy. We report a rare case admitted to emergency department recurrent seizures after second course of chemotherapy for the treatment of gastric cancer.

Case: A 55-year-old woman with gastric cancer received second course adjuvant chemotherapy with cisplatin, Dosectaxel, 5-FU, folinic acid. She had no nausea, vomiting, or diarrhea during or after chemotherapy administration. She had no metastatic mass in brain. She had an acute onset of a generalized seizure and coma on the second day after chemotherapy. On arrival in the emergency department, she was unconscious with a Glasgow Coma Score of 10 (eyes 3, verbal 3, motor 4). Computed tomography and MRI of the brain did not show any lesions. She had no underlying diseases except gastric cancer. The laboratory studies are normal. One hour after admission she had second generalised tonic-clonic seizure. The convulsive seizure was intervened with intravenous Diazepam (5 mg) and patients were consulted to neurology department. EEG was performed in patients. Periodic Lateralized Epileptiform Discharges were seen in EEG. We were considered seizure due to chemotherapeutic agents in patient with normal laboratory and imaging results. Cisplatin and 5-FU was the probable cause of seizures. Additional antiepileptic treatment was administered. The patient was taken to the observation room. No seizures were determined and the patient was discharged after 24 hours.

Conclusion: In conclusion generally, chemotherapy-associated neurotoxicity and seizures is related to specific drugs or drug combinations. The chemotherapeutic agents most commonly reported to cause central nervous system (CNS) toxicity and seizures are cisplatin, methotrexate, L-asparaginase, busulfan, 5-Fluorouracil. Finally it should be remembered that the seizures may be due to chemotherapeutic in patients presenting with seizures after chemotherapy.

Keywords: Chemotherapy, Recurrent Seizures, Cisplatin and 5- FU

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[Nörolojik Aciller]

PNOUOSEPHALUM DEPENDS ON RIB İMPLANT: CASE REPORT

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Introduction: Pneumocephalus is rare complication of rib implant. Free air in the head generally progress after

craniotomy, intracranial infections or neurotrauma. We will introduce a postoperative case having lung cancer and thoracic wall metastasis and operated pneumonectomy, thoracic wall resection and reconstruction of costa's with titanium material. He was admitted hospital emergency medicine clinic with headache and vomiting.

Case: 64 years male patient, he was admitted to emergency department with headache and vomiting for 1 week. Having chronic obstructive lung disease and lung cancer and a thoracic surgery 40 days ago and don't have any trauma. In examination blood pressure: 123/68 mmHg heart rate: 68/minute fever: 36 °C glasgow coma scale: 15 awake, oriented and cooperative and in good general condition. He has no nuchal rigidity and normal neurological examination; but having horizontal nystagmus. In laboratory have wbc counts: 13500/mm³ and cranial ct: have bilateral pneumocephalus and air densities in cervical and thoracic imaging in anterior epidural cavity from clivus to thoracic vertebrae. Titanium costa material can be seen into the vertebral epidural space. We have learned patient had a local chest wall metastasis and had surgery of thoracic wall and costa resection and reconstruction with titanium costa material. This material's vertebral end can be seen in epidural space of thoracic vertebra. We ordered ceftriaxone 2gr per day iv and patient was operated by thoracic surgeon. The implant titanium rib material removed and the dura of thoracic vertebral spine restored by neurosurgery. After 15 days patient discharged from hospital as cured.

Conclusion: Pneumocephalus is rare complication of rib implant surgery. In this case after thoracic wall resection and reconstruction of rib with titanium material the vertebral end of material is going deeply to thoracic vertebral epidural space and cause a pleural to subarachnoid fistula in this space. The positive pressure of air in pleural space has result of air going from spinal epidural area to clivus and cranial epidural space. Surgeons who making thoracic and abdominal operations must pay attention to the vertebral space and dural unity and to bear in mind that any dural injury can cause pneumocephalus and intracranial complications.

Keywords: pneumocephalus, rib, implant, thoracic surgery

Figure 1.

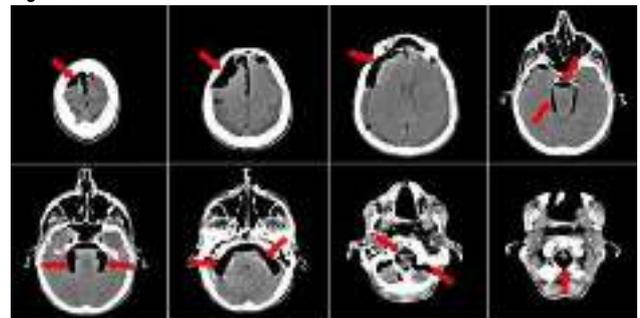


Figure 1. Bilateral pneumocephalus and air in foramen magnum

Figure 2.



Figure 2: Air densities in cervical imaging in anterior epidural cavity from clivus to thoracic vertebrae (pneumorrhachis)

Figure 3.

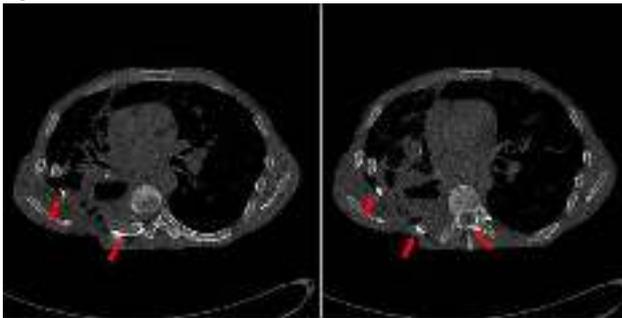


Figure 3: Thoracic vertebral fracture can be seen (red for vertebral, yellow for spinal canal) (axial views)

Figure 4.

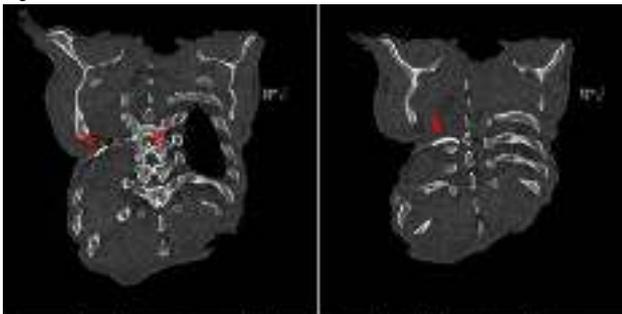


Figure 4: Thoracic vertebral fracture can be seen (red for vertebral, yellow for spinal canal) (axial views)

Figure 5.

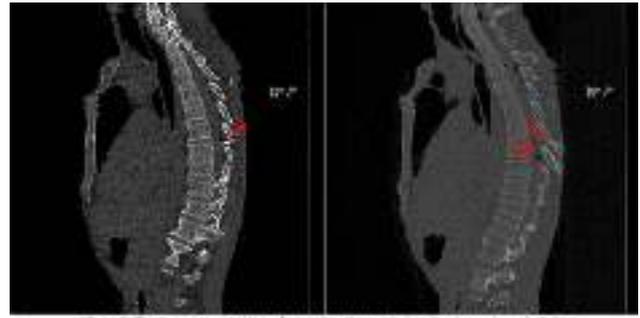


Figure 5: Thoracic vertebral fracture can be seen (red for vertebral, yellow for spinal canal) (axial views)

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[Nörolojik Aciller]

A RARE CASE WITH SHORTNESS OF BREATH: MYASTHENIC CRISIS

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Objectives: Myasthenia gravis is a disorder of neuromuscular transmission characterized by fluctuating weakness and fatigability and attributed to damage of acetylcholine receptors by auto antibodies. Myasthenia gravis is a disorder of neuromuscular transmission characterized by fluctuating weakness and fatigability and attributed to injury of acetylcholine receptors by auto antibodies. %12-16 of patients with MG can pass a myasthenic crisis in a part of their lives. In this article we aimed to point to myasthenic crisis which developed after infection, irregular and insufficient drug use.

Case: A-75 years old male patient admitted to ED with shortness of breath. In the story it was learned that develops speech difficulties with swallowing four days ago, the last two days it was learned that an increase in respiratory distress. In his story, for 6 years he has been followed with a diagnosis of MG and he forgot to use his pyridostigmin drug last day. On physical examination, the general condition was worse than moderate, tachypnea, tachycardia and sweating were present, had respiratory distress. Neurological examination was conscious, cooperative, and oriented patients who had ptosis of the left eye. Laboratory: Hemoglobin 17.5 g / dL, Leukocytes 14,700 / pl, CRP 121 g / dl, blood glucose 288 mg / dL, Arterial blood gases: pH:7.182 PCO₂:76.3 mmHg PO₂:95.3 mmHg SO₂:%94.2 HCO₃:21.2 2lt/ second Oxygen and 60mg corticosteroids was administered to patient. Pyridostigmine dose which is not received last day was given. 30g IVIG treatment was planned and with a diagnosis of myasthenic crisis he was hospitalized to the neurology intensive care.

Conclusion: In the cases with myasthenic crisis, in the intensive care unit, especially monitoring of respiratory parameters carefully, ensuring appropriate life support and struggle with complications is the most important part of the treatment

Keywords: Myasthenia gravis, emergency department, shortness of breath

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NEUROLEPTIC MALIGNANT SYNDROME**Cihan Bedel¹, Asli Hatice Bedel², Nesrin Gökben Beceren¹, Önder Tomruk¹, Makpere Özer Delikanlı¹, Erkan Duman¹, Hamit Hakan Armağan¹**¹Suleyman Demirel University Faculty of Medicine, Emergency Department, Isparta, Turkey²Akdeniz University Faculty of Medicine, Department of Pharmacology, Antalya, Turkey

Objectives: Neuroleptic malignant syndrome (NMS) is a potentially fatal disease composed of hyperthermia, extrapyramidal symptoms, autonomic nervous system disturbances, and altered levels of consciousness. Although the cause is still uncertain, most studies suggest it is the result of dopaminergic deficiency in the central nervous system, most commonly caused by neuroleptic medications. Similar symptoms and clinical pictures can be seen as a result of acute withdrawal of Parkinson's disease treatment. In this case we aimed to draw attention to neuroleptic malignant syndrome, encountered rarely in the emergency department but highly mortality.

Case: 73 years old female patient was admitted to the emergency department with complaints of consciousness and fever. In the story we learned that two days ago he withdrawn his drug Stalevo (levodopa, carbidopa and entacapone, Novartis, Turkey) which is for his Parkinson's disease and since yesterday, he has fire and confusion. Patient has in history Parkinson's disease, dementia, anxiety disorders. On physical examination, the general condition was bad, tachypnea, tachycardia and sweating were present. Blood pressure 90/60 mmHg, body temperature: 38.4, heart rate: 110/min, respiratory rate: 28, GCS: 9. The patient's neurological examination was lethargic consciousness, cooperative, and not oriented. Both of the wrist and left lower extremities was rigidity. Laboratory tests hemoglobin: 6.8gr/dl, Leukocytes 14,500 / pl, CRP 61 g / dl, blood glucose: 192 mg / dL, urea 172.9 mg / dL, creatinine 2.08 mg / dL, sodium 148 mmol / L, potassium 4.28 mmol / l AST: 102 u / l ALT: 311 u / l CPK: 5097 u / l CK-MB 689 u / l. ABG: pH 7.41 PCO₂: 38.2 mmHg PO₂: 25.4 mmHg SO₂: 64.3% BE: -1 mmol / l HCO₃: 23.2. The patient was given iv paracetamol and peripheral cooling. The patient was admitted to the neurology intensive care with a diagnosis of neuroleptic malignant syndrome. Stalevo 100 mg was began. Infectious diseases advised Meronem 2 x 1. Dantrolene sodium was planned, but in our country there is no. bromocriptine (Parlodel, Novartis, Turkey) 3 x 5 mg and 10mg diazepam 1 x 1 for agitation was started but the patient died the next day after.

Conclusion: Neuroleptic malignant syndrome is rare and lethal, early diagnosis and prompt treatment is important to reduce mortality. The patients who is using antipsychotics, patients and their relatives to be informed of possible side effects is useful. It would be useful to be followed this patients in intensive care units continuous monitoring and respiratory support may be awarded

Keywords: Neuroleptic malignant syndrome, emergency medicine, consciousness

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[Nörolojik Aciller]

CENTRAL PONTINE MYELINOLYSIS**Cihan Bedel¹, Önder Tomruk¹, Nesrin Gökben Beceren¹, Tuna Parpar²**¹Suleyman Demirel University Faculty of Medicine, Emergency Department, Isparta, Turkey²Suleyman Demirel University Faculty of Medicine, Radiology Department, Isparta, Turkey

Objective: Central pontine myelinolysis is a neurological disorder characterized by loss of myelin in the central pons as well as in the other parts of the brain like basal ganglia, lateral geniculate bodies, external and internal capsules, and cerebellum. Where as the causes and pathogenesis of Central pontine myelinolysis remain unclear, many studies suggest that rapidly correction of hyponatremia is a major factor in the pathogenesis of osmotic stress in the pontine and extra pontine gliya. In this case we wanted to draw attention to central pontine myelinolysis in a patient with chronic alcoholics

Case: 73 year old male patient was referred to our emergency department with complaints of consciousness. In the story three days while being treated in the internal medicine service in other center he had a consciousness which started the same day he came to emergency department. Patients have been using chronic alcohol and cannabis. On physical examination, the general condition was bad. Blood pressure: 100/60 mmHg body temperature: 36.4 pulse rate 65 respiratory rate 18/min GCS: 9. The patient's neurological examination was lethargic did not have orientation, cooperation. The patient was quadriplegic. Babinski (+), on the left, DTR is hypoactive. Laboratory results; creatinine 0.9 mg / dL, sodium 154 mmol / L, potassium 2.90 mmol / L ast: 1271 u / l alt: 5121 u / l. ABG: pH: 7.494 PCO₂: 38.5 mmHg PO₂: 69 mmHg SO₂: 88% BE: -4.5 mmol / l HCO₃: 21.7, urinalysis: normal. 3 days ago sodium was observed 116 mEq / L while he was in other center. Cranial computed tomography was normal. Diffusion MRI was planned preliminary diagnosis of central pontine myelinolysis. In the central pontine, there was no diffusion restriction, the scene covering the pons, T2 signal was increased. The lesion was interpreted as a Pontine myelinolysis. The patient was hospitalized in the intensive care unit.

Conclusion: Central pontine myelinolysis is considered an iatrogenic disease which is resulting from rapid correction of hyponatremia. If we suspected diagnosis for central pontine myelinolysis, cranial MRI should be required.

Keywords: Central pontine myelinolysis, hyponatremia, emergency medicine

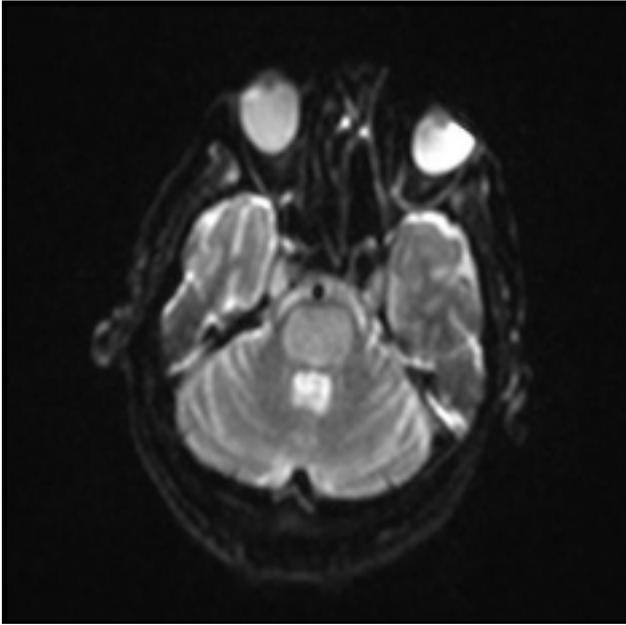


Figure 1. MR imaging of central pontine myelinolysis

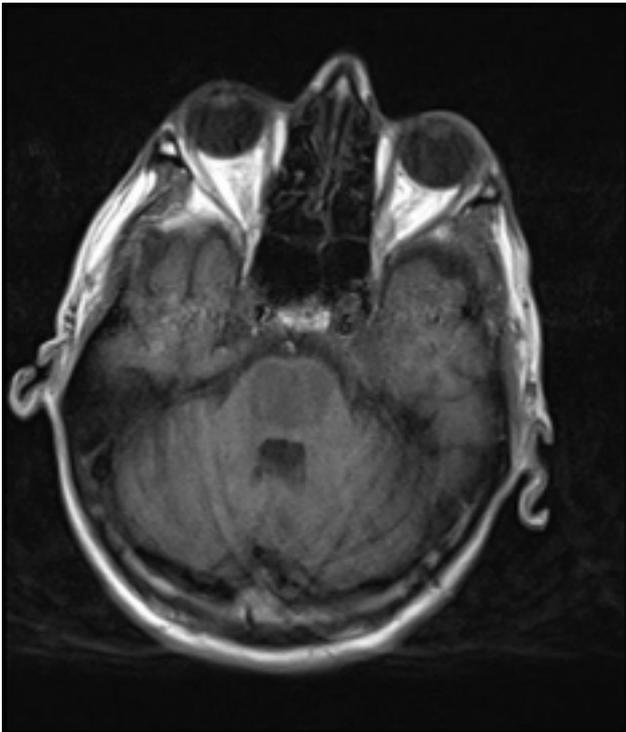


Figure 2. MR imaging of central pontine myelinolysis

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A GROWING PROBLEM: ENERGY DRINKS

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Introduction: So-called 'energy drinks' usually based on caffeine, carbohydrates, vitamins and other ingredients such as taurine- have become popular and capture one percent of the soft

total drink market. The ingestion of caffeine-containing drinks together with alcohol is not a new phenomenon and recently has become popular among young individuals between the ages of 21 and 35 years. We report a case that had epileptic seizure after intake of energy drink with alcohol.

Case Report: A previously healthy 49-year-old man was brought to the emergency department after a sudden onset tonic-clonic seizure. The seizure lasted about 5 min and the patient remained unconscious for a period of time. The patient had no history of head trauma and denied experiencing any seizure-provoking factors, such as sleep deprivation, illicit drug, fever or infection. According to his wife's testimony, just before loss of consciousness, the patient had been drinking 2 boxes of energy drinks with vodka on an empty stomach. His past medical history and family history was unremarkable. On admission, the patient was stuporous, in a post-ictus state, with eye opening in response to verbal command, no verbal response and withdrawal response to pain. The blood pressure was 110/60 mm Hg, heart rate 94/min, respiratory rate 30/min and tympanic temperature 36.1°C. Pulse oxymetry revealed oxygen saturation 91%. The rest of the examination was unremarkable. The laboratory exams were unremarkable. Urine screening for the presence of cocaine, opioids and benzodiazepines were negative. Screening for phenytoin, carbamazepine, tricyclics, valproic acid and phenobarbital were also negative. The 12-lead ECG showed normal sinus rhythm with 90 beats/min. Brain computerized tomography was regular. A neurologist was consulted for the patient. An electroencephalography was obtained in the emergency department and revealed short-term paroxysmal epileptiform activity that generalized for once. The patient had followed for 8 hours and had been seizure-free during the follow-up period thus discharged from the emergency department.

Conclusion: Energy drinks have no therapeutic benefit and both the known and unknown pharmacology of various ingredients, combined with reports of toxicity, suggest that these drinks may put people at risk for serious adverse health effects. The consumption of energy drinks has also been implicated in causing adverse central nervous system effects, such as seizures and cerebral vasculopathy besides rapid heartbeat even death. Genetic factors may also contribute to an individual's vulnerability to caffeine-related disorders including caffeine intoxication, dependence and withdrawal. The combined use of caffeine and alcohol during heavy episodic drinking is increasing sharply and at risk of serious injury, sexual assault, drunk driving and death. According to research presented at the 59th Annual Meeting of the American Academy of Neurology, large amounts of energy drinks may induce seizures in genetically susceptible persons especially if they are taken on an empty stomach. In addition, studies have suggested that taurine has both anticonvulsant and epileptogenic properties and excessive caffeine consumption has been shown to result in a lower seizure threshold with a dose-dependent effect. The caffeinated energy drinks are a growing problem more than 160 countries including Turkey. Based on this case, we want to attract attention to the adverse effect of energy drink usage.

Keywords: energy drink, epileptic seizure, alcohol.

PLATELET INDICES AND LEVELS OF PARAOXONASE (PON1) AND ARYLESTERASE (ARES) IN ACUTE ISCHEMIC STROKE PATIENTS

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Background: It has been indicated that oxidative damage contributes to secondary brain injury in ischemic stroke patients. So far, few studies specifically examined on the platelet indices associated with the Paraoxonase (PON1) and Arylesterase (ARES) in acute ischemic stroke. The aim of this study was to evaluate the index values of the platelets, levels of the PON1 and ARES enzymes activity in patients who presented to emergency department with acute ischemic stroke.

Methods: 100 subjects (51 patients with acute ischemic stroke and 49 control) from the Turkey population (patient:68.39±11.83,controls: 65±9.95, years) were included the study over 6 months. Venous blood samples of 5 ml from patients and controls were withdrawn, collected in heparinized tubes, and immediately stored on ice at 4oC. Blood samples of the patients were taken immediately after arrival at the ED (within 6 hours of injury). The serum was separated from the cells by centrifugation at 4,000 rpm for 5 minutes. Plasma samples were stored at -80oC until analysis. Percentages, means, standard deviation (SDs), were used in the descriptive statistics. For statistical analysis, Fisher exact test was used for categorical variables, and the Mann-Whitney U test for continuous variables. The analyses were conducted using a 0.05 confidence level and P ≤ 0.05 was considered significant.

Results: 51 patients with acute ischemic stroke (68.39±11.83,years) and 49 healthy persons as controls (65±9.95, years) were included the study. Average platelet volume (MPV,fL) was statistically higher (8.32±1.36 vs. 7.63±1.12; P=0.007); but there was no significant difference in value of the platelet (PLT,µL-1:259.07±66.36vs265.52±43.24;P=0.568),plateletcrit (PCT,%;0.23±0.04 vs 0.22±0.03;P=0.604) and width of platelets in volume index (PDW, fL: 8.15±1.34 vs7.74±1.17;P=0.109). On the other hand Arylesterase (ARES,U/dL:105.51±15.49 vs112.44±20.09;P=0,0053) and paraoxonase (PON1,U/dL: 125.34±32.73 vs131.06±25.89;P= 0,042) activity were significantly lower in the patients compared to the controls.

Conclusion:S: MPV level may reflect severity of cerebral ischemia and provide an early indication of outcome in patients of acute ischemic stroke. ARES and PON1 activity were decreased probably due to oxidative stress.

Keywords: Ischemic stroke, Emergency department, Paraoxonase (PON1), Arylesterase (ARES), Platelet indices

Figure 1. Paraoxonase (PON1) and Arylesterase (ARES) levels in patients with acute ischemia and healthy controls subjects

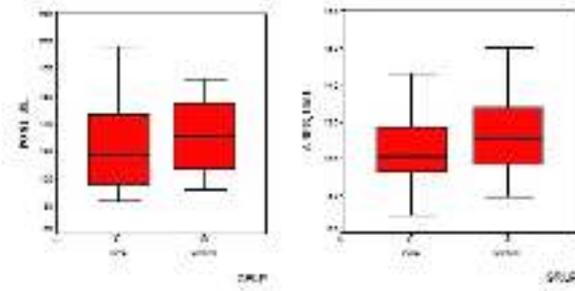


Figure 1. Paraoxonase (PON1) and Arylesterase (ARES) levels in patients with acute ischemia and healthy controls subjects

Table1. Platelet incidence, Paraoxonase (PON1) and Arylesterase (ARES) levels in patients with acute ischemia and healthy controls subjects*.

Parameters	Control Group		Acute ischemic stroke Group	
	X±SD	X±SD	p-value	**p-value
PLT, 10 ⁹ /L-1	265.52±43.24	259.07±66.36	0.572	0.568
MPV, fL	7.63±1.12	8.32±1.36	0.76	0.007
PCT, %	0.22±0.03	0.23±0.04	0.620	0.604
PDW, fL	7.74±1.17	8.15±1.34	1.61	0.109
PON1, U/dL	131.06±25.89	125.34±32.73	0.41*	0.042
ARES, U/dL	112.44±20.09	105.51±15.49	1.03	0.0053

*Mean \bar{X} ± Standard deviation (\bar{X} ±SD), Minimum-Maximum (Min-Max) value

**Mann-Whitney U test

NEUROLEPTIC MALIGNANT SYNDROME INDUCED BY SYNTHETIC CANNABINOIDS

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Introduction: Neuroleptic malignant syndrome is a life-threatening complication of antipsychotic therapy. Cannabis has been used for more than 4000 years. Synthetic cannabinoid products (SCPs), marketed as “Spice”, “K2”, “Bonsai”, “Jamaika gold”, “Spice gold” and others, have been sold in retail outlets and via the Internet as early as 2004. Neuroleptic malignant syndrome induced by synthetic cannabinoids has been not reported previously.

Case: A 28 yeras male, with behavioral problems and agitation, was brought to emergency department. He had a history of synthetic cannabinoids use (1 pack ponsai-18 per day).

On examination, Temperature:39°C, pulse rate:155/min, Blood pressure: 60/40 mm Hg, blood oxygen saturation:%75

Respiratory rate:25/min. Central nervous system examination showed Clonus,rigidity of limbs and arms. Babinski sign: negative.

On examination of Chest, Cardiovascular system, Per abdomen examination showed no abnormality. Laboratory investigation revealed mild leukocytosis (leukocyte count $16.3 \times 10^9/L$), aspartate aminotransferase level was elevated (755 U/L), and his creatine kinase (CK) level was markedly elevated (27980 U/L). Other laboratory results, including electrolyte levels, were normal. Subsequently he was admitted to ICU with clinical examination suggesting autonomic instability. He was exitus five day of admission.

Conclusion: Currently, very little medical literature exists on the adverse effects in adults and emergency department presentations associated with SCPs use. Neuroleptic malignant syndrome induced by synthetic cannabinoids has been not reported previously.

Keywords: Neuroleptic malignant syndrome, Cannabis, Synthetic cannabinoid products, bonsai



Figure 1. Synthetic cannabinoids (Bonsai-18)



Figure 2. Synthetic cannabinoids

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A CASE WITH TOLUENE ENCEPHALOPATHY DUE TO CHRONIC ADHESIVE ABUSE

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Introduction: Toluene inhalation is a common form of substance abuse in children and young adults. It is a major component of many paints, adhesives, inks and cleaning liquids. The low cost and easy availability of organic solvents have led to increases in the number of young abusers in many countries like Turkey. This substance is popular due to its euphoric effect and

easy availability. Chronic abuse results in persistent neurologic abnormalities such as ataxia, tremors and nystagmus.

Case Report: A 23-year-old man presented with ataxia, dysarthria and urinary incontinence. The medical history, family history and review of the systems were unremarkable. His mood was euphoric, speech was slurred and he had coarse rotatory nystagmus in all directions of gaze. There was severe ataxia of gait with moderate limb in-coordination and intention tremor. Cranial nerves, deep tendon reflexes and sensory examination results were normal. Examination of full blood count, urea and electrolyte concentrations gave normal results. Contacts were made with patient's family to inform. It was learned that the patient has abused chronic toluene via inhalation for 8 years and this findings has been available for 1 year. Because of this history of toluene abuse, magnetic resonance imaging (MRI) was obtained and revealed diffuse high intensity areas of deep cerebral white matter, internal capsule, cerebral peduncle, ventral pons and middle cerebellar peduncle were noted (figure 1). These high intensity areas of internal capsule, brain stem and middle cerebellar peduncle on T2 weighted image would be significant for understanding pyramidal tract sign and cerebellar sign of this case. On the basis of neuropathological descriptions of chronic toluene intoxication, these high intensity areas of T2 weighted image were presumed to be demyelinating lesions of central nervous system.

Discussion: The first case of volatile substance abuse by inhalation was reported by Clinger et al(1) in 1951. In their report, abused substance was gasoline. In our case, abused substance is an adhesive named 'bali'. Because of the low cost and easy availability of this substance, toluene abuse is an important social and health problem in many countries especially in young adults. Inhaled toluene is rapidly absorbed by the lungs, from where it easily enters the lipid-rich brain. Because of its high lipid solubility, toluene accumulates in lipid-rich tissues as brain. Long-term inhalation of toluene-containing solvents causes irreversible central nervous system damage. Toluene-induced chronic encephalopathy causes cerebellar symptoms and signs such as ataxia, nystagmus and tremors as in our case. Xiong et al(2) described white matter changes in centrum semiovale, posterior limb of the internal capsule, the ventral part of pons and the cerebellar peduncles on cranial MRI in patients who chronically abuse toluene. In our case, similar changes have been observed. MRI may be a sensitive tool to use in evaluating the severity and prognosis of the neurological syndrome resulting from toluene abuse. In evaluation of patients presented to emergency department with encephalopathy findings, chronic toluene abuse should be remembered especially in young adults.

References

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Keywords: toluene, chronic abuse, encephalopathy



Figure 1. T2 weighted MRI revealed diffuse high intensity areas of deep cerebral white matter, internal capsule, cerebral peduncle, ventral pons and middle cerebellar peduncle (yellow arrow).

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AN ATYPICAL ISCHEMIC STROKE CASE: PRESENTING WITH PAIN IN EXTREMITY

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Introduction: Serebrovascular diseases are believed to be one of the most frequent causes of emergency department (ED) admissions in neurological emergencies. Usually patients have complaints like blurred vision, impaired speech, confusion and loss of power. Sometimes they can also have atypical complaints and this can refer us to different clinical diagnosis.

Case: 76 year old male patient, with a history of hypertension, referred to ED having pain and weakness in left lower extremity that had begun 2 hours ago. He was well and conscious, also his vital signs were normal. Neurologic examination revealed hypoesthesia in left lower extremity, his muscle tone was 3/5, he had no achilles reflex and his patellar reflex was found to be normal. Nothing additional was found in neurologic examination. Cranial CT scan was performed and it was stated as normal. Following this, he was consulted to neurology department and cranial pathology was not found in him. After that lumbar MR scanning was planned with the pre-diagnosis of lumbar disc hernia however there was not any pathologic finding either. The emergency physician planned a diffusion weighted cranial MR scanning and acute infarction was obtained in right parietal lobe. With this result he was reconsulted to neurology department. Anticoagulant therapy was initiated to the patient and he was admitted to neurology clinic.

Conclusion: Stroke cases are not always presented with typical symptoms. Accurate timing is very important in especially ischemic stroke cases. A rapid CT scanning should be performed and bleeding should be excluded. A diffusion weighted cranial MR scanning can reveal acute infarction in cases with the normal

cranial CT scan. However emergency physician should not be late the neurology consultation in patients who are appropriate for thrombolytic therapy.

Keywords: Ischemic stroke, Atypical presentation, Emergency Department



Figure 1. Diffusion weighted MRI.



Figure 2. Diffusion weighted MRI.

LITERAL PARAPHASIA

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Introduction: Paraphasia is a speech disorder which is defined as using words and sentences inarticulately without any meaning. Also, this term is generally used to define vocabulary disorders (meaningless words, deformation of words). Paraphasia was first used as a term in a book, "Nervous System Diseases" written by doctor Julius Althaus in 1877. There are various types of paraphasia which are literal or phonological, neologistic, verbal and perseverative. Phonological paraphasia, also known as phonemic paraphasia or literal paraphasia, refers to the substitution of a word with a non-word that preserves at least half of the segments and/or number of syllables of the intended word - "papple" for apple or "lelephone" for telephone

Case: A thirty seven year old female patient presented with sudden headache and mispronouncing complaints to our emergency department. Vital signs were as follows: 36.1°C, blood pressure:133/75 mmHg, pulse:99 beats per minute, spO2:%95. Despite decrease in fluency, no meaningful finding other than literal paraphasia was detected during her neurologic examination. The other systemic examinations were normal. Studied parameters of hemogram, biochemistry and coagulation were in normal limits. On computed tomography an intraparenchymal haematoma measuring 5X4 cm on the left frontoparietal lobe with a midline shift of 6 mm was detected. She was operated immediately and discharged from the hospital on the eleventh day without any neurological sequelae.

Discussion: The most frequently encountered cause of aphasia or paraphasia is thrombotic or embolic occlusion of left carotis interna or left medial cerebral artery. This is followed by hemorrhages on the left medial cerebral artery region. Transient ischemic attacks, even migraine may cause temporary paraphasia. In addition to cerebrovascular causes, intracranial tumours, head traumas, some degenerative diseases, infections affecting left hemisphere and demyelinating diseases may also result in paraphasia. Here as in our case, patients presenting with isolated paraphasia may have a serious underlying disorder. Therefore, it is crucial to make patients name the objects during examination in addition to other neurologic examinations.

Keywords: emergency medicine, literal paraphasia, neurological emergency



Figure 1. literal paraphasia

THE UTILITY OF EEG IN THE EMERGENCY DEPARTMENT

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Background and aim: Seizure-related visits are common in the emergency department (ED) but the clinical situations for ordering emergency electroencephalography (EEG) are unclear. The aim of this study is to identify which clinical conditions meet with the pathological EEG and whether patient management is changed by abnormal results.

Methods: A retrospective chart review study of all patients visiting the ED with a seizure or symptoms mimicking a seizure was performed. Patients who recorded an EEG within 16 h after the initial event were enrolled. Demographic data and EEG results of patients with provoked and unprovoked seizures were recorded and related factors were analysed.

Results: A total of 449 patients (219 men) of mean±SD age of 45.48±21.83 years were evaluated. The seizure was thought to be provoked in 98 patients (21.8%) and unprovoked in 352 (78.2%) patients (31.2% remote symptomatic and 47.4% idiopathic). The EEG results of 281 patients (62.6%) revealed an abnormality, and the abnormal EEG ratio was high in patients with presumed seizure (p<0.001). One hundred and thirty-eight patients (30.7%) were hospitalised and the remainder (n=311, 69.3%) were discharged from the ED. An abnormal EEG was found in 98 (71%) of the hospitalised patients and in 183 (59.5%) of those discharged (p=0.019).

Conclusion: EEG provides useful diagnostic information and should be considered in all patients presenting to the ED with a seizure. Since the timing of the study affects the diagnostic efficacy of the test, EEG recordings might be done within 24 h either in the ED or epilepsy clinic.

Keywords: Seizure, diagnosis, Emergency EEG, neuroimaging, management

Box

Box 1 Patient data collected from the charts

- ▶ Age
- ▶ Gender
- ▶ Indication for EEG
 - First seizure
 - Recurrent seizure in an epileptic patient
 - Seizure-mimicking symptoms
- ▶ Imaging modality
 - CT
 - MRI
- ▶ Seizure type
 - Provoked
 - Unprovoked/idiopathic
- ▶ Final management
 - Hospitalisation
 - Discharged from ED
- ▶ EEG recordings
 - Normal
 - Slow encephalopathic
 - Epileptic
 - Other

Table 2 Neuroimaging studies

Neuroimaging	
Yes	322 (71.7%)
No	127 (28.3%)
Radio-opaque	
Yes	173 (38.5%)
No	276 (61.5%)
CT	
Normal	160 (56%)
Abnormal	131 (44%)
MRI	
Normal	29 (95%)
Abnormal	23 (40%)
Patients without neuroimaging	
Abnormal EEG	74 (59.2%)
Normal EEG	53 (40.8%)
Patients without known epilepsy	
Abnormal neuroimaging	112 (48.9%)
Abnormal EEG	163 (56.8%)
Epileptic	60 (20.9%)
Slow encephalopathic	89 (31%)
Other	14 (4.9%)

Table 1

Table 1 Demographic data of patients and reasons for EEG requests

Demographic data	n (%)
Adult (≥16 years)	413 (92)
Children (<16 years)	36 (8)
Mean ±SD age (years)	45.48 ±21.83
Male	219 (49.8)
Female	230 (51.2)
EEG requests	
Seizure-mimicking symptoms	98 (21.8)
First seizure	166 (37)
Recurrent seizure in an epileptic patient	185 (41.2)

Table 2

Table 3

Table 3 Seizure type: provoked or unprovoked

Seizure type	Number	%
Provoked seizures	98	21.8
Systemic fever	39	8.7
Metabolic disturbances	25	5.6
Trauma	13	2.9
Unused/misused epileptic medications	10	2.2
Subarachnoid haemorrhage	6	1.3
Meningitis	5	1.1
Cardiac causes	4	0.9
Intoxication	3	0.7
Hypoglycaemia	2	0.4
Shunt dysfunction	2	0.4
Unprovoked seizures	352	78.2
Idiopathic seizures	214	47.4
Stroke	83	18.5
Tumour	34	7.6
Encephalomalacia, old trauma signs	24	5.3

Table 4

Table 4 Most common causes of epileptic seizures according to age group

Cause of seizure	Patient age group (years)				p Value
	1-16	17-44	45-60	>60	
Metabolic disturbances	1	9	7	8	0.79
Systemic fever	11	14	5	9	<0.001
Meningitis	2	2	0	1	0.05
Trauma	5	4	2	2	0.001
Subarachnoid haemorrhage	0	1	2	3	0.46
Misused epileptic medications	1	6	2	1	0.50
Tumour	1	11	13	9	0.14
Stroke	0	9	21	53	<0.001
Encephalomalacia, old trauma signs	1	11	10	2	0.04

Table 5

Table 5 Abnormal EEG results according to the cause of the seizure

Cause of the seizure	Normal EEG	Abnormal EEG	p Value
Metabolic disturbances	7	18	0.31
Systemic fever	14	25	0.83
Meningitis	0	5	0.08
Trauma	9	4	0.01
Subarachnoid hemorrhage	4	2	0.13
Misused epileptic medications	3	7	0.62
Tumor	10	24	0.31
Stroke	24	58	0.07
Encephalomalacia, old trauma signs	4	20	0.03

Table 6

Table 6 Abnormal EEG results in patients with seizure and seizure-mimicking symptoms

EEG result	Clinical condition			p Value
	Seizure-mimicking symptoms	First seizure	Recurrent seizure	
Normal, n (%)	52 (53.1)	44 (26.5)	72 (38.9)	<0.001
Abnormal, n (%)	45 (46.9)	122 (73.5)	113 (61.1)	

Table 7

Table 7 Abnormal EEG results in patients with provoked and unprovoked seizures

	EEG result		p Value
	Normal, n (%)	Abnormal, n (%)	
Provoked	35 (36.9)	61 (63.5)	0.82
Unprovoked	133 (37.7)	220 (62.3)	
Remote symptomatic	39 (11.1)	101 (28.6)	
Idiopathic	94 (26.8)	119 (33.7)	

Table 8

Table 8 Final disposition of patients according to EEG results

Disposition	EEG result		p Value
	Normal N (%)	Abnormal N (%)	
Inpatient treatment	40 (23.2)	97 (41)	0.017
Outpatient treatment	128 (70.8)	184 (59)	

	Normal N (%)	Epileptic N (%)	Slow encephalopathic N (%)	Other N (%)	p Value
Inpatient treatment	40 (29)	32 (23.2)	51 (44.2)	5 (3.6)	0.003
Outpatient treatment	128 (41.2)	50 (28.9)	85 (27.3)	8 (2.8)	

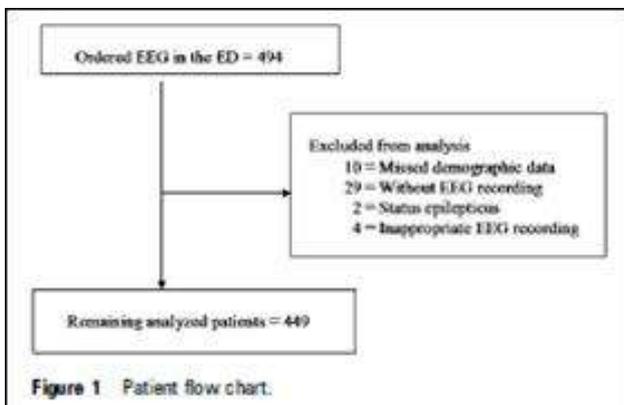


Figure 1 Patient flow chart.

Figure 1. patient flow chart

EEG AS A PART OF THE DECISION-MAKING PROCESS IN THE EMERGENCY DEPARTMENT

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Study objective Although electroencephalography (EEG) is a useful diagnostic tool for patients with a suspected seizure, its value in informing the acute care of patients in the emergency department (ED) remains unclear. The aim of this study is to determine the effects of EEG results on subsequent patient management in or from the ED.

Materials and methods: This prospective observational study was carried out in the ED of a tertiary-care university hospital. All patients presenting to the ED with seizure or seizure-mimicking symptoms were included in the study. EEG was advised for all patients after an initial evaluation. Before EEG, the ED physician and neurologist were asked clinical questions about the patient. The consistency between the clinical decision of emergency physicians before the EEG report and the final management of patients determined by the consultant neurologist was analyzed. The interobserver reliability of the physicians was determined.

Results: Overall, 110 patients were enrolled in the study. The sensitivity and specificity of ED physicians' diagnosis of the presence of seizure were both 88% (95% confidence interval, 79–93 and 62–97%). The interobserver reliabilities and j values of ED physicians and neurologists were found to be 'moderate'. Patients with abnormal EEG results were prescribed new medication (P = 0.003) and changes in therapy (P = 0.59) were more than for patients with normal results.

Conclusion: As seizure is a clinical event, EEG is not essential for diagnosing the presence of a seizure clinically in the ED. However, the results of EEG provide useful information especially for treatment choices. As the timing of the study affects the diagnostic efficacy of the test, EEG recordings should be performed within 24 h either in ED or in the epilepsy clinic.

Keywords: diagnosis, emergency electroencephalography, management, seizure

Table 1.

Table 1 The clinical questions posed to the emergency physician and neurologist

	Yes	No	Not sure
1. The patient had a seizure	Yes	No	–
2. The patient needs a neuroimaging modality in ED	Yes	No	–
4. It is safe to discharge the patient	Yes	No	–
5. AED should be started to the patient (for first seizure patients)	Yes	No	–
6. AED should be changed (dose or regimen) for patient (for recurrent seizure patients)	Yes	No	–

AED, antiepileptic drug; ED, emergency department.

Table 2.

Table 2 Demographics of the patients and causes for electroencephalography requests

Demographic	n (%)
Male	54 (49%)
Female	56 (51%)
Average age (mean±SD)	44.11±20.08
EEG requests	
Seizure-mimicking symptoms	17 (15.5%)
First seizure	25 (22.7%)
Recurrent seizure in an epileptic patient	68 (61.8%)
Neuroimaging	
None	34 (31%)
Normal CT	38 (34.5%)
Abnormal CT	38 (34.5%)
Disposition	
Inpatient treatment	17 (15.5%)
Outpatient treatment	93 (84.5%)
EEG results	
Normal EEG	42 (38.2%)
Abnormal EEG	88 (81.8%)
Epileptic	21 (19.1%)
Slow encephalopathic	37 (33.6%)
No epileptiform abnormality	10 (9.1%)

CT, computed tomography; EEG, electroencephalography.

Table 3.

Table 3. Differences in abnormal electroencephalography results in groups

	None (n=20)	Non-epileptiform (n=19)	Epileptic (n=10)	Non-epileptiform-epileptic (n=38)	P
Age (yr)	34.2 (5.1)	42.2 (8.2)	41.2 (8.1)	37.8 (7.8)	NS
Sex (M/F)	14/6	12/7	8/2	11/27	NS
Seizure type	0	12/7	10/0	11/16	NS
Seizure duration (min)	0	12/7	10/0	11/16	NS
Seizure frequency (times/yr)	0	12/7	10/0	11/16	NS
Seizure onset	0	12/7	10/0	11/16	NS
Seizure location	0	12/7	10/0	11/16	NS
Seizure treatment	0	12/7	10/0	11/16	NS
Seizure response	0	12/7	10/0	11/16	NS

NS, not significant.

Table 4.

Table 4. Sensitivity, specificity and positive and negative predictive values of emergency physicians' decisions for patient management

Classification	Sensitivity (95% CI)	Specificity (95% CI)	PPV (95% CI)	NPV (95% CI)
Emergency physician's decision	0.78 (0.65-0.91)	0.85 (0.72-0.98)	0.82 (0.71-0.93)	0.79 (0.68-0.90)
Emergency physician's decision + neurologist's decision	0.82 (0.71-0.93)	0.88 (0.77-0.99)	0.85 (0.74-0.96)	0.81 (0.70-0.92)
AED prescription for first seizure patients	0.88 (0.77-0.99)	0.92 (0.81-1.00)	0.90 (0.79-1.00)	0.87 (0.76-0.98)
EEG request in acute ED, emergency physician, EEG request, follow-up, EEG, positive EEG result				

Table 5.

Table 5. Interobserver reliabilities and κ values of emergency physicians and neurologists among clinical questions

Clinical questions	κ
The presence of a seizure	0.40
Necessity of neuroimaging in ED	0.82
Outpatient management or hospitalization	0.38
AED prescription for first seizure patients	0.52
AED dose or regimen change for known epileptic patient	0.36

AED, antiepileptic drugs; ED, emergency department.

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[Nörolojik Aciller]

CHRONIC HYPOCALCEMIA AS A SEIZURE ETIOLOGY AN EPILEPTIC PATIENT

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Serum calcium levels are maintained in a narrow range (8,5-10,5 mg/dL) under the normal conditions. Calcium is critical for normal cell function, neural transmission, membrane stability, bone structure, blood coagulation, and intracellular signaling. Hypocalcemia is defined as serum ionized calcium level less than 4,2 mg/dl. The causes of hypocalcaemia are hypoalbuminemia,

hyperphosphatemia, hypomagnesemia, surgical effect, PTH deficiency or PTH resistance, vitamin D deficiency or resistance

Hypocalcemia may cause serious conditions and seizures are one of them. We present a 72- old male patient who had been treated for epileptic seizures and was discovered to have chronic hypocalcaemia in the emergency department. Our patient was started on anti epileptic medication six months prior to ED admission and had a poor control seizure control. The patient had a history of total thyroidectomy and serum calcium was found 5,89 mg/dL in the emergency department. Calcium replacement therapy was initiated and antiepileptic medication had been discontinued. Follow up on the patient revealed that no new seizures occurred after daily calcium replacement.

Keywords: hypocalcemia seizure papilledema

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[Nörolojik Aciller]

A CASE OF CEREBRAL VENOUS SINUS THROMBOSIS PRESENTING WITH SEIZURE

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Introduction: Cerebral venous sinus thrombosis(CVST) is an uncommon disease that diagnosed with difficulty and had many distractor clinical symptoms. Blood coagulation disorders, oral contraceptive use, pregnancy,postpartum period and systemic inflamatory diseases are prevalent causes of CVST. CVST is commonly seen between 20-25 aged pregnant or postpartum women.The collaterals of cerebral venous systems may prevent early indications of thrombus.The clinical symptoms of cerebral venous sinus thrombosis are headache, neurological deficits, increased intracranial pressure findings, loss of sensory, loss of consciousness and convulsions. CVST is commonly seen superior sagittal sinus and lateral sinuses. Cranial tomography, cranial magnetic resonance imaging and venography invasive angiography are used for diagnosis of CVST.Anticonvulsant agents, antibiotics for septic thrombophlebitis and anti thrombotic agents are treatment of cerebral venous sinus thrombosis.Herein, we reported a case of cerebral venous sinus thrombosis that 36-year-old postpartum woman admitted to emergency department with seizure.

Case report: A 36-year-old woman admitted to emergency department with convulsion, jaw locking and loss of consciousness about one hour ago. The patient had any medical history except for cesaran delivery a week ago. On physical examination; the patient was oriented and cooperated. There was any pathology on neurological examination. The vital signs as follow:blood pressure 120/70 mmHg, body temperature: 36.1 C, heart rate:68 betaser/min.There was any pathology on laboratory tests. A computed tomography scan showed hyperdense area at sagittal sinus. There was no signal of recent ischemic or hemorrhagic stroke. Magnetic resonance images and magnetic resonance angiography showed hypointense areas at sagittal sinus region. CVST were thought for patient and she was taken into neurology service. The patient discharged after eight days.

Conclusion: CVST is an uncommon disease seen generally between 20-35 years. Emergency physicians should be careful

patients admitted to emergency department with headache and neurological symptoms particularly postpartum and pregnant women.

Keywords: Cerebral venous sinus thrombosis, Seizure, Postpartum women

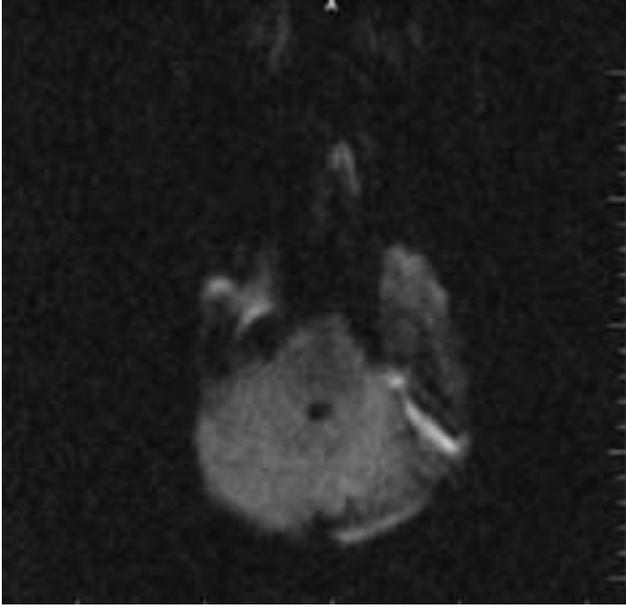


Figure 1. Cerebral venous sinus thrombosis

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[Nörolojik Aciller]

A CASE REPORT: STROKE OR THROMBOTIC THROMBOCYTOPENIC PURPURA

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Introduction: Thrombotic thrombocytopenic purpura (TTP) is a rare disease presenting with hemolytic anemia, thrombocytopenia, neurological signs, renal failure and fever. It is generally seen in healthy, young women; however, it may be encountered in elder patients, confusing with stroke. In the pathogenesis of TTP, thrombotic lesions typically involve arterioles and capillaries. Dysfunction occurs in kidney and brain due to ischemia. Neurological findings are predominant in classical TTP but acute renal failure is minimal or lacking. Laboratory findings include decreased hemoglobin and hematocrit values, thrombocytopenia, leukocytosis, reticulocytosis and dysmorphic, polychromatic erythrocytes, burr cells and helmet cells on peripheral smear.

TTP diagnosis is made based on pentad including thrombocytopenia, neurological findings, microangiopathic hemolytic syndrome, fever and renal failure but not all of them are required for diagnosis. Here, we aimed to emphasize this topic by presenting a case which falls between TTP and cerebrovascular disease.

Case: A 64-years old woman was presented to our emergency department with weakness at right side. In primary evaluation, patient was conscious, cooperated and there was 1/5 muscle

strength at upper left limb. Blood pressure was 170/90 mHg. Systemic examinations were found to be normal. Blood samples were drawn for complete blood count and biochemical tests and a brain CT scan was ordered which revealed no abnormal finding (Figure 1). Laboratory results were as follows: White Blood Cells, 8.4x10³; Hemoglobin, 12.71 g/dl (↓); Hematocrit, 39.8%; Platelet, 11 10³; Lactate dehydrogenase, 674 U/L (↑); D-Dimer (Quantitative), 3 409 (↑); BUN, 70 mg/dL (↑); creatinine, 1.11 mg/dL (↑); Neutrophil, %: 70 % (↑). The patient was consulted to neurology department for ischemic cerebrovascular disease while she was consulted to internal medicine department for TTP. The patient who had platelet count consistent with laboratory and dysmorphic erythrocyte on peripheral blood smear was admitted for follow-up by 2 departments; however, the patient died before evaluations completed.

Conclusion: TTP should be considered in patients presenting with clinical presentation of cerebrovascular disease.

Keywords: Stroke, Thrombotic Thrombocytopenic Purpura, distinction

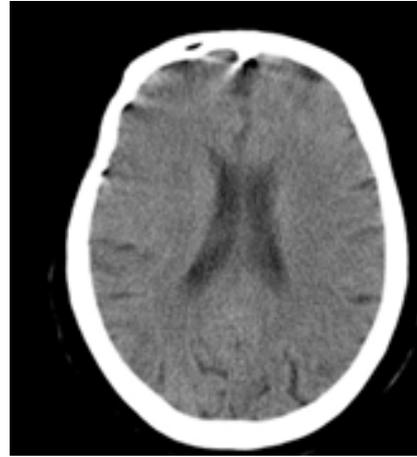


Figure 1. Computed tomography

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[Nörolojik Aciller]

CROHN'S DISEASE AND POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME

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Introduction: Crohn's disease (CD) are In addition to local intestinal complications, systemic or extra-intestinal complications occur frequently and may involve almost any organ system besides the bowel. Along with other extra-intestinal manifestations, a wide spectrum of neurological complications has been reported. We report that posterior reversible encephalopathy syndrome was occurred in patient which following with CD.

Case report: 20-year-old man was brought to emergency department (ED) by his relatives with seizure. On anamnesis was revealed that he had once seizure attack with tonic-clonic pattern for approximately 5 minutes in his home and did not have urinary incontinence. His past history revealed that patient was performed appendectomy 4 months ago and was diagnosed crohn disease 2 months ago. Due to complication of crohn disease, he was performed partial colectomy one month ago. In addition, performed electromyography (EMG) of patient who

was researching in neurology clinic because of weakness in limbs for about one month demonstrated sensory neuropathy in more apparent the lower extremities. On initial evaluation he was alert, oriented, and cooperated. Vital signs were as follows: blood pressure 150/100mmHg, heart rate 94beats/min, respiratory rate 16 min, temperature was 36.6°C, and oxygen saturation 97% on room air. Spot blood sugar was 98 mg/dl. While physical examination was performing, patient had seizure attacks twice with tonic-clonic pattern and 5 mg diazepam was administered aim to stop seizure. Then phenytoin (18mg/kg) was infused. On neurological examination, patient was in postictal period, there were not any lateralized deficit, and there were clonus in bilateral lower extremities. Sensory and cerebellar examination could not been evaluated. On other systems examination revealed no pathological findings. On laboratory results were as follows: WBC:12100 x10³/μL, Hgb: 11 g/dL, Plt: 799 x10³/μL and biochemical panel were normal. Brain CT and MR were planned. There was no abnormal pathology on CT of brain. T2A and FLAIR sequences of brain of MR demonstrated that hyperintense and views with irregular-patchy contrast-enhancement in bilateral posterior parietal lobes and more apparent left parietal lob cortical-subcortical location closely vertex. (PRES?) (Figure-1). Patient was hospitalized to neurology clinic for control of seizure and further investigations.

Discussion: Neurologic dysfunction is an infrequent but potentially devastating extraintestinal manifestation of CD. Virtually all components of the nervous system, both central and peripheral, may become involved. Peripheral neuropathy is among the most frequently reported neurological pathologies in CD. A variety of causes may attribute to central nervous system involvement, including demyelination, cerebrovascular disease, seizures, encephalopathy, and spinal cord dysfunction.

PRES is characterized by variable associations of seizure activity, consciousness impairment, headaches, visual abnormalities, nausea/vomiting, and focal neurological signs. The cerebral imaging abnormalities are often symmetric and predominate in the posterior white matter (5). In literature, PRES have been reported generally secondary to infused Infiximab in patients with CD.

Physicians should be aware that although peripheral neurological lesions are common in CD, this disease may present various clinical presentations including central nervous system

Keywords: Crohn's disease, PRES

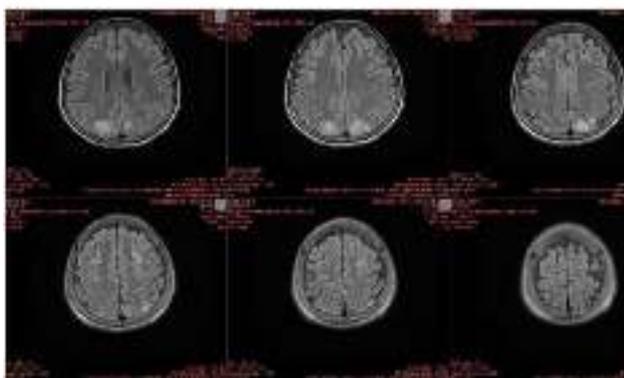


Figure 1. Kranial MR imaging of the patient

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[Nörolojik Aciller]

NEUROLEPTIC MALIGNANT SYNDROME CAUSED BY ATYPICAL ANTIPSYCHOTICS

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Neuroleptic malignant syndrome is an acute, life-threatening medical complication caused by antipsychotics or the drug therapy in Parkinson's disease (PD). It is commonly seen with typical antipsychotics and very rare with atypical ones. Clinical features are high fever, marked rigidity, consciousness disturbance, autonomic dysfunction, and elevation of serum creatine kinase.

We present a case report of a 82-year-old man who was admitted to our hospital with high fever and altered mental status. On arrival his GKS was 8 (3+4+1); his vital signs were arterial blood pressure:189/109 mmHg, pulse 120/min, respiratuar rate 32/min, fever 40,7 °C, oxygen saturation 97%. He was dehydrated. He had generalized tremors, cog wheel rigidity in all extremities and orofacial dystonias. The pupils were in normal size and reactive to light. He was agitated and removed intravenous (IV) line. Clinically, NMS was diagnosed in the patient and he has been admitted to intensive care unit. In our case we discuss the relation between atypical antipsychotics and Neuroleptic malignant syndrome.

Keywords: Neuroleptic malignant syndrome,hyperthermia, atypical antipsychotics

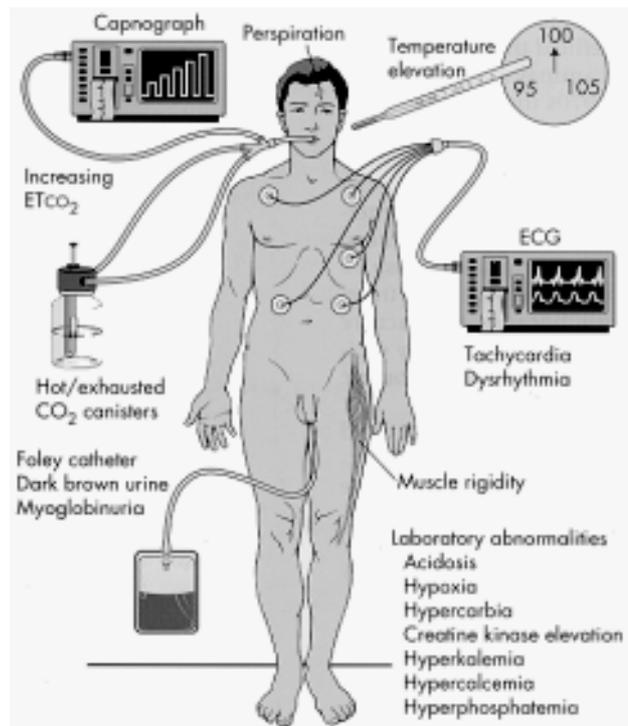


Figure 1. Neuroleptic malign sendrom



Figure 2. Neuroleptic malign sendrom

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[Nörolojik Aciller]

HEMIFACIAL SPASM IN VERTEBROBASILAR DOLICOECTASIA

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Introduction: Hemifacial spasm is a movement disorder characterised by involuntary clonic contractions and twitching of the ipsilateral facial muscles innervated by the seventh cranial nerve. Vascular compression of the facial nerve is the most common cause of hemifacial spasm. The anterior inferior cerebellar artery, the posterior inferior cerebellar artery, the posterior inferior cerebellar artery or both the vertebral artery and the posterior inferior cerebellar artery are responsible vascular structures.

Case: A 54-year-old man admitted to the emergency department with new onset, left-sided musculus orbicularis oculi spasms. The spasms started one week ago abruptly and became stronger. He had no significant past medical history or family history. Neurological examination revealed right sided involuntary contractions of the facial musculature provoked by activity such as speech. The ophthalmologic examination was normal and hearing function was intact. Biochemical analysis of blood including magnesium was normal. MRI and MR angiography revealed a dolichoectatic left vertebral artery which continues as tortuosity in basilar artery.

Discussion: Neurovascular contact is a common cause of hemifacial spasm. We tried to mention that vertebrobasilar dolicoectasia is a rare cause of it and also MRI/MRA is an essential part of work-up for hemifacial spasm.

Keywords: hemifacial spasm, vertebrobasilar, dolicoectasia

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[Nörolojik Aciller]

VALPROATE-INDUCED COMA: CASE REPORT

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We report a case of hyperammonemia without hepatic dysfunction as a possible cause of lethargy, stupor, and coma in a woman after valproic acid (VPA) administration.

A 44 year-old woman diagnosed with epilepsy was treated with levetiracetam for years. Two months before admission, the medicine was changed with valproic acid because the seizures were incompletely controlled. She admitted to our emergency room with altered mental status. Recently, she had become lethargic. Her vital signs were normal. Physical examination revealed an unresponsive woman with reactive pupils. No significant lateralized deficit was obtained. Her laboratory tests were normal and her blood valproic acid was in therapeutic levels. Her CT scan of head has no acute pathology as well as her EEG. She was diagnosed as Valproate-induced coma and admitted to neurology department. Valproic acid was discontinued and TPN was administered.

In our case using VPA in therapeutic levels evolved into a coma without focal neurologic signs, and was accompanied by isolated hyperammonemia without hepatic failure.

Keywords: coma, hyperammonemia, valproic acid

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[Nörolojik Aciller]

A RARE CAUSE OF STROKE: MULTIPLE MYELOMA

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Introduction: Multiple myeloma (MM) is a human B-cell neoplasm characterized by the clonal expansion of malignant plasma cells in the bone marrow. A multiple myeloma (MM) patient usually presents with complaints of skeletal system like bone pains, pathological fractures, and also anemia, signs of renal failure and increased susceptibility to infections. Nevertheless the hyperviscosity syndrome, hyperuricemia and neurologic involvements are uncommonly presenting features of MM. Fortunately, neurological manifestations occur in a small amount of patients of MM and arise in the late courses of disease.

Case: A 42-year-old woman was admitted to our emergency department with acute onset hemiplegia of the right side and altered mental status following a syncopal episode. She had severe headaches for a week. Vital signs were normal. Glasgow Coma Scale rating was 9/15 (Eye: 4, Verbal: 2, Motor: 3). On neurological examination there were right-sided hemiplegia, pupillary light reflex was positive on both sides, no neck stiffness, difficulty with speech. The power was Grade 0 on the right side. There was no abnormality in EKG. We obtained FBC, biochemistry and coagulation panel and found within normal limits except; erythrocyte sedimentation rate (ESR) 45 mm/h (normal < 20mm/h), the total serum protein concentration was 6.1 g/dL (normal, 6.4-8.3g/dL) and albumin was 2.4 g/dL (normal, 3.5-5.2 g/dL). We performed computed tomography

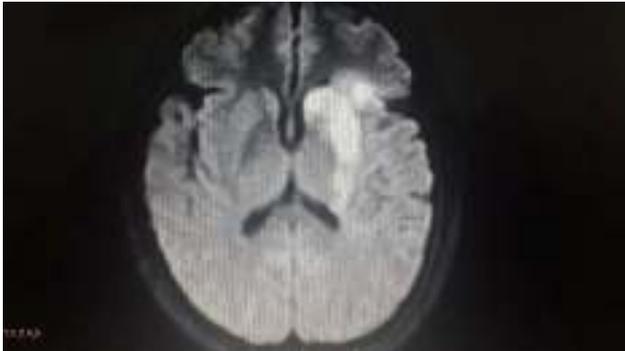
(CT) and Diffusion- and T2-weighted MRI. There was no abnormality in CT, but MRI revealed a hyperintense lesion in the left middle cerebral artery. The patient had no risk factors of stroke; but she had admitted to the internal medicine outpatient clinic due to symptoms of fatigue, palpitations, weakness, musculoskeletal system pain and hematuria and proteinuria in her urine analysis. She had been investigated for nephrotic syndrome due to AL amyloidosis. She had been performed bone marrow biopsy for the differential diagnosis of MM and amyloidosis. By the time she presented with stroke-like symptoms, the biopsy results had not confirmed the diagnosis. She was admitted to the neurology service for further evaluation, where the biopsy examination resulted as multiple myeloma. Then the patient transferred to haematology ward.

Discussion: The incidence of central nervous system (CNS) involvement in MM is 1% as reported. Most of the stroke-like presenting cases due to cerebral infarction have been caused by hyperviscosity especially in late courses of disease. Major neurologic deficits, like lethargy, hemiparesis, seizures, coma and confusion occur in more than 25% of patients with multiple myeloma and hyperviscosity syndrome. Minor complaints are such as; dizziness, vertigo, headache, and impaired learning.

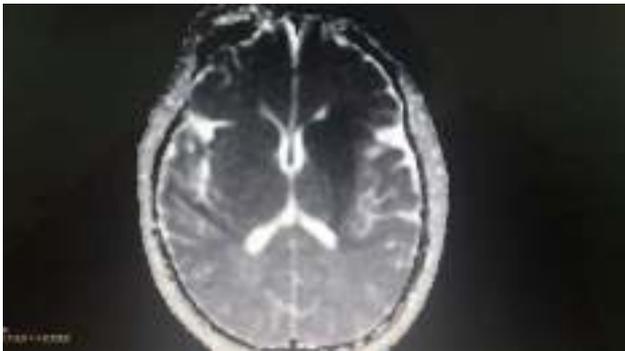
We describe a case representing a rare complication of multiple myeloma associated with stroke secondary to blood hyperviscosity. Indeed, while neurologic deficits occur frequently in patients with myeloma and hyperviscosity syndrome, cerebral infarcts remain rare and their mechanisms debated. Although symptoms originating from the central nervous system are uncommon in patients of MM, stroke-like symptoms can be the initial manifestation of the disease as well; so we suggest that patients with no stroke risk factors should be evaluated carefully for haematological and coagulation disorders.

Keywords: emergency medicine, multiple myeloma, stroke

mm presenting as stroke



mm presenting as stroke



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[Nörolojik Aciller]

A RARE AND FATAL CAUSE OF SEIZURE IN EMERGENCY SERVICE: CEREBRAL VENOUS SINUS THROMBOSIS COMPLICATED WITH HEMORRHAGIC INFARCT

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Cerebral venous sinus thrombosis (CVST) is rarer than the arterial thrombosis. CVST can affect all age groups however young women affected more common. It is difficult to diagnose because of the variety of clinical signs and symptoms. Headache, papilledema, focal deficits, seizures and coma are the most common findings in this patients. The most common symptom is a severe headache. CVST results are variable to completely healed to death. Early diagnosis and treatment is also very important for reducing mortality and morbidity. A previously healthy 31 years old female admitted to emergency department with complaint of seizure and diagnosed CVST complicated with hemorrhagic infarct. In this case we aimed to raise awareness of emergency physicians on this issue.

A 31-year-old female was admitted to emergency department with complaint of headache and seizure. Her headache had been present for two days and had increased. The patient had a generalized tonic-clonic seizure once. Patient's past medical and family history were unremarkable. She had begun to use oral contraceptive ten days ago. On admission, the patient was stuporous, in a post-ictus state, with eye opening in response to verbal command, no verbal response and withdrawal response to pain. The blood pressure was 120/80 mmHg and heart rate 80/min. The rest of the examination and the laboratory exams was unremarkable. The 12-lead ECG showed normal sinus rhythm with 80 beats/min. The patient regained consciousness during the follow up period in emergency department thus neurological examination was repeated and no lateralized finding was detected. During the cranial computerized tomography (CCT) capture, the patient had generalized tonic clonic seizure again. Obtained CCT images were compatible with venous hemorrhagic infarct in the left frontal, right frontoparietal and left parietal cortical areas. After that she was planned cranial magnetic resonance imaging (MRI) and revealed that thrombosis starting from superior sagittal sinus and extending to confluence sinuum and thrombosis in sinus rectus; the right frontoparietal and the left parietal cortical infarct and haemorrhages (figure 1). The patient was started on levetiracetam therapy for seizure control and admitted to the neurology intensive care unit with a diagnosis of hemorrhagic infarct complicated CVST. She died on the 6th day of hospitalization.

CVST is a condition that less common than arterial occlusive diseases of brain and conversely more common seen in young adults and children. %75 of adult patients with CVST are women and CVST results with mortality and morbidity in %5-30 of the patients. Pregnancy, puerperium and the use of oral contraceptive drugs increased the CVST. Other etiological factors are trauma, infection (otitis, sinusitis, meningitis), severe anemia, dehydration, connective tissue diseases and malignancies.

The imaging modalities of choice are CCT and MRI. Poor prognostic factors are identified as impaired consciousness and papilledema, presence of cerebral infarct and haemorrhages, presence of seizure, male gender, 37 years and older and the presence of neurological deficits.

CVST is one of the important cause of stroke in young individuals. The use of oral contraceptive drug should be questioned and the diagnose of CVST should be considered in young women with headaches that difficult from the old ones, seizure for the first time and focal neurological deficits. Delayed diagnosis increased mortality and morbidity.

Keywords: Seizure, Oral contraceptive, Cerebral venous sinus thrombosis

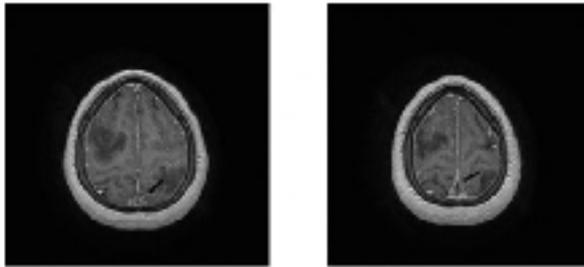


Figure 1. Thrombosis starting from superior sagittal sinus and extending to confluence sinuum and thrombosis in sinus rectus; the right frontoparietal and the left parietal cortical infarct and haemorrhages.

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[Nörolojik Aciller]

A CASE OF GIANT ARACHNOID CYST CAUSING HYDROCEPHALUS

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Introduction: Arachnoid cysts are relatively common benign lesions occurring in association with the central nervous system, both within the intracranial compartment (most common) as well as within the spinal canal. They are usually located within the subarachnoid space and contain cerebrospinal fluid (CSF). Arachnoid cysts account for ~1% of all intracranial masses. Although the vast majority are sporadic, we report a 37-year-old female presented with headache, nausea and vomiting resulting with hydrocephalus thus placed of a cystoperitoneal shunt.

Case Report: A 37-year-old female was presented to our emergency department with complaint of headache, nausea and vomiting continued for 2 days. It was learned that the patient had an arachnoid cyst so that she had been operated 3 years ago in other centre. Obtained magnetic resonance imaging (MRI) showed a large suprasellar cyst with noncommunicating hydrocephalus (figure 1). She referred to our brain surgery department and hospitalized for operation. A cystoperitoneal shunt was put in place to alleviate current aggravation of hydrocephalus symptoms. After the operation, a computerized tomography (CT) scan obtained to control of whether decrease of hydrocephalus and control the shunt (figure 2). The patient's symptoms was resolved after the operation and she discharged in postoperative sixth day from the hospital.

Discussion: Arachnoid cysts are benign and usually small and the vast majority remain asymptomatic throughout life. When symptoms occur they are usually the result of gradual enlargement resulting in mass effect. This results in either direct neurological dysfunction or distortion of normal CSF pathways resulting in obstructive hydrocephalus. Typical symptoms of an arachnoid cyst around the brain include headache, nausea and vomiting, seizures, hearing and visual disturbances, vertigo, and difficulties with balance and walking. Diagnosis usually involves a brain scan or spine scan using diffusion-weighted MRI which helps distinguish fluid-filled arachnoid cysts from other types of cysts. Untreated, arachnoid cysts may cause permanent severe neurological damage when progressive expansion of the cyst(s) or bleeding into the cyst injures the brain or spinal cord. Symptoms usually resolve or improve with treatment. If they are deemed to be causing symptoms then surgery can be contemplated. This can either take the form of a craniotomy (fenestration or excision) or placement of a cystoperitoneal shunt as in our case.

Keywords: arachnoid cyst; cystoperitoneal shunt; hydrocephalus



Figure 1. T2-weighted axial MRI image of the brain showed a large suprasellar cyst with noncommunicating hydrocephalus.



Figure 2. CT images showed a large suprasellar cyst and hydrocephalus that decrescent with cystoperitoneal shunt.

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[Nörolojik Aciller]

A RARE CASE IN EMERGENCY SERVICE: PRES

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Introduction: Posterior reversible encephalopathy syndrome (PRES) is a temporary condition that diagnosis with clinical, neurological and radiological evaluation. The most common symptoms include headache, lethargy, visual disturbances, paresis and nausea and often it's seen with acute hypertension. Cases have been reported after chemotherapy treatment, pregnancy toxemia, organ transplantation, immunosuppressive agents and autoimmune diseases.

Case: Sixty-nine years old female patient, with history of adrenal cancer and hypertension, was brought to the emergency department by 112 due to head trauma and seizures, following loss of consciousness. She was conscious and her GCS was 15 at admission. There was a 3x2cm hematoma in the patient's forehead. There wasn't any acute pathology in first brain CT except thickness and density increase (secondary to trauma), compatible with the skin-subcutaneous hematoma, in frontal and right temporoparietal region. Patient had generalized tonic-clonic seizures 3 times during follow-up in the emergency room. Brain MRI was taken to patient after seizures are treated with 10 mg diazepam. Gyral style linear density increase areas were seen in bilateral frontal, parietal lobes and the parasagittal area near the vertex in occipital lobes, in the flair and T2 series of brain MRI. Because of exclusion the possibility of bleeding in patient with history of trauma, patient was taken to the emergency intensive care unit. Administration of 2x500mg IV levetiracetam after 1000 mg loading dose and taking of brain MRI with contrast to diagnosis of brain metastasis was recommended to patient by neurology department. Due to the platelet count in blood tests detected 34.000/mm³, patient was

consulted to hematology department. Hematology department was noted that thrombocytopenia was compatible with the effects of chemotherapy and has proposed the administration of the platelet suspension because of head trauma. Next day control platelet count was 74.000/mm³ after administration of 2 units of apheresis platelet suspension. Patient's blood pressure was controlled with intravenous infusion of nitroglycerin. In contrast brain MRI results; in former test, pathological signal changes at the bilateral occipital lobe, parasagittal region and oksipitoparietal areas, affecting of cortex-subcortical white matter, were considered consistent with vasogenic edema, has increased and has spread towards both frontal lobe and parietal lobe vertex plane, in new test (Figure 1-2). It has been reported that PRES should be considered primarily as differential diagnosis by the radiology department. Patient was consulted back to neurology department in terms of PRES, and 100 mg/day acetylsalicylic acid was started to giving patient. After 6 days follow-up in the emergency intensive care unit, patient's hemodynamic and neurologic problems were fully recovered and she was discharged with healing from hospital.

Discussion: PRES is a transient situation that characterized radiological cerebral edema especially in parietal and occipital lobe, and which may appear with nonspecific findings like headache, nausea, vomiting, visual and mental changes and focal and generalized seizures. But when diagnosis and treatment delayed; after complications like status epilepticus, intracranial bleeding and massive ischemic infarct, it can be watched with significant morbidity and mortality. With early diagnosis the return of the disease can be achieved without sequelae.

Keywords: Head Trauma, Seizure, PRES

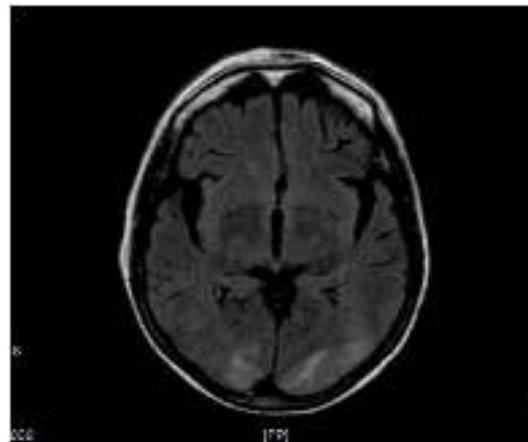


Figure 1. Patient's Brain MR Image

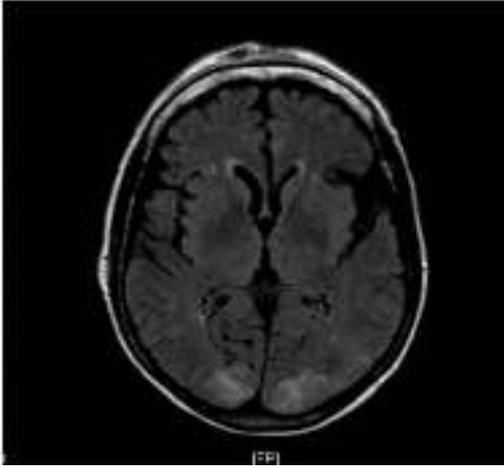


Figure 2. Patient's Brain MR Image

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DIFFERENTIAL DIAGNOSIS FOR SIGNS OF CEREBROVASCULAR EVENT: BASILAR MIGRAINE

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Introduction: Basillary migraine is a rare form of migraine in which besides the headache and aura the patients describe difficulties in speech, vertigo, tinnitus and other symptoms associated with the brain stem, but there are no references to weakness in motor functions. It is presumed that this kind of migraine is related to the partial insufficiency of the basillary artery in supplying the brain stem.

Case: A 22-year-old female patient presented herself at the Emergency Department with speech disorders. On an initial physical examination the patient's general condition was found to be fair and she was conscious. Cooperation and orientation could not properly be assessed because of her slurred speech. No signs of motor or sensory deficit, pathological reflexes or meningeal irritation were observed. Her pupils were isochoric and LR was bilaterally positive. Her vital signs, blood glucose and her ECG were within normal range. The patient was desperately trying to describe a feeling of dizziness and a severe tension headache. During history taking it was learned that the patient did not suffer from any other disease except for migraine, that she used prophylactic medicine and that she had experienced speech disorders in one of her previous attacks too. Vascular access was established and the patient was transferred to a quiet room and monitored. Nasal O₂ was given to her and she was started on metoclopramide infusion. Diclofenac sodium intramuscularly administered. To exclude other possible differential diagnosis, a brain diffusion-weighted MRI was performed (Fig.1) and an acute infarction was detected. 4 hours after her admission in the Emergency Department the patient's dysarthric condition improved. She was monitored and observed for a few hours more and was then discharged with suggestions of a neurologic control in the following days.

Conclusion: Headaches are a frequent symptom that brings patients in the Emergency Department. Despite that being the case, cases like the aforementioned one, with a basilar migraine and neurological symptoms, are not very common. It is advised

that medics at the Emergency Department perform a screening of the CNS before diagnosing a migraine in patients with neurological deficits.

Keywords: migraine, headache, Emergency Medicine

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[Nörolojik Aciller]

GABAPENTIN-INDUCED SLEEPLESSNESS, TRIGGERING EPILEPTIC SEIZURES AND A LUMBAR FRACTURE

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Introduction: Gabapentin is a medicament used in adults against neuropathic pain and simple or complex partial convulsions associated or not with generalized convulsions. Among its known adverse effects are somnolence (desire for sleep), weakness, dizziness, headache, vomiting, weight gain, irritability, sleeplessness, ataxia, nistagmus, paresthesia and loss of appetite. In this report we present the case of a patient using gabapentin against neuropathic pain but who presented himself with a 48-hour sleepless period and with a generalized tonic clonic seizure.

Case: A 37-year-old male patient was brought to the Emergency Department with loss of consciousness and contractions throughout his body lasting approximately 5min. From history taking we learned that the patient had newly started a gabapentin therapy against his neuropathic pain but had been sleepless for 48 hours, at the end of which seizures started appearing. During the seizure that lasted for approximately 3-4 minutes the patient reported contractions starting from his extremities but then spreading throughout his body. He remembered losing his consciousness but no urinary incontinence had occurred. Physical examination showed his general condition being fair, he was conscious and cooperative. His pupils were isochoric and his light reflex was bilaterally positive. There were no focal neurological deficits or pathological reflexes and his vital signs were stable. Other systems' examination was normal except for lumbar sensitivity. The patient had no history of chronic diseases; he didn't use alcohol or any other medicine except gabapentin. His laboratory results were within normal range. An X-ray was performed because of the lumbar sensitivity and a fracture was observed on the level of the 1st vertebra (Fig.1). The fracture was assessed as requiring no surgery. After being monitored a while in the ER, the patient was transferred to the Neurology Department.

Conclusion: Epileptic seizures are a frequent event in patients applying to the ER and sometimes these patients might have bone pathologies because of the contractions or traumatic events associated with the seizures. Because of this, a general systemic examination, besides the neurological one, should not be neglected. Also to be kept in mind are the rare adverse effects of some specific drugs which might lead to these kind of seizures.

Keywords: Gabapentin, epileptic seizures, lumbar fracture



Figure 1.

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[Nörolojik Aciller]

PRESS SYNDROME IN THE EMERGENCY DEPARTMENT: A CASE REPORT

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Introduction: Posterior reversible encephalopathy syndrome (PRES) is a clinical condition that may develop due to eclampsia – preeclampsia, hypertension, drug intoxications and many metabolic diseases. Vasogenic edema developing on brain tissue due to various etiologic factors constitutes the basis of its pathophysiology. It is stated that the sympathetic stimulation which defends brain against high acute blood pressure is less sufficient in the posterior circulation system of the brain than the anterior system.

Case: The patient, a 17-year-old female who 3 days ago had a normal vaginal delivery, presented herself with acute bilateral vision loss. Upon admittance her general condition was good, she was conscious and had a Glasgow Coma Scale score of 13 (E3,M6,V4). The pupils were isochoric and IR was +/+. She presented no sign of meningeal irritation. On both upper and lower extremities muscle strength was found to be 4/5 and there were no positive pathological reflexes. The rest of the physical examination was normal and so were the laboratory results. The patient had a history of periodic hypertension during pregnancy and a brain MRI was scheduled. Hyperintense lesions, compatible with PRES syndrome, were observed bilaterally on the occipital lobes (Fig.1). The patient was transferred to the Neurology ICU department and treated with mannitol and low molecular weight heparin (LMWH). On the 4th day of her follow-up the patient's vision and overall condition improved. She was discharged on the 7th day of her treatment.

Conclusion: This case report presents a case diagnosed as PRES, with clinical and radiological findings and vision lost during the postpartum period, but with no risk factors other than periodic hypertensive attacks.

Keywords: PRESS Syndrome, emergency department, vision loss

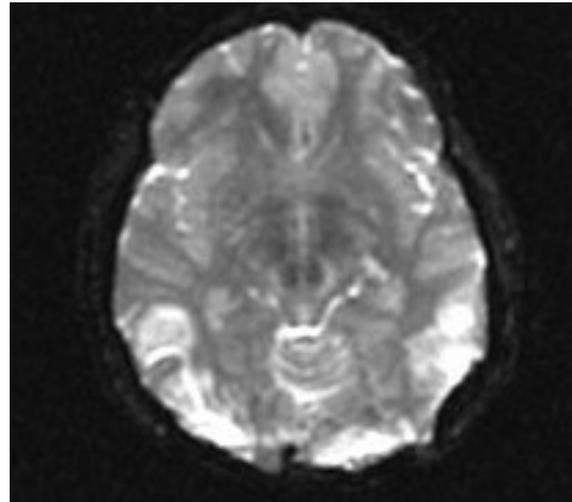


Figure 1.

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A VENOUS SINUS THROMBOSIS CASE PRESENTING WITH A CEREBROVASCULAR EVENT'S CLINIC

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Introduction: In comparison to arterial stroke, cerebral venous sinus thrombosis (CVST) is rarely seen and is usually observed in those of younger age. Predisposing factors include pregnancy, puerperium, use of oral contraception (OCC), coagulopathies, intracranial infections, cranial tumors, penetrant head traumas, lumbar puncture, malignancy, dehydration, inflammatory bowel disease, connective tissue diseases, Behcet's disease, sarcoidosis, nephrotic syndrome, parenteral infusions and various medicines. We report here the case of a young pregnant woman who presented herself to the Emergency Department with a cerebrovascular event's clinic

Case: A 26-year-old and 32-week-pregnant woman was admitted by the Emergency Department with lisping and numbness in her left arm. Her general condition was good, she was conscious and had a Glasgow Coma score of 15 (E4, M6, V5). Her pupils were isochoric and her light reflex test was +/+. There were no signs of meningeal irritation. Muscle strength on her left lower and upper extremities was 4/5 and there was hypoesthesia. Her plantar reflex response was indifferent on her left side and flexor on her right side. The other systems' examination was normal. A diffusion-weighted brain magnetic resonance was performed and an acute ischemic infarct with an ADC (Apparent Diffusion Coefficient) was observed on her right frontal cortical region (Figure 1). The patient's ECG and carotid and vertebral artery doppler ultrasound were reported as normal. She was then admitted to the Neurological ICU and a contrast-enhanced MRI venography was performed. Signs of chronic thrombosis were found. The patient's physical examination was performed again and minor improvements were observed. She was prescribed low-molecular-weight heparin (LMWH) throughout her pregnancy.

Conclusion: Cerebrovascular diseases are rarely seen in young patients. In spite of this, pregnant patients presenting themselves with neurologic symptoms should be screened for venous sinus thrombosis, as pregnancy itself constitutes a risk factor for it.

Keywords: cerebral venous sinus thrombosis, emergency department, pregnancy

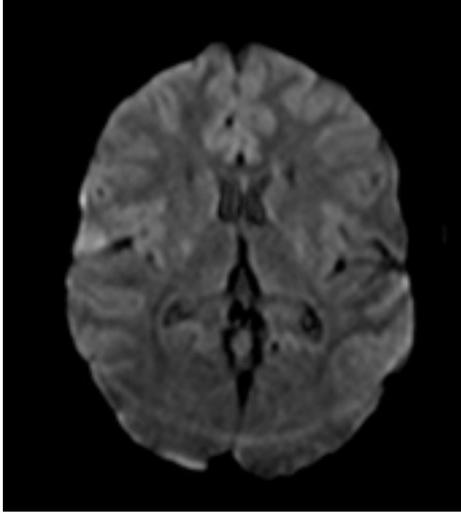


Figure 1.

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[Nörolojik Aciller]

IS EVERY RESPIRATORY FAILURE A MYASTHENIC CRISIS?

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Introduction: Myasthenic crisis is respiratory failure from myasthenic weakness. Due to the involvement of respiratory muscles, hypoventilation can occur and subsequently lead to hypoxia and hypercapnia.

Case: This paper presents a 82-year-old patient with a past medical history of myasthenia gravis who presented to the emergency department with complaints of asthenia and shortness of breath.

Discussion: Myasthenia gravis is a frequently encountered autoimmune disease characterized by the antibodies that develop against the acetylcholine receptors in the postsynaptic membrane of the neuromuscular junction. Involvement of respiratory and bulbar muscles is the most severe consequence of the disease. This condition, known as myasthenic crisis can cause severe respiratory failure due to the weakness. Moreover, hypercapnia (pCO₂: 26 in our patient) can occur due to obstruction in upper respiratory tract and insufficient ventilation dysfunction in neuromuscular diseases. Hypoventilation develops in the first phase of sleep, particularly in REM sleep. Hypoxemia and hypercapnia arise due to the occurrence of central and obstructive apnea and associated with poor muscle tone. However, we considered an alternative diagnosis because of the presence of hypocapnia (pCO₂: 26 mmHg) rather than hypercapnia in our patients.. That is why the probability of PE was calculated by Geneva risk scoring. Due to moderate probability (age: 2, pCO₂: 2, pO₂: 3,

atelectasis: 1, total: 8), D-dimer test was performed to eliminate the probability of PE. Because the D-dimer result was high (22100), CT angiography was performed that yielded a bilateral and sub massive PE.

Conclusion: In patients presenting to a hospital due to shortness of breath, blood gas and D-dimer test results should be evaluated carefully. PE should be suspected in myasthenia gravis patients with hypocapnia and high D-dimer results. The patient was diagnosed with pulmonary embolism given the high value of D-dimer and hypocapnic blood gas.

Keywords: Myasthenic crisis, Pulmonary embolism, D-dimer, Arterial blood gase

PE

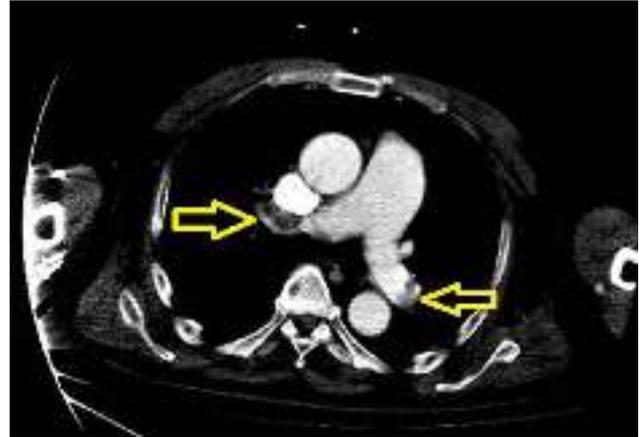


Figure 1. Bilateral submassive pulmonary embolism

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UNILATERAL THALAMIC INFARCTION PRESENTING AS DIPLOPIA AND HORIZONTAL GAZE PALS: A CASE REPORT

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Introduction: Lacunes are an important disease feature of cerebral small vessel disease (SVD). Thalamic lacunes in particular have been associated with cognitive impairment in SVD. The thalamus is a complex structure with multiple subcomponents possessing unique architecture and connectional properties. Diffusion-weighted magnetic resonance imaging (DWI MRI) has been widely established as an imaging modality in the diagnosis of acute cerebral infarction with a sensitivity of 88%, specificity 95%, and false-positive rate 1.5%. Preliminary data also support the use of DWI MRI in acute brain stem and other types of subcortical stroke. Vertical diplopia and nystagmus typically occur in lesions of the brainstem or cerebellum. In thalamic infarctions, ocular findings are exceedingly rare and, when present, usually involve vertical gaze paresis. We report a patient who presented with vertical diplopia and horizontal gaze palsy of his right eye and was found to have left ventrolateral thalamic infarctions on diffusion-weighted magnetic resonance imaging.

Case: An 63-year-old man, presented to the emergency department with a history of diplopia and medial gaze palsy. She denied vertigo, gait disturbance, weakness, paresthesia, or

alteration in consciousness or awareness. The patient had history of hypertension, congestive heart failure and atrial fibrillation. His vital signs were normal except 150/85 mmHg blood pressure. His Glasgow Coma Scale was 15. He has defect in medial eye movements of the right eye. There was vertical nystagmus. His cranial CT was normal, in the DWI MRI there were lacunar infarctions in the left thalamus. After neurological consultation, he sent home with low molecular weight heparin.

Conclusion: Horizontal gaze palsy is typically seen following pontine lesions where there is involvement of the sixth nerve nucleus from which horizontal gaze for both saccadic and smooth pursuit movement is mediated. But in our patient there was 3rd nerve palsy findings due to thalamus infarction. Dependent on the extent of infarction, other ocular motility abnormalities may be noted such as nystagmus, as was evident in our cases. Also literature reports mention about vertical diplopia and nystagmus in the acute setting typically suggest an infarct in the midbrain, pons, medulla, or cerebellum rather than in the thalamus. With advances and availability of DWI MRI, however, these findings can now be linked to a broader spectrum of anatomic locations than previously postulated.

Keywords: Horizontal gaze palsy, diplopia, Diffusion MRI, thalamic infarction

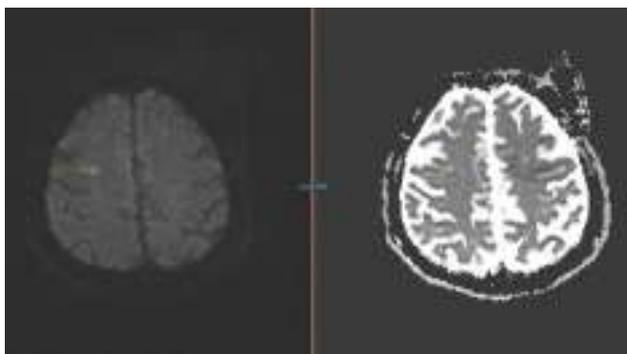


Figure 1. Infarction in right thalamus

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IS APHASIA ALWAYS NEUROLOGICAL?

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Purpose: Hypothyroidism is lack of thyroid hormone or inability of thyroid hormone to be active. Hypothyroidism causes deceleration in metabolism rate and disfunction in many organs. The prevalence of hypothyroidism is 0,1 - 2 % in the society. 90% of the cases are women or seen in the winter. Myxedema is multiorgan and metabolic disfunction caused by hypothyroidism. Hoarseness and slowness of speech could be seen in hypothyroidism along with hair loss, fatigue, weight gain, amnesia, constipation, sensitivity to cold, nonpitting edema, bradycardia, macroglossia, hypotermia. Accumulation of mucopolysaccharides on vocal cords causes hoarseness and slowness of speech. We will present the patient with motor aphasia and diagnosed myxedema.

Case: 56 year old male patient admitted to emergency department with dizziness, fatigue, swelling of legs and he was unable to speak. There was no neurological pathology except motor aphasia. There was bilateral nonpitting edema on the patients legs. Even though cranial CT and diffusion MRI scans were normal, consultations to relevant specialist were requested. The patients thyroid function tests were; TSH: 100 IU/ml, fT3: 0,26 pg/ml, fT4: 0,045 ng/dl. The patient was diagnosed hypothyroidism – myxedema. After thyroid hormone replacement, the patients symptoms and motor aphasia was regressed.

Conclusion: Even if cerebrovascular disease is the first to diagnose that comes to mind for the patients who admits to emergency department with dizziness and aphasia, if there is no neurological pathologies it must not be forgotten that hypothyroidism could cause similar symptoms.

Keywords: Aphasia, cerebrovascular disease, hypothyroidism,

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CASE OF POSTPARTUM PATIENT WITH ALTERED MENTAL STATUS AND NEW-ONSET SEIZURES; POSTERIOR REVERSIBLE LEUKOENCEPHALOPATHY

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Introduction: Posterior reversible encephalopathy syndrome (PRES) is a clinically and radiologically defined syndrome characterized by seizures, headaches, visual disturbances, and altered mental status or focal neurological deficits. Imaging frequently shows abnormalities in the posterior brain regions, especially the occipital and the parietal lobes. PRES has been described in association with a wide spectrum of underlying causes. The most common conditions include hypertension, renal disease, preeclampsia/eclampsia, or status post transplantation. In this presentation, we report a postpartum patient of PRES who was admitted to our ED because of seizure and deterioration of consciousness.

Case: A 22-year-old female patient with history of preeclampsia was admitted to our ED because of seizure and deterioration of consciousness. She had no known medical or family history except preeclampsia. On his physical examination, her blood pressure was 175/75 mmHg, pulse rates of 92 beats/min, a temperature of 36.7°C. During the observation in ED, she suddenly became dazed and had a generalized tonic clonic seizures, and the patient was given 2 mg midazolam intravenously. CT scan of the head, CBC, and a metabolic panel were performed to work-up the witnessed seizure, and all results were normal. MRI revealed bilateral hyperintense lesions in subcortical white matter of parietooccipital lobes on T2-FLAIR sequences. The patient was admitted to neurology intensive care unit. MRI on 15 days after admission showed the improvement of the abnormal findings.

Discussion: PRES is a condition manifested by altered mental status, seizures, headaches, and visual loss. In conclusion, according to this case, we should keep in mind that apart from the association of PRES with several medical conditions including preeclampsia. Awareness of PRES is crucial for emergency

physicians, as prompt identification and treatment can have profound impacts upon patient's long-term neurologic function.

Keywords: Preeclampsia; Awareness; ED

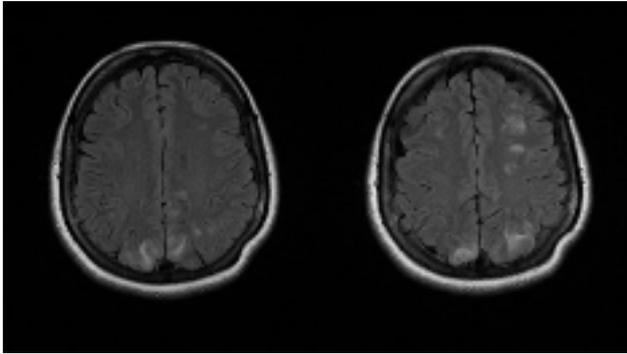


Figure 1. Magnetic resonance imaging revealed bilateral hyperintense lesions in subcortical white matter of occipital lobes on T2-FLAIR sequences.

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HYPOKALEMIC PERIODIC PARALYSIS TRIGGERED BY HONEY CONSUMPTION

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Introduction: Periodic paralysis, which is usually hereditary, is a rare neuromuscular disorder. Hypokalemic periodic paralysis, the most common acquired form of periodic paralysis, is characterized by attacks of transient quadriplegia or paraparesis associated with decrease in serum potassium level.

Case: A 45-year-old male patient was brought emergency department by the family members with complaint of loss of extremities power and weakness. The complaints were observed firstly on the hands and feet of the patient, and then affected gradually the entire body, without the absence of sensory loss. In patient past history he reported that 3 hour after eating a bowl of honey, he had felt weakness on both arms and feet during exercise. On physical examination, he was conscious, cooperative, arterial blood pressure 120/80 mm Hg, and pulse rate 78/min. There was asymmetric muscle weakness, intact sensory examination, and hypoactive deep tendon reflexes. The left and right lower extremity muscle strength was 1/5 and 3/5 respectively. There was no family history, drug intake and any disease history. Computerized cranial tomography showed no abnormality. Initial laboratory tests results indicated K:2.5 mEq / L (range 3.5, -5.1 mEq / L). Other values and CPK were within normal ranges. Electrocardiogram showed normal sinus rhythm waves, other findings were unremarkable. Diagnose was hypokalemic periodic paralysis which was related to overt consumption of honey that compatible with literature data.

Conclusion: These cases illustrate that overt consumption of honey should be considered a potential precipitant of hypokalemic periodic paralysis.

Keywords: Periodic paralysis, hypokalemia, asymmetric muscular involvement

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[Nörolojik Aciller]

AN UNUSUAL CAUSE OF ACUTE PARAPARESIS; SEVERE HYPERKALEMIA

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Objectives: Limb weakness with a wide range of differential diagnosis that is common cause of emergency department admission. There are many non-neurologic conditions as well as neurologic ailments. The most commonly causes of bilateral lower limbs weakness are spinal cord diseases, peripheral nerve diseases-Guillain-Barré syndrome (GBS), neuromuscular junction disease-Myasthenia Gravis syndrome (MG), hypoglycemia or severe electrolyte abnormalities (hypo-hyperkalemia, hypo-hypercalcemia, hypomagnesemia). We present the case of a patient with acute weakness of lower extremity due to hyperkalemia.

Case: A 65 year old woman was admitted to emergency department (ED) with presenting acute onset weakness of both the lower limbs. There was any another complaints such as trauma, chest pain, syncope, headache. She had chronic renal failure and hypertension in her medical history and entering dialysis regularly 3 days of week. She has entered last dialysis two days ago. Vital signs were normal except that heart rate was 50/min. and Glasgow Coma Score (GCS) was 15/15. In the physical examination she had bilaterally symmetrical motor weakness of the lower limbs (2/5) and decreased plantar response. Other neurological examination was intact and peripheral pulse were palpable, there was no specific findings other system examinations. Her ECG showed nodal rhythm with 50/min rate. Laboratory findings were pH 7.35 (N:7.35-7.45), bicarbonate of 25,8 mmol/L (N: 22-27), blood glucose level of 178 mg/dl and potassium of 8,73 mEq/L (N:3,5-5,3) on venous blood gas analysis. While she had getting emergency treatment for hyperkalemia including intravenous calcium gluconate, nebulised salbutamol, neutralised mai, nephrology was consulted for emergency dialysis. After hemodialysis her potassium level was 5,5 mEq/L and motor power improved to 5/5 in both the lower limbs, her post-dialysis ECG returned normal sinus rhythm. By the time of discharge she was able to walk normally and had no any complaint.

Discussion: Muscle weakness is a common, nonspecific ED complaint that encompasses a broad differential diagnosis including neurologic ailments and a range of non-neurological conditions. Spinal cord lesions usually present with bilateral weakness but with hyperreflexia and muscular spasticity. Guillain-Barré syndrome should be considered in the differential diagnosis of bilateral limb weakness, GBS progresses within days and the absence of deep tendon reflexes are characteristic. The lower limbs weakness due to hyperkalemia is similar to GBS because severe hyperkalemia can cause ascending muscle weakness that begins with the legs and progresses to the trunk and arms (1, 2). This can progress to flaccid paralysis mimicking Guillain Barre syndrome (1). Hyperkalemia-related clinical symptoms usually occurs due to membrane polarization disorders (3, 4). Cardiac effects are more severe, other symptoms severe muscle weakness or paralysis and gastrointestinal signs. The mechanism of paralysis due to hyperkalemia is not clear but there are few cases suggesting that the cell membrane is directly affected by potassium (3,

4) and muscular weakness related to impaired neuromuscular transmission (5, 6).

Conclusion: Hyperkalemia should always be considered in the differential diagnosis of acute onset paraparesis, especially with chronic renal failure and serum potassium level should be checked before the neuroimaging.

Keywords: Hyperkalemia, Paraparesis, Differential diagnosis



Figure 1. The first ECG shows nodal rhythm with K level of 8.73 mEq/L

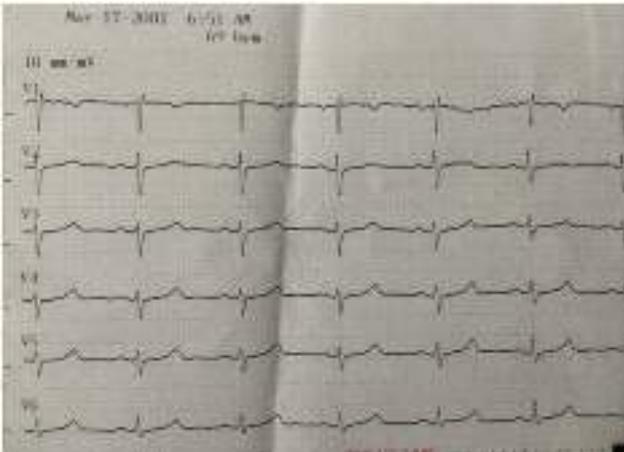


Figure 2. The second ECG shows sinus rhythm after hemodialysis with K level of 5.5 mEq/L

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[Nörolojik Aciller]

A SIMPLE ENTERITIS? ACUTE DYSTONIC REACTION

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Introduction: Dystonia is a neurological event which characterized with repetitious and involuntary muscle spasms with permanent or transient posture disorders. The most seen acute dystonic reaction (ADR) type is caused by the drugs. In this case we present a 19 years old woman who had acute dystonic reaction while using metoclopramide in therapeutic doses.

Case: 19 years old female patient came to emergency department, her complaints were sudden spasm on her neck and cheek, and shift of her eyes upwards. In her history, two days ago she started to have 30 mg/day metoclopramide per orally treatment because of vomiting and diarrhea. Her complaints got down after treatment, but in second day, after 5 or six hours after taking pills, spasm on her cheek, shifting upwards on her eyes had started. In the physical examination, General condition is good but she was worrisome. TA was 110/70 mmHg, HR:90/min,

RR:22/min, T:36.4°C. In her neurological examination muscle tonus was normal and no rigidity was detected. In extrapyramidal system examination there was dystonia in her cheek and neck and also dysarthria (Figure 1). No special condition in her medical history. All the laboratory results were normal. In her brain computerized tomography scan we could not see any pathological finding. Because of the complaints started suddenly and no past history like this situation, we thought that the reason is metoclopramide which she used. IV 0.09% NaCl and biperidine intramuscularly was started. Approximately 60 minutes later the symptoms were decreased. In 6 hours of observation all the complaints were got normal and she discharged for proposal for neurology follow up.

Conclusion: We have to keep in mind that, metoclopramide which uses often as an antiemetic can cause significant ADR as a side effect. The patients who has ADR must be questioned for drug use history.

Keywords: Metoclopramide, acute dystonic reaction, adolescent, side effect



Figure 1. The patient's image

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[Nörolojik Aciller]

CEREBROVASCULAR ISCHEMIA WITH WARFARIN OVERDOSE

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Introduction: Warfarin is an anticoagulant normally used in the prevention of thrombosis and thromboembolism, the formation of blood clots in the blood vessels and their migration elsewhere in the body.

Case: 84-year-old woman presented with speech disorder and left side hemiplegia. Symptoms had started the day before. She had cerebrovascular ischemic attack three years ago because of atrial fibrillation and she was given warfarin and recovered totally. She had diabetes mellitus also and she was taking gliklazid. Arterial blood pressure was 150/90 mmHg, blood glucose level was 170 mg/dL. There was atrial fibrillation in ECG. In her blood tests the international normalized ratio (INR) level was 9.66, except this, other parameters were in normal limits. Head computed tomography (CT) was normal. In her magnetic resonance imaging of brain (MRI) there were millimetric acute diffusion restrictions around the parietal and temporal lobes. (Figure 1) She was consulted to neurology department and transferred to intensive care unit. She died after five days while she was taking treatment in intensive care unit.

Conclusion: We expect bleeding disorder with high INR levels. We want to present this rare case we met in emergency department.

Keywords: cerebrovascular ischemia, warfarin overdose, INR level

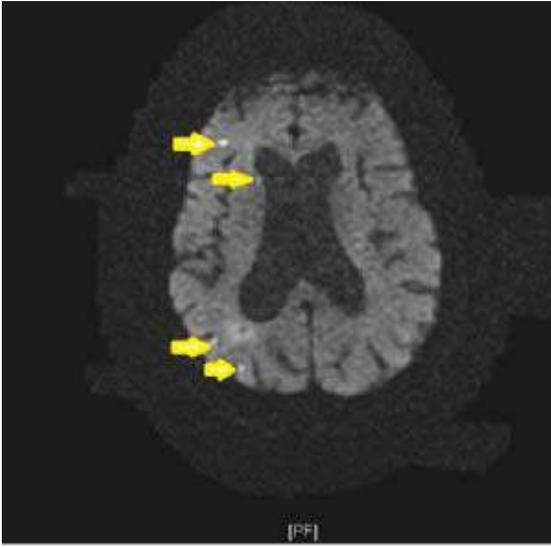


Figure 1.

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[Nörolojik Aciller]

IDIOPATHIC SPONTANEOUS RHINORRHEA

Dilber Üçöz Kocaşaban, Hikmet Duymaz, Hayri Ramadan, Fuat Koray Çelik, Sertaç Güler, Yavuz Katırcı

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Idiopathic spontaneous rhinorrhea is a rare condition with cerebrospinal fluid (CSF) discharge from the nose. The cause is trauma in 96% of the cases. We present a 30-year-old patient who presented with headache and was found to have idiopathic spontaneous rhinorrhea.

The patient presented to the emergency department with headache and clear nasal discharge for the last week. Neurology examination revealed neck stiffness. Other physical examination findings and vital signs were stable. The ring (halo) test was positive in the nasal fluid. The fluid was investigated at the biochemistry laboratory and the glucose, chlorine, proteins, enzymes, and lactate dehydrogenase (LDH) levels resembled that of CSF. Brain computed tomography was requested and no pathology was found. The patient had been going to an ear-nose-throat physician for the clear nasal discharge for 2 years and had been using various drugs with a diagnosis of allergic rhinitis. A neurosurgery consultation was requested with a preliminary diagnosis of idiopathic spontaneous rhinorrhea and the patient was hospitalized. The patient's investigation continues.

It is difficult to diagnose idiopathic spontaneous rhinorrhea. The cause of the CSF discharge is tumors causing direct bone erosion or a direct increase in intracranial pressure in more than 50% of the cases. Unilateral nasal discharge is the main symptom with CSF discharge. Many of these patients have been treated for allergic and vasomotor rhinitis for many years and some develop recurrent meningitis. Nasal fluid glucose, protein and electrolyte analysis should be performed in patients suspected of

having cerebrospinal fluid rhinorrhea. Idiopathic spontaneous CSF rhinorrhea must be repaired even when there is no active discharge as severe complications may develop.

The diagnosis and treatment are difficult and the risk of recurrence and complications high, compared to other causes of CSF leaks.

Keywords: Emergency Medicine, Idiopathic, Rhinorrhea

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[Nörolojik Aciller]

PROGNOSTIC RELATIONSHIP BETWEEN COMPLETE BLOOD COUNT PARAMETERS AND TRANSIENT ISCHEMIC ATTACK, ISCHEMIC STROKE

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Aim: The aim of the present study was to investigate whether whole blood count parameters in patients presenting to emergency service with TIA (transient ischemic attack) and cerebrovascular accident (CVA) can be beneficial in a diagnosis and differential diagnosis of these two events.

Materials and Methods: Ankara Files of overall 250 patients (150 ischemic stroke, 100 transient ischemic attack) who referred Atatürk Training and Investigation Hospital Emergency Service between the dates of 01/01/2013 and 31/01/2014 and whose history and physical examination findings were consistent with TIA or ischemic CVA diagnoses according to AHA and ASA 2014 stroke guide and who underwent both brain CT and MRI examination were investigated retrospectively. From the files, leukocyte numbers, neutrophil numbers, monocyte numbers, thrombocyte number, RDW, PDW and MPV values at the time of presentation were recorded. Thrombocyte /lymphocyte, lymphocyte /monocyte and neutrophil /lymphocyte ratios were calculated. Comparisons were made between ischemic stroke, TIA, control group and other subgroups in terms of whole blood count parameters..

Results: In CVA group, neutrophil, MPV, RDW, and NLR values were higher than control group. While lymphocyte, PLT, PDW and LMR values were lower than control group. In TIA group, RDW, NLR and PLR values were higher than control groups while PDW values were lower than control group. Among CVA subgroups, no difference was observed in terms of whole blood count parameters.. In TIA subgroups which is infarct positive, MPV values were higher than infarct negative group.

Conclusion: It is our suggestion that MPV may be a good infarct marker as it is high both in infarct positive TIA and in ischemic CVA. In addition, high PLT and LMR values in CSA groups and high PLR values in TIA group may be used to differentiate them.

Keywords: Ischemic stroke; Transient ischemic attack; Blood count parameters; Prognosis

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[Nörolojik Aciller]

STROKE IN A YOUNG PATIENT**Muhittin İşsever, Ulaş Karaoğlu, Mehtap Bulut, Aydın Sarıhan, Hasan Aydın, Emine Gaffari***Department of Emergency Medicine, Medipol University Hospital, Istanbul, Turkey*

Introduction: Stroke is the second leading cause of major morbidity and mortality in the world. However, acute ischemic attacks are very rare in the pediatric and young age groups (5-10%). The most common causes of stroke in children and young people are cardioembolism (generally related to a congenital heart disease), cervicocephalic artery dissections, focal arteriopathies of the children, sickle cell anemia and some genetic and metabolic disorders. In addition, 10-30% of the causes of acute strokes are of unknown causes. We would like to present this case because it's extremely rare.

Case: A 15 year old male patient presented to the emergency unit with a severe acute headache in the left side of the head. His complaints started while he was lying down 15 minutes prior to his presentation. When he tried to stand up he had weakness in his right side and he fell on the ground. He had difficulty speaking. He could not feel the right side of his body. His vital signs were normal. The patient's general condition was good, he was conscious, cooperating and oriented. Pupils' light reflex (+/+), and pupils were isochoric. GCS (Glasgow Coma Score):15. Physical examination revealed effacement in the right nasolabial sulcus, muscle strength loss of 3/5 in the right distal, and 4/5 in the proximal, and 5/5 in the right lower extremity. Pathologic reflexes were absent. Sensory examination revealed right hemiparesis. The other organ system physical examinations were within normal limits. Cranial CT (computerized tomography) obtained was normal. Diffusion MRI was subsequently obtained and signs of an acute infarction extending from the left periventricular area to the putamen and splenium were observed. The patient was consulted with the pediatric neurology department. The patient was admitted to the ward with the diagnosis of acute ischemic stroke. During his admission hematological and coagulation test values were in normal ranges. Hemoglobin electrophoresis, Factor: II-VII-VIII-XII, fibrinogen and homosistein leves, anti-trombin III and Protein C-S activities, activated protein C resistance, Factor V Leiden mutation panel and MTHFR mutation analysis were normal. Antinuclear antibodies and lupus anticoagulant tests were also negative. The patient was follow up and treated for 20 days. On discharge, he had 5/5 right hemiparesis and the nasolabial sulcus was minimally effaced. The patient was subsequently enrolled in a physical therapy program.

Results: Even though the general incidence of stroke has decreased, some studies have reported an increase in hospital admissions related to stroke in children and young adults. Although the etiology of acute ischemic stroke in children is different from adults, the current therapeutic approach is based on data obtained from studies conducted on the adult population. This is because there is no sufficient data on the acute treatment and secondary prevention after acute ischemic stroke in the pediatric population. In addition, structural, metabolic and genetic risk factors, requiring more specific treatment, should also be considered in cases of stroke in children and young adults. The diagnosis and treatment should be conducted on the basis

of a multidisciplinary approach, including pediatric cardiology, hematology, neurology, neurosurgery and neuroradiology.

Keywords: ischemic stroke, stroke in young adults



Figure 1. Cranial CT Image

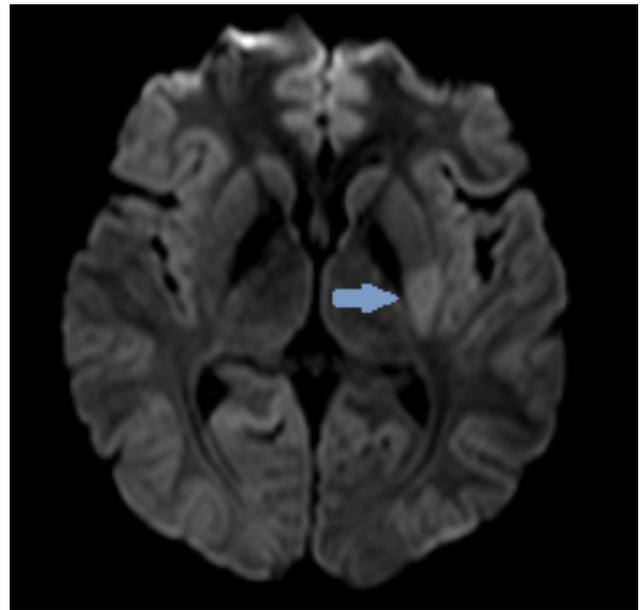


Figure 2. Diffusion MRI shows acute infarction

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[Nörolojik Aciller]

IS PERIPHERAL FACIAL PARALYSIS REALLY PERIPHERAL OR NOT: FOVILLE'S SYNDROME**Eren Gökdağ, Ömerul Faruk Aydın, Kerem Dost Bilmiz, Özlem Güneysel**
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Introduction: Facial nerve (7th cranial nerve) palsy is often idiopathic (formerly called Bell palsy). Idiopathic facial nerve palsy is sudden, unilateral peripheral facial nerve palsy. Symptoms

of facial nerve palsy are hemifacial paresis of the upper and lower face. Foville's syndrome is caused by the blockage of perforating branches of the basilar artery in the region of the brainstem. Structures affected by infarction are paramedian pontine reticular formation (PPRF), nuclei of cranial nerves VI and VII, corticospinal tract, medial lemniscus and medial longitudinal fasciculus.

Case: This case is about a 47-year-old man who had peripheral facial paralysis. He referred to our emergency department with complaints of pins and needles on his face and ptosis. His vital signs were in normal range. He had peripheral facial paralysis on left half of his face. He had dysphagia and horizontal, continuous nystagmus. MRI revealed acute pons infarction (Figure-1,2). He had been hospitalized and given anticoagulant treatment.

Conclusion: In this case, we emphasized the importance of neurological examination. Central and ischemic causes may be the main reason of peripheral facial paralysis and Foville's syndrome should be kept in mind.

Keywords: facial, Foville's, paralysis, syndrome

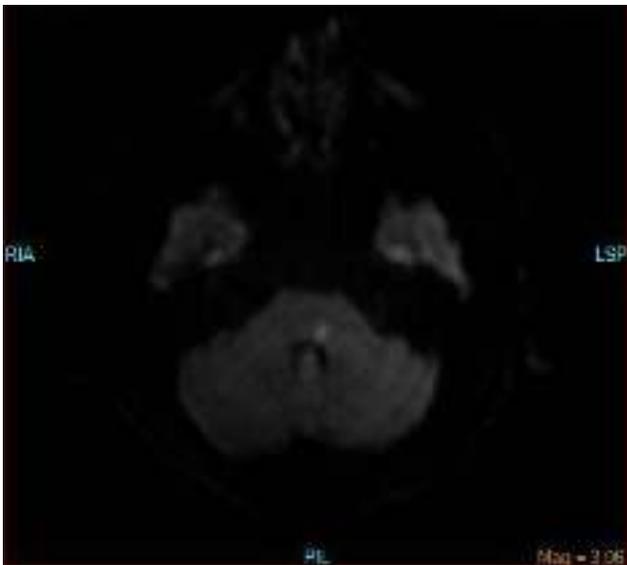


Figure 1.

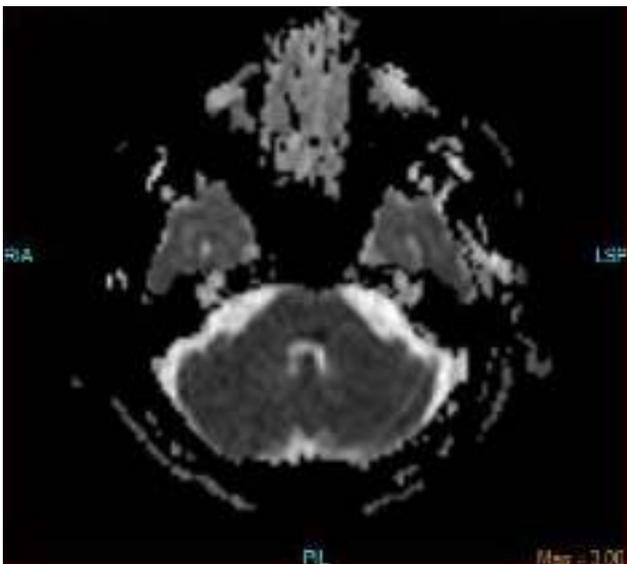


Figure 2.

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[Nörolojik Aciller]

**GAZI UNIVERSITY SCHOOL OF MEDICINE
EMERGENCY DEPARTMENT TEAM'S THOUGHTS
ABOUT THROMBOLYTIC THERAPY IN STROKE**

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We performed a two-item questionnaire to Gazi University School of Medicine Emergency Department Team (physicians, nurses and paramedics). The questionnaire includes that 'if you had acute stroke with hemiplegia and have been brought to ED, do you accept the thrombolytic therapy and why?'. 43 members said 'yes' and 7 members said 'no'. 14 members said yes because they don't want to survive with plegia and 12 members wants recovery without sequelae. 4 members don't want thrombolytic therapy because of bleeding complication and 3 members don't want the therapy in ED but they accepted it in neurology intensive care unit. This is a cross-sectional study that we made it for point to the importance of thrombolytic therapy in stroke. Further studies are needed to change ideas thrombolytic therapy.

Keywords: emergency department, questionnaire, thrombolytic therapy,

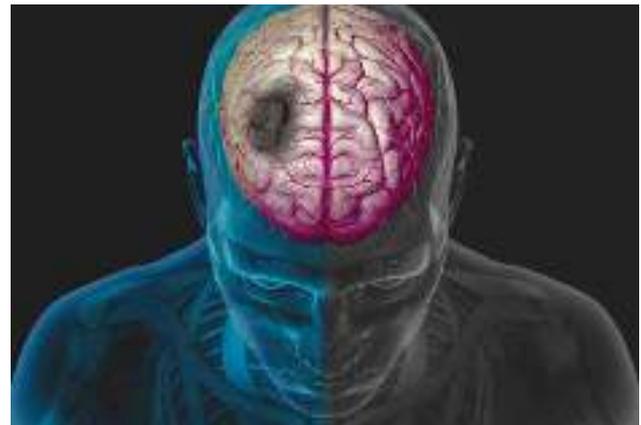


Figure 1.

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[Nörolojik Aciller]

**THE ROLE OF OXIDATIVE STRESS AND PLATELET
ENDOTHELIAL ADHESION MOLECULE (SCUBE1) IN
THE EARLY EVALUATION OF PATIENTS WITH STROKE:
AN OBSERVATIONAL STUDY**

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Objective: Two of the leading reactions in arterial thrombosis are aggregation and platelet activation which are the main causes of the ischemic complications of acute ischemic stroke. SCUBE1 [signal peptide-CUB (complement C1r/C1s, Uegf, and Bmp1)-EGF (epidermal growth factor)-like domain-containing protein 1] might act like a new platelet endothelial adhesion molecule and have pathological roles in cerebrovascular disorders. Thus,

in the present study, we aimed to assess the role of early oxidative changes and platelet activation in the management of patients with acute stroke by evaluating serum total oxidant status (TOS), total antioxidant status (TAS) and SCUBE1 levels.

Methods: Venous blood samples were obtained from 73 patients diagnosed as stroke in the emergency department within 8 hours of symptom onset and from 20 eligible healthy volunteers as control subjects in the current study. Patients were divided into two groups as follows: Group 1 (n=53), ischemic stroke; and Group 2 (n=20), hemorrhagic stroke.

Results: No significant differences were observed between patients with stroke and the controls with respect to age or sex (p = 0.990 and p = 0.990, respectively). In the stroke patients, mean serum TOS and SCUBE1 levels were significantly higher (p < 0.01 for both comparisons), and serum TAS levels were significantly lower (p < 0.01) versus control subjects.

A statistically significant difference was observed between groups 1 and 2 (p < 0.01) with respect to mean serum SCUBE1 levels. The mean serum SCUBE1 levels were higher in group 1 compared with group 2 (0.82 ± 0.49 and 0.40 ± 0.11, respectively). TOS and TAS levels were also significantly different between groups 1 and 2 (p < 0.01 for both comparisons).

Conclusion: These results indicate that platelet activation and oxidative stress together play a role in the pathogenesis of stroke patients. SCUBE1 and TOS might be an alternative criterion to the visual scanning techniques in describing patients initially thought to have stroke and distinguishing ischemic from hemorrhagic stroke.

Keywords: stroke, ischemic, hemorrhagic, SCUBE1, TOS, TAS.

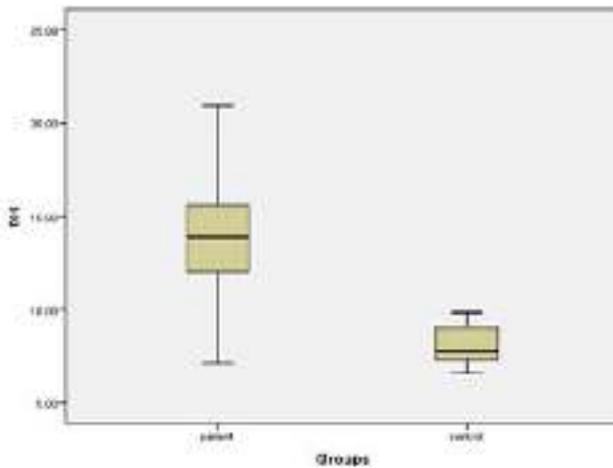


Figure 1. Total oxidant status (TOS) levels in stroke patients and controls.

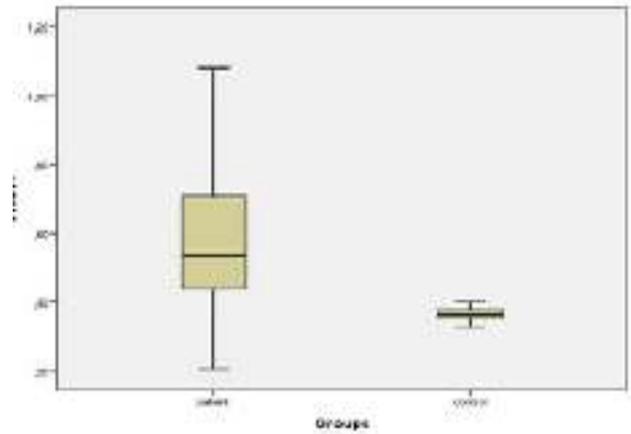


Figure 2. SCUBE1 levels in stroke patients and controls.

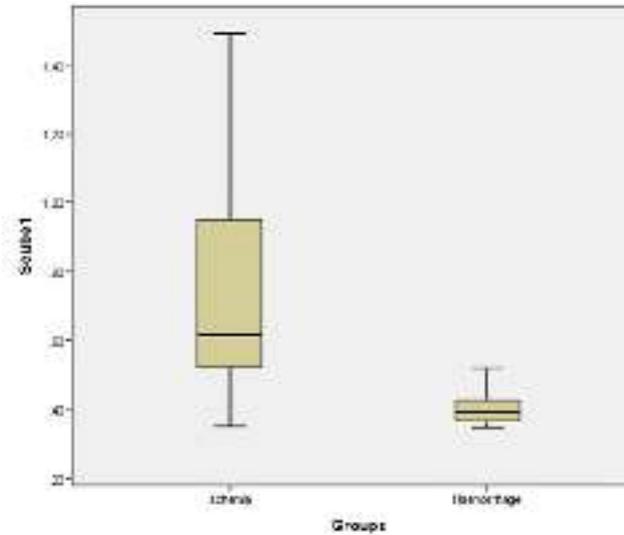


Figure 3. SCUBE1 levels in ischemic and haemorrhagic stroke patients

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[Nörolojik Aciller]

RETROSPECTIVE ANALYSIS OF THE STROKE PATIENTS WITH MALIGNANCY

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The association between cancer and excessive blood coagulation remains well-recognized, forming the basis of many reviews, monographs, symposia, and international conferences. Most of these begin by mentioning Trousseau and his eponymous syndrome. Trusseau has stated that; patients who presented with unexpected, unusual or migratory thrombosis most often diagnosed with a visceral cancer.

Material Methods: we have investigated the patients who were admitted to our Emergency Department with ischhemic stroke between January 1, 2011- July 1, 2014 retrospectively. We have detected 103 patinets stroke who have also also cancer history. Thirteen of the patients were with primary brain cancer and 5 patients with intracranial methastasis. Because of we did not have enough evidence to demonstrate that; there is a strong relationship between stroke and thromboembolic event, we have excluded these 18 patients from the study.

Results: Total 85 patients with stroke (56 male and 29 female) who had history of malignancy were included in the study. The mean age of the patients was $64,9 \pm 12,17$. Laboratory values of the patients are shown in Table 1. The patients were divided into two groups according to; if they have one or more stroke history. In the group of patients without chronic disease history, there were significant difference in hemoglobine levels between the patients with one or more stroke history ($12,42 \pm 2 - 10,90 \pm 1,69$ respectively, $p < 0.035$). When we investigated the patients according to the cancer type; 15 with prostatic cancer, 2 with cervix cancer, 10 with lung cancer, 8 with bladder cancer, 4 with breast cancer, 9 with skin cancer, 20 with other types of cancer.

Conclusion: the incidence of stroke related to malignancy increases day by day. Also the possibility of recurrent stroke in the patients with malignancy increases. It is determined that; low hemoglobin levels were identified in recurrent stroke patients, independently from chronic disease.

Keywords: Emergency Medicine, Trousseau Syndrom, Stroke

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[Nörolojik Aciller]

A RARE DIAGNOSIS IN THE EMERGENCY DEPARTMENT: CREUTZFELDT-JAKOB DISEASE

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Introduction: Prion diseases are rapidly progressive neurodegenerative diseases that have fatal outcome.Creutzfeldt-Jakob Disease (CJD) is the most common form of human prion diseases although it has an annual incidence of only 1 case per million population worldwide.The prognosis is poor and there is no effective treatment for CJD.Due to the non-specific neurological and psychiatric complaints, the diagnosis is very difficult especially in the emergency department (ED) settings. Here we report a 77-year-old female as a sporadic CJD patient who was consulted with the preliminary diagnosis of CJD and who had been misdiagnosed with osteoarthritis at another hospital.

Case Presentation: A 77-year-old female patient admitted to the ED with complaints of inability to talk, diminished walking and urinary and fecal incontinence.These symptoms started 6 months ago and new complaints added progressively during last three months.She admitted and discharged to another hospital with the diagnosis of osteoarthritis a week ago.The patient was brought to our ED with complaints of could not getting out from the bed and urinary and fecal incontinence.She had a medical history of diabetes mellitus and take oral antidiabetic drug.Physical examination revealed normal vital signs.Remarkable physical and neurological examination findings included poor general condition, lack of verbal response, oromandibular dystonia, flexor responses of upper extremities and eye opening response to painful stimuli, choreathetosis, and flexor plantar reflexes. The neck was supple without signs of meningismus.Laboratory evaluation,electrocardiogram, and computed tomography of head did not reveal any abnormality. During her ED admission, MRI with diffusion-weighted images (DWI) of the brain revealed high signal intensity predominantly in the bilateral caudate nucleus, putamen, posteromedial thalamus, and frontal cortex

(Figure 1a and b).Neurology department was consulted with the preliminary diagnoses of dementia, demyelinating disease, viral encephalitis, and prion disease.After consultation, the neurology service admitted to patient for further evaluation.During her hospital admission lumbar puncture revealed elevated 14-3-3 protein level in cerebrospinal fluid (CSF).All these findings including progressive neurological symptoms, findings of MRI, and CSF analysis,were considered together, the patient diagnosed with CJD. During follow-up the patient developed myoclonic seizures and died on 40th day of admission.

Discussion: CJD may be sporadic, familial or acquired (iatrogenic and variant).Sporadic CJD is the most common type of the disease and precise cause is unclear.The mean age for the onset of CJD is between 57-62 years.Family history of CJD and medical history of psychosis, multiple surgical procedures, and residence for more than 10 years on a farm were considered as significant risk factors for sporadic CJD.Myoclonus and rapidly progressive mental deterioration are the two major clinical features of CJD. Death usually occurs after a year of symptom onset.It is hard to diagnose CJD at ED settings.Gold standart diagnostic test for CJD is brain biopsy. However, a number of clinical and laboratory features are accepted for probable diagnosis of sporadic CJD.

In conclusion, even if ED physician could not diagnose CJD in first hand, he/she should keep the level of additional imaging and consultation threshold low especially in patients with ongoing mental status changes.

Keywords: Creutzfeldt-Jakob Disease, dementia, emergency medicine, prion diseases

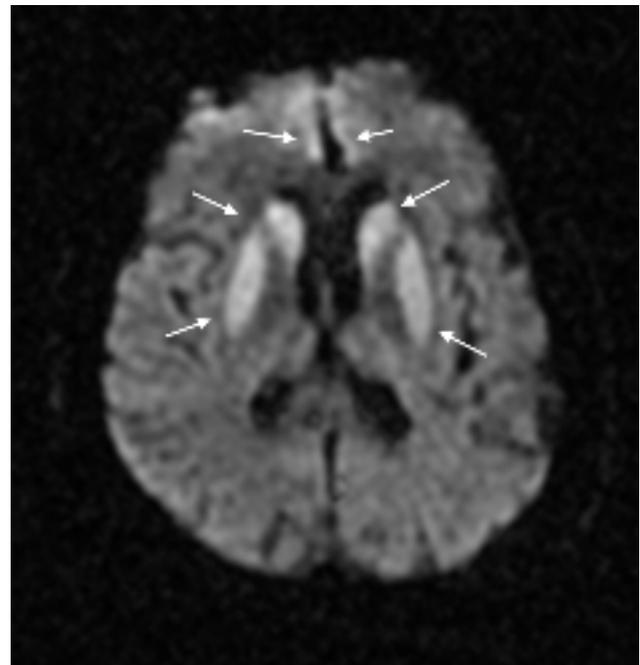


Figure 1a. MRI of the brain with diffusion-weighted and fluid attenuated inversion recovery images shows increased signal intensity predominantly in the bilateral caudate nucleus, putamen, posteromedial thalamus, and frontal cortex.

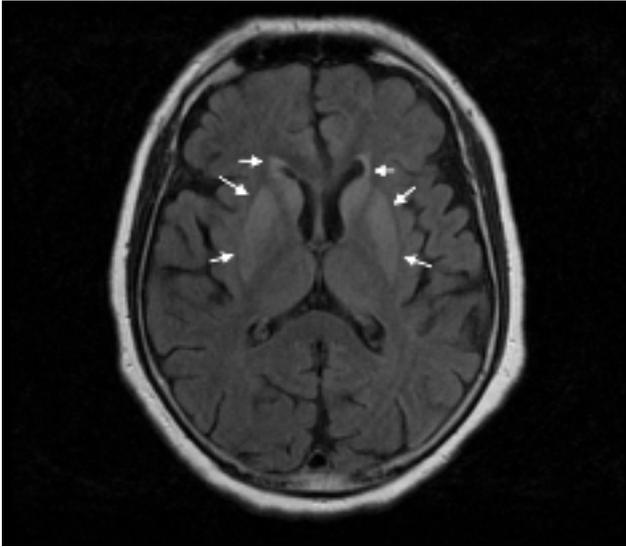


Figure 1b. MRI of the brain with diffusion-weighted and fluid attenuated inversion recovery images shows increased signal intensity predominantly in the bilateral caudate nucleus, putamen, posteromedial thalamus, and frontal cortex.

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[Nörolojik Aciller]

UNCOMMON CAUSE OF SUBACUTE SUBDURAL HEMATOMA

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Introduction: Subdural hematoma (SDH) is usually associated with traumatic brain injury. Usually resulting from tears in bridging veins which cross the subdural space, subdural hemorrhages may cause an increase in intracranial pressure (ICP). Subdural hematomas are often life-threatening when acute. Subacute and chronic subdural hematomas, however, have better prognosis if properly managed and develop over a period of days to weeks, often after minor head trauma, though such a cause is not identifiable in 50% of patients (1). Subdural hematoma is also commonly seen in the elderly and in alcoholics, who have evidence of cerebral atrophy. It is also more common in patients on anticoagulants, especially aspirin and warfarin. Patients on these medications can have a subdural hematoma with a minor injury. We presented an adult patient got the diagnosis of SDH without a history of head trauma or any medication.

Case: A 49 year old male who suffers from a headache for about 3 days, which has no response to analgesic drugs, applied to the emergency department. The patient mentioned no additional symptoms. and with a proper neurologic examinations we detected no pathological feature. He did not have an additional disease and history of using drugs, cigarettes or alcohol. He mentioned that he had no recollective head trauma, but holded himself to prevent sneezing. The patient underwent to head computed tomography (CT) and 1 cm hematoma which is placed in the frontotemporoparietal area with an 6 mm shift in the midline area was detected. The patient was hospitalized to neurosurgery clinic and after five days of observation he was for five days discharged without operation.

Discussion: Subacute SDH is defined as progress of SDH in 3-14 days. Most of the patients are over the age of 50. Also people

with head trauma history, chronic alcoholism, epilepsy and coagulopathy are more tend to SDH (2). Emergency department doctors should pay more attention to this group of patients about subdural hematoma. However, as mentioned in this presented case SDH, subarachnoid hemorrhage have to be kept in mind in conditions which make intracranial pressure increase. Doctors should give their time properly to take patient's medical history

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Keywords: Subdural hematoma, non traumatic, emergency department

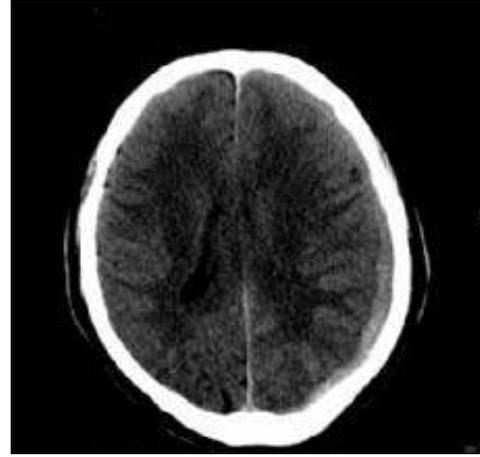


Figure 1. Subdural hematoma at fronto temporal area on cranial tomography.

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[Nörolojik Aciller]

SPONTANEOUS VERTEBRAL ARTERY DISSECTION PRESENTING ED VERTIGO AND RIGHT HEMICRANIAL PAIN

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Objective: Vertigo and headache in young patients is mostly based on peripheral pathologies. Central pathologies is shown rarely but it is critical, also may cause increased risk of mortality and morbidity. Vertebral artery dissection (VAD) can be spontaneously or can follow blunt cervical trauma. Sub-intimal dissections swell and occlude the artery. The reduced blood flow rate and endothelial injury encourage thrombus formation with the inevitable emboli causing brain stem and cerebellar infarctions. We aimed to engage attention that VAD is not because of trauma in young patients

Case: A 29 year old female was admitted to emergency department with right hemicranial pain, vertigo and vomit starting about 24 hours ago. There were no comorbid diseases or drug usage. All vital signs of patient were stable (TA:120/80 mmHg, Fever 36.7 C, Pulse: 80/min, Sat.O2: %99, RR:18/min). The patient was oriented and cooperated. There were left hemihypoesthesia and right sided ataxia on neurological examination and no abnormalities on other systemic examination. Complete blood count, biochemical parameters, cardiac markers,

electrocardiogram and brain CT were normal. On the magnetic resonance imaging there were lacunar diffusion limitation in bilateral cerebellar hemisphere (Figure 1) and the cervical CT angiography showed occlusion on right vertebral artery (Figure 2-3). After admission to neurology clinic the cerebral angiography was performed and there was the dissection starting from arise of the right vertebral artery. After two weeks with anticoagulation treatment complete recovery was observed.

Conclusion: Because of the fact that many of the underlying disorders are treatable, the causes of ischemic strokes in young adults are usually require more extensive investigations than more elderly patients in order to find an underlying cause. Most of patients can be resolved without sequelae based on careful physical examination, early diagnosis and treatment. And also it is important to remind that trauma is not necessarily for emerge of vertebral artery dissection.

Keywords: Vertebral artery dissection, hemicranial pain, vertigo, emergency department

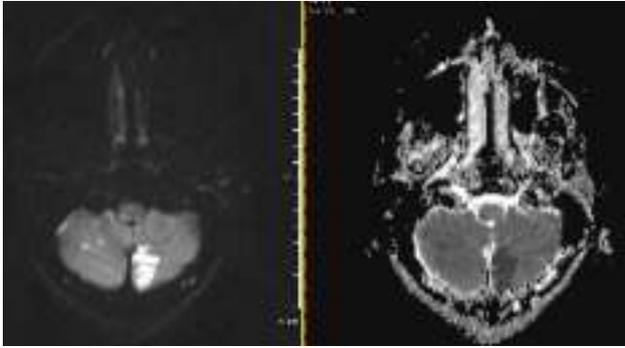


Figure 1.



Figure 2.

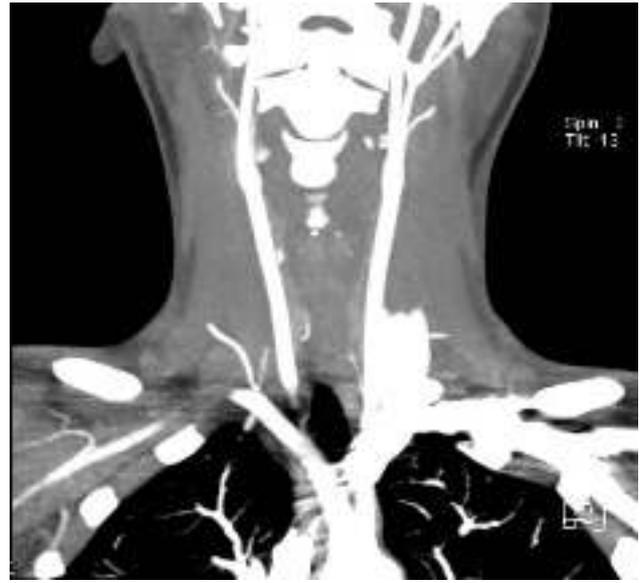


Figure 3.

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[Nörolojik Aciller]

TRAP AT EMERGENCY DEPARTMENT

Funda Karbek Akarca, Alper Sener, Ayşe Güler, Yusuf Ali Altuncı, Murat Ersel
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Introduction: Entrapment neuropathies are compression neuropathies; that are formed the result of remaining under pressure through the peripheral nerve's anatomical pathways.

Case: 17-years-old woman female patient, refers to the emergency department with the complaint of the tangle of foots while walking since 2 days. From the patient's story it is learned that she waited by squatting for 1 hour, 3 days ago. At the physical examination; it is observed that the patient couldn't stepped onto foots, also it is observed that there is hipostez at the leg lateral, and between the 1. and 2. Toe, and foot dorsiflexion strength was 0/5. At the taken EMG; there were more distinctive bilateral at right side electrophysiological findings that are compatible with the entrapment of the fibula nerve at the fibula head.

Conclusion: Diagnosis of entrapment neuropathies similar to many other diseases' symptoms and can lead us to think another diagnosis and being a huge clap for the clinicians at the emergency departments.

Keywords: Entrapment neuropathies, emergency department, numbness, weakness

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[Nörolojik Aciller]

MECHANICAL THROMBECTOMY IN ACUTE STROKE PATIENT

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Introduction: Mechanical thrombectomy by using a single stent retriever system has demonstrated high efficacy for recanalization of large-artery occlusions in acute stroke.

Clinically, thrombolytic therapy with use of recombinant tissue plasminogen activator (tPA) remains the most effective treatment for acute ischemic stroke. However, the use of tPA is limited by its narrow therapeutic window and by increased risk of hemorrhagic transformation. In this case; we showed that; a left side medial artery occlusion can be treated effectively with thrombectomy with early diagnosis by showing with angio tomography.

Case: Forty six years old man patient referred to our emergency department with right side disability and aphasia that happened two hours ago. His vital parameters were normal (BP:166/92,HR:70). blood glucose level is 152, sinus rhythm was seen in her ekg. She had no medical history also. In his physical examination; his right upper and lower extremities strength were 1/5 and he was global aphasic. there was no problem with other systems examination. His second hour NIHSS score was 20. we planned cranio and cervical anjiography and other preparations for thrombolytic treatment. We consulted neurology department immediately. After half and two hours his referral to our ED, his blood test result and cranio-cervical anjiography results were ready. On his anjiography; there was a chronic stenosis in left internal carotid artery and also, a thrombus in medial cerebral artery. we consulted the patient with interventional radiology for thrombectomy. After a stent was applied for the stenosis, thrombectomy to left medial cerebral artery was done by interventional radiology. He was transferred to neurology intensive care unit. 6 hours after the approach, his right side disability was disappeared and he had moderate dysarthria. In his physical examination he had no right side disability (5/5 strength upper and lower extremities) his dysarthria was better than sixth hour examination while discharging from neurology after seven days.

Discussion and Conclusion: The aim of treatment of acute ischemic stroke is to revascularize to the occlusion of thrombus of vessel. Unlike ischemic core, the target of treatment is to recover penumbra area so that, the increase of ischemic field is blocked. Intravenous thrombolytic therapy (iv rtPA) is the standard treatment for ischemic stroke treatment. But the rates of revascularization for distal internal carotid artery (ICA) is %5-9, for M1 segment of the middle cerebral artery is %30-40 are reported, in patients who are detected in the proximal ends of vessel occlusion and treated with IV rtPA. In a study that examined the cause of the acute ischemic stroke and evaluating patients who underwent conventional angiography, is shown that; ICA, the MCA M1 or basilar artery occlusion are accompanied more than 90% of the patients with NIHSS score \geq 12. High NIHSS score is not good clinical response in patients treated with IV rtPA. This is due to the low rate of recanalization remain in large vessels. Therefore; Intra-arterial treatment options should be included in our absolute treatment strategy, in the patients who are identified proximal vessel occlusion in ischemic stroke.

Keywords: Mechanical Thrombectomy, Acute Stroke Patient

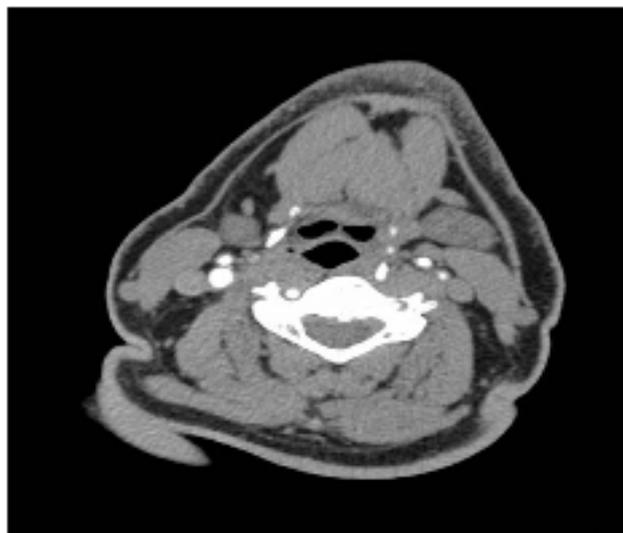


Figure 1. The chronic stenosis in left internal carotid artery

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[Nörolojik Aciller]

A RARE CAUSE FOR SEIZURES: THROMBOTIC THROMBOCYTOPENIC PURPURA

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Introduction: A seizure is an episode of neurologic dysfunction caused by abnormal neuronal activity that results in a sudden change in behavior, sensory perception, or motor activity. The clinical spectrum of seizures includes simple and complex focal or partial seizures and generalized seizures. For patients presenting with new-onset seizure disorder, the list of possible causes is longer and includes the following:

- Central nervous system pathologies (stroke, neoplasm, trauma, hypoxia, vascular abnormality)
- Metabolic abnormalities (hypoglycemia/hyperglycemia, hyponatremia/hyponatremia, hypercalcemia, hepatic encephalopathy)
- Toxicologic etiologies (alcohol withdrawal, cocaine, isoniazid, theophylline)
- Infectious etiologies (meningitis, encephalitis, brain abscess)

While caring for seizure patients in emergency department, all of the differential diagnoses have to be ruled out by laboratory and radiographic studies.

Case: 39 years old male admitted to emergency medicine for generalized tonic clonic seizure for the first time in his life. He had diabetes mellitus previously and no known epilepsy or seizure history. He didn't have any drug abuse or illicit substance use. His vital findings were stable, blood glucose was 385 mg/dl and his ECG findings were sinus rhythm with RBBB. He was in postictal state without any trauma finding and the other physical and neurologic examination was normal. His cranial computed tomography shown no acute pathology and his hemogramme and laboratory studies as follows; hgb: 12,8 g/dL, hemotocrit 36,5 %, MCV: 83,5 fL, platelet: 37.000 / μ L, WBC: 7780 / μ L, LDH: 497 U/L, direct and indirect bilirubin, serum transaminases and renal function tests were in normal range. His blood smear

revealed 5-6% fragmented erythrocytes and 20.000 thrombocytes in mm³. The patient admitted to ICU with TTP diagnosis.

Discussion: Thrombotic Thrombocytopenic Purpura (TTP) is a rare blood disorder characterized by clotting in small blood vessels of the body, resulting in a low platelet count. In its full-blown form, the disease consists of the pentad of microangiopathic hemolytic anemia, thrombocytopenic purpura, neurologic abnormalities, fever, and renal disease. In classic TTP, acute renal failure findings may be seen rarely while neurologic manifestations are more common. Signs and symptoms may be related to neurologic dysfunction, anemia and thrombocytopenia. Mental status change, seizures, hemiplegia, paresthesias, visual disturbance, and aphasia may be seen. Fatigue may accompany anemia. Although there was not hemolytic anemia, fever or acute renal fever in our case, seizures with thrombocytopenia, erythrocyte fragmentation in blood smear, low plasma ADAMTS13 level supported TTP diagnosis.

TTP managed by plasma exchange, corticosteroids and ASA (plt>50.000). In our case, Prednisolon 80mg/day has been started and plasmapheresis was administered for 6 days. On his following days, seizures resolved and blood thrombocytes counts normalized.

Results: While evaluation of patients presenting with new-onset seizure disorder to emergency department, central nervous system pathologies, metabolic and hematologic abnormalities such as TTP, toxicological and infectious etiologies must be ruled out carefully. Treatment must be targeted to underlying etiology after initial management of seizures.

Keywords: causes of new-onset seizure, thrombotic thrombocytopenic purpura,

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[Nörolojik Aciller]

CERVICAL DISTONIA ASSOCIATED WITH COMBINE ORAL CONTRACEPTIVES

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Introduction: Cervical dystonia is a neurological disorder characterized by abnormal movement and posture changes caused by involuntary contractions of head, neck and shoulder muscles. Cervical dystonia is classified into two groups as primary (idiopathic) and secondary. Primary cervical dystonia is more common and multifactorial such as genetic and environmental. The most important reason of secondary cervical dystonia is drugs. In this article, a female patient who developed cervical dystonia associated with combined oral contraceptive therapy (ethinylestradiol and cyprotherone acetate) which is not among drugs caused secondary dystonia was presented.

Case: A 22 years-old woman referred to emergency medicine with contraction at the neck. She said that a painful contraction was especially on the left side of the neck for several hours, limited neck motions and occurred suddenly and she never have been as a complaint before. When she referred to the emergency department, she was conscious and cooperative, her general condition was good. Tension was 120/80 mmHg, pulse was 84 beats/min, oxygen saturation was 100%, respiratory rate was 18 breath/min and temperature was 36,4°C. On physical

examination, focal cervical dystonia and retrocollis were detected. Neurological and other systems examinations were normal. There was no psychiatric problems in her medical history. She told using combine oral contraceptive drug for six days due to menstrual cycle disorder recommended by obstetric physician. Family history was unremarkable. Routine blood count and biochemical results were normal.

The patient's drug induced acute dystonic reaction was considered to be secondary cervical dystonia. During our follow-up, in emergency department respectively pheniramine maleate, biperiden as an anticholinergic agent and midazolam as a benzodiazepine agent were administered. Her complaints were resolved completely. Oral contraceptive agent she used was stopped and the patient was discharged.

Conclusion: In patients presenting to the emergency department, medication should be considered in the different diagnosis of dystonia. However how oral contraceptives cause movement disorder is unknown, it should be considered that in women cases these side effects can be observed.

Keywords: cervical dystonia, drug side effects, emergency

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[Nörolojik Aciller]

HYPERGLISEMIA AS A CAUSE OF FOCAL NEUROLOGIC FINDINGS

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Introduction: Patients who have ischemic cerebrovascular event encompass appreciable part of patients who apply to departments of emergency. Diabetes mellitus (DM) is a well-known risk factor for cerebrovascular disorders. Also, uncontrolled high blood sugar levels have been shown to be a cause of transition neurologic problems. In here, we presented the management of, and the clinic and radiologic findings of a patient with hyperosmolar hyperglycemic nonketotic state and central facial paralysis evaluated in our department of emergency

Case Report: A 76-year-old woman patient having diabetes mellitus and hypertension was admitted to our department of emergency with complaining of balance problem and facial weakness. Her blood pressure, Sa O₂, body temperature, and pulse rate were recorded as 126/82 mmHg, 98%, 36.7 C, and 102/minute, respectively. On physical examination, central facial paralysis on the left side and ataxic gait on the right side were determined. At the time of her admission, blood sugar of the patient was 531 mg/dl. In arterial blood gas results, pH was 7.45, HCO₃ was 22.9 mmol/L, osmolarity was 340 mOsmol/L. Urine keton was found negatively. The patient had a hyperosmolar hyperglycemic nonketotic state (HHNS), and standard treatment was started for HHNS. A diffusion weighted magnetic resonance imaging (MRI) was planned in order to assess the likelihood of cerebrovascular event (Image 1a). Following the treatment of HHNS, the symptoms of the patient was improved dramatically. After that, a control diffusion weighted MRI was taken (Image 1b).

Discussion: The some of elder patients with uncontrolled DM can rarely complain with central facial paralysis. We can find a few hyperdense areas on computerized tomography or some lesions in the level of basal ganglions on T1 weighted MRI of

these patients. In our case, we considered that this patient had a cerebrovascular event because she had some atypic symptoms, such as balance problem, facial paralysis and ataxic gait. Her limited diffusion capacity on diffusion weighted MR was compatible with the clinical finding. The improvement of diffusion capacity on MRI following regulation of her blood sugar showed that her symptoms were related to hyperglycemia.

In this case, a trombolitic treatment might have been started according to the clinical and laboratory findings of the patient. In the literature, trombolitic therapy is stated as contraindicated when blood sugar level is lower than 50mg/dl, but it is uncertain in the case of hyperglycemia.

Conclusion: Patients with hyperosmolar hyperglycemic nonketotic state who apply to emergency departments can have focal neurologic findings, and can seem like cerebrovascular event. Trombolitic treatment can be started If these patients are mistakenly assessed as ischemic stroke. We should keep in mind that patients with hyperglycemia may seem like ischemic stroke, and appropriate treatment can improve symptoms of these patients

Keywords: Focal neurologic findings, Nonketotic hyperglycemia, Emergency department

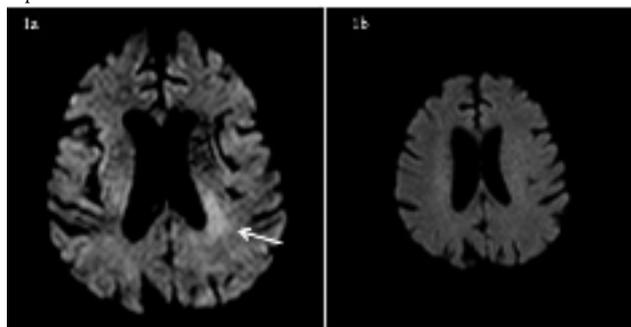


Figure 1a: Acute restricted diffusion around left ventricular posterior horn **Figure 1b:** Normal diffusion-weighted MR image

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[Nörolojik Aciller]

HIGH MORTALITY, EVALUATE IMMEDIATELY

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Traumatic head injuries are a major cause of death, and disability but it might be best to refer to the damage done as traumatic brain injury. Traumatic subarachnoid hemorrhage results from the breakdown of the parenchyma and subarachnoid vessels and presents with blood in the cerebrospinal fluid. Patients who show early development of traumatic subarachnoid hemorrhage have a threefold higher mortality risk than those without traumatic subarachnoid hemorrhage (42% vs. 14%, respectively). Aim of this case presentation is pay attention to severity and high mortality of closed head injury with subarachnoid hemorrhage.

Case: A 29 year old man was brought to the emergency department with complaints of fall from the second floor. He was breathing but unconscious. At physical examination he had spontaneous breathing and circulation and GCS was 13. At monitor SpO2 %94, pulse 110 beat/minute and blood pressure was 150/90 mmHg. Bilateral D/I pupillary light reflex was positive. There was laceration at frontal region. Tomography was planned for patients with changes in consciousness. At

tomography there was subarachnoid hemorrhage at frontal parenchymal and intraventricular bleeding. Patient was included in the operating room immediately. Hematoma evacuated and fracture repaired. After one week intensive care unit follow patient transferred to clinic.

Conclusion: Traumatic brain injury with subarachnoid hemorrhage has high mortality risk and this patients management should be quickly and carefully. In the emergency department especially head trauma patients with altered mental status should be evaluated quickly and Patients requiring immediate surgery should be operate immediately.

Keywords: Traumatic head injuries, subarachnoid hemorrhage, mortality



Figure 1. CT view of patient



Figure 2. operation view of patient

NUMBNESS AND LOSS OF SENSATION, KEEP IN MIND DIAGNOSIS: GBS

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Guillain-Barre syndrome (GBS), a polyneuropathic disease, may affect peripheral nervous system, autonomic nervous system and also cranial nerves. It is an immune-mediated disease characterized by symmetrical muscle weakness and areflexia advances in days. GBS is the most common cause of acute flask paralysis since polio has been eradicated in most of the world. It affects all ages in the population with an incidence of 0.4-4/100.000. Even though it is not encountered widely, early diagnosis and treatment is crucial for the prognosis.

Generally, there was a history of infection (mostly viral notably upper respiratory tract infections) 1 to 4 weeks before the onset of the disease. Nevertheless there is very limited data about interaction of GBS with specific viral infections.

50 years old male presented to our emergency department with complaints of numbness on his hands for 3 days. After that, he felt numbness on all of his body the day before he applied to emergency, with loss of his body balance and inability to walk. He had a history of viral upper respiratory tract infection 13 days ago. His general condition was good with full consciousness, orientation and cooperation. He demonstrated physical examination findings of bilaterally isochoric pupils and equal light reflexes, reduced gag reflex and 5/5 muscle strength in upper and lower extremities proximal to the wrists bilaterally. However, muscle strength was reduced distally and deep tendon reflexes were shortened. His laboratory results was in normal range and show no specific information about the diagnosis. We performed lumbar puncture to the patient and met increased protein levels and normal cerebrospinal fluid blood count (albuminocytologic dissociation). We consulted and hospitalized the patient to neurology department with diagnosis of Guillain-Barre syndrome.

More than 50% of GBS cases become symptomatic after a prodromal period of 2 weeks, progress 5-10 days and symptoms last up to 28 days. The disease is generally monophasic and relapse rarely. Sensational symptoms and paresthesias are usually observed with pain and detected in the early stages. After the sensational symptoms, weakness appears from lower extremity to upper.

To sum up, Guillain-Barre syndrome must be kept in mind for differential diagnosis for patients presented with numbness, muscle weakness and loss of sensation in emergency departments.

Keywords: numbness, Guillain-Barre, syndrome

A RARE CAUSE OF PSYCHOSIS; FAHR'S SYNDROME

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Fahr's Syndrome is a rare, genetically dominant, inherited neurological disorder characterized by abnormal deposits of

calcium in areas of the brain that control movement, including the basal ganglia and the cerebral cortex. The disease usually manifests itself in the third to fifth decade of life but may appear in childhood or later in life. Initially patients can be asymptomatic. Severe forms can later present with progressive psychosis, cognitive impairment, dementia, movement disorders, and parkinsonian symptoms. The diagnosis requires the following criteria be met; family history consistent with autosomal dominant inheritance, progressive neurological or neuropsychiatric manifestations, bilateral calcification of the basal ganglia, exclusion of other causes (metabolic, infectious, toxic or traumatic). The disease progresses steadily, and there is no known cure or specific treatment currently. We aimed to remind this clinic-radiologic syndrome with this patient who was admitted to emergency department because of neurological symptoms.

Case: A 66 year old woman admitted to emergency department because of screaming and aggressive behaviors. At her history there was deterioration in the movement for 1 year, growing restlessness and insomnia, loss of appetite, irritability and weight loss for 2 months, humming and self-talk for last two week. At her physical examination blood pressure was, 110/70 mm Hg; pulse rate, 84 beats/min (regular); temperature, 36.8°C, and SpO2 99 %. Neurological examination was normal. At laboratory analysis there was no metabolic, infectious and toxic disease findings. Bilateral calcification of the basal ganglia on brain tomography was viewed. No abnormalities in the neurological consultation and patients referred to psychiatry. Patients with a diagnosis of psychosis depend on Fahr syndrome and lorazepam, risperidone treatment was started and followed by psychiatry.

Conclusion: Fahr's syndrome is a clinical-radiological syndrome and it should be kept in mind in patients presenting to the emergency department with various neurological and psychiatric symptoms. Emergency physicians should recognize these radiological signs.

Keywords: psychosis, Fahr's Syndrome, neurologic emergency

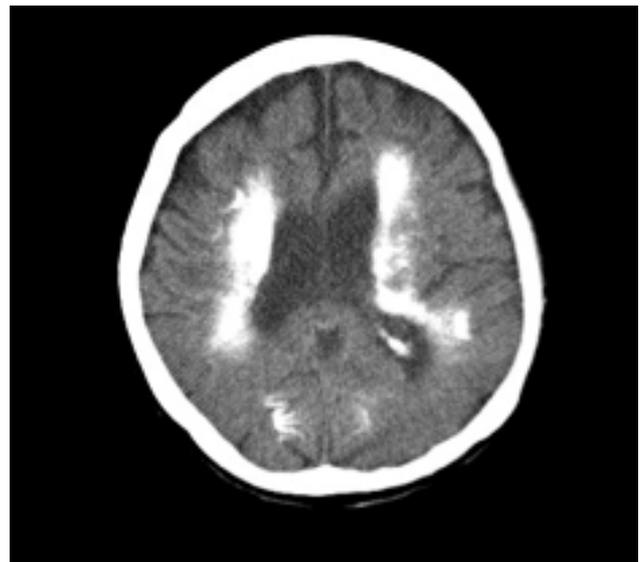


Figure1. Computed tomography sign of Fahr's Syndrome

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A RARE CAUSE OF SUDDEN WEAKNESS IN LOWER EXTREMITIES IN A YOUNG ADULT: PATHOLOGICAL FRACTURE OF THE VERTEBRAE. A CASE REPORT:

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If a young adult patient presents to an emergency department with weakness of the lower extremities, first considerations as causes of this complaint would likely be vertebral trauma, demyelination disorders, disc pathologies, Guillain-Barre disease and electrolyte imbalances. Pathological fractures may not be first considered among the possible causes of the lower extremity weakness in a young adult patient. In this case report, we present a 35-year-old male with a sudden development of weakness and paresthesia in the lower extremities. The patient has no medical record of a known illness. Magnetic resonance imaging of the vertebrae showed multiple metastatic lesions and one pathological fracture on T5 segment and pressure on the medulla spinalis. This case shows, while assessing young adult patients presenting with paresthesia and/or weakness, emergency physicians should keep in mind that pathological fracture might be the cause of clinical table regardless of the patient's history without any prior disease or complaint.

Keywords: Pathological, Vertebra, Fracture, Emergency medicine, Weakness



Figure 2.



Figure 3.



Figure 1.

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[Acil Tipta Yeni Teknolojiler]

IS TISSUE OXYGEN SATURATION RELATED WITH COMPLETE BLOOD PARAMETERS

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Objectives: The aim of the present study was to determine the relationship between complete blood count (CBC) parameters and tissue oxygen saturation (StO₂) levels of the emergency department (ED).

Methods: We examined 130 patients over 18 years who were admitted to our ED and underwent laboratory evaluation between 21 May-28 May 2014. Age, gender, CBC parameters including WBC, Hb, Hct, MCV, RDW, Plt and MPV levels of the patients were noted. For the StO₂ level measurement, an

Inspectra device was placed to the right thenar muscle for 10 s and mean of the first, fifth and 10th second values were noted at the admission time.

Results: In our study 66 (50,8%) females, 66 (48,2%) males total 130 patients were included. Mean age of our study group was 47,75±18.91 (min:18, max:80). Mean StO2 level of females was 80,52±5,89 (min:67,max:92) and mean StO2 level of males was 78,50±6,53 (min:62,max: 93). Mean StO2 values of the genders were significantly different (p=0,02). StO2 levels were corelated with Hct (p=0,032, r=0,189) and MPV(p=0,016, r=-0,211) levels.

Conclusion: StO2 level measurement may be helpful in predicting the Hct and MPV values of the ED patients.

Keywords: Emergency, tissue oxygen saturation, mean platelet volume platelet, complete blood count

Table1. Correlations between Sto2 and age, WBC, Hct, MCV, Plt, MPV and RDW according to gender.

	Age	WBC	Hb	Hct	MCV	Plt	MPV	RDW
StO2 correlation for females	p: 0.048 r: 0.244	p:0.171 r: -0.17	p:0.894 r:-0.017	p:0.245 r:0.146	p:0.264 r:-0.141	p:0.057 r:0.237	p:0.058 r:-0.236	p:0.599 r:0.066
StO2 correlation for males	p:0.639 r:0.060	p: 0.479 r: 0.090	p:0.337 r: -122	p:0.639 r:0.060	p:0.123 r:0.195	p:0.011 r:0.317	p:0.207 r: -0.16	p: 0.864 r: -0.02
StO2 correlation for total	p:0.639 r:0.06	p:0.699 r:0.034	p: 0.269 r:0.098	p:0.032 r: 0.189	p:0.944 r: -.006	p:0.155 r:0.126	p:0.016 r:-0.211	p:0.240 r:0.104

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RELATIONSHIP BETWEEN END-TIDAL CARBON DIOXIDE AND TISSUE OXYGEN SATURATION LEVELS IN SMOKERS AND NONSMOKERS

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Background and AIM: End-tidal carbon dioxide (EtCO2) monitoring has been used in a range areas. Near-infrared spectroscopy (NIRS) allows continuous, noninvasive measurement of tissue hemoglobin oxygen saturation (StO2) in muscle and has been studied for a wide range of conditions. In this study we aim to determine the levels of EtCO2 and StO2 in smokers and nonsmokers and the relationship between these two parameters.

Material and Methods: We examined 201 healthy volunteers including 156 smokers and 45 nonsmokers. We measured thenar muscle StO2 via NIRS device. The EtCO2 was determined by a capnograph. Baseline measurements were obtained from all participants after not-smoking for two h. Second measurements were taken 5 min after smoking was finished.

Results: In nonsmokers baseline EtCO2 and baseline StO2 levels were correlated (p:0.035,r:0.315). But we couldn't find significance between females and males for mean baseline EtCO2 (p:0,246) and baseline StO2 (p:0.264) levels in this group.

Conclusion: Smoking affects tissue oxygenation. In nonsmokers baseline EtCO2 and baseline StO2 levels were correlated, but there was no correlation for these two parameters in smokers.

Keywords: End-tidal carbon dioxide, near-infrared spectroscopy, tissue hemoglobin oxygen saturation, smoker, nonsmoker

Table 1. Baseline StO2 and baseline EtCO2 levels of smokers and nonsmokers according to gender.

	Smoker Group		Nonsmoker group		p
	F	M	F	M	
Age	30.94±8.0 (min:18,max:52)	34.06±10.58 (min:18,max:67)	36.12±10.9 (min:23,max:49)	37.61±16.74 (min:24,max:71)	0.55
	Total: 33.02±9.88 (min:18,max:67)		Total: 37.04±17.72 (min:23,max:71)		
Baseline EtCO2 (mmHg)	39.79±3.53 (min:31,max:45)	44.02±4.94 (min:35,max:54)	44.06±3.24 (min:38,max:50)	43.11±4.71 (min:36,max:54)	0.195
	Total: 42.61±4.94 (min:31,max:54)		Total: 43.47±4.21 (min:36,max:54)		
Baseline StO2 (%)	75.96±5.23 (min:69,max:86)	78.73±4.16 (min:70,max:86)	75.71±5.58 (min:65,max:81)	75.32±2.85 (min:70,max:80)	0.004
	Total: 77.81±4.71 (min:69,max:86)		Total: 75.47±4.05 (min:65,max:81)		

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[Acil Tipta Yeni Teknolojiler]

USE OF TISSUE OXYGEN SATURATION LEVELS AS A VITAL SIGN IN THE ED TRIAGE

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Objectives: The utilization of vital signs as triage tools remains a mainstay of emergency patients. The evolution of monitoring technologies, including the noninvasive tissue oxygen saturation devices has improved our ability to monitor the critically ill patients. The aim of the present study was to determine the tissue oxygen saturation (StO2) levels of the patients as a vital sign during emergency triage.

Methods: Approximately 30-35 patients present to our emergency department each day and the triage of these patients are performed by a nurse at admission time. A three level system (1:red,2:yellow,3:green) is used to determine the triage level of the patients presenting to our department. We examined 150 patients during five days. Age gender, triage levels and hospitalization status of the patients were noted. For the StO2 level measurement, an Inspectra device was placed to the right thenar muscle for 10 s and mean of the first, fifth and 10th second values were noted at the admission time.

Results: In our study 73 females (48.6%), 77 males (51.4%) totally 150 patients were included. We determined a significant difference between green and yellow (p=0.00), green and red (p=0.00), yellow and red (p=0.001) according to StO2 levels. We couldn't find a significant difference between females and males in triage groups (p=0.13 for green, p=0.71 for yellow, p=0.86 for red). There was correlation between StO2 - triage level (p=0.00,r=0.609) and StO2-hospitalization status (p=0.00,r=0.449).

Conclusion: StO2 level measurement may be helpful in determining the triage level of the patients presenting to the ED.

Keywords: Emergency, tissue oxygen saturation, triage

Table 1. Age, StO2 levels and hospitalization status of the groups according to gender

	Green (n:58, 38.7%)		Yellow (n:43, 28.6%)		Red (n:49, 32.7%)	
	F (n:35,47.9%)	M (n:23,29.9%)	F (n:18,24.7%)	M (n:25,32.5%)	F (20,27.4%)	M (n:29,37.7%)
Age	29.14±13.84 (min:18,max:65)	37.47±16.57 (min:23,max:70)	54.72±13.21 (min:40,max:75)	53.04±16.95 (min:18,max:75)	57.90±15.87 (min:18,max:75)	56.03±14.65 (min:22,max:80)
StO2 (%)	74.69±1.54 (min:70,max:76)	76.09±2.64 (min:72,max:80)	80±5.15 (min:73,max:87)	79.88±4.04 (min:75,max:87)	83.15±8.67 (min:62,max:93)	82.76±7.16 (min:67,max:92)
Hospitalization						
Discharged (n:102, 68%)	n:58 (100%)		35 (81.4%)		9 (18.4%)	
Hospitalized into service (n:17, 11.3%)	0 (%)		8 (18.6%)		9 (18.4%)	
Hospitalized into ICU (n:31, 20.7%)	0 (%)		0 (%)		31 (63.3%)	

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[Ortopedik Aciller]

TIBIAL PLATEAU FRACTURES AFTER STUMBLING WITHOUT FALL OR AN OTHER TRAUMA

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Tibial plateau is one of the most critical load-bearing areas in the human body. Tibial plateau fractures can occur as a result of high-energy trauma or in low-energy trauma when bone quality is poor. This fractures occur due to a combination of axial loading and varus/valgus applied forces leading to articular depression, malalignment and an increased risk of posttraumatic osteoarthritis. The most common mechanism of injury is motor vehicle accident, followed by falls and sports injuries, with 40% of injuries being poly-trauma. The mean age of people with this type of fracture is 51. Tibial plateau fractures in younger patients are commonly the result of high-energy injuries. We will present a 41 year old man patient with tibial plateau fractures after stumbling without fall or an other trauma.

41 year old man was admitted to the emergency room due to pain and swelling in the left knee after stumbling. According to his medical records he has no disease history. His initial vital signs were; blood pressures 110/54, pulse rates was 88/min, temperature was 36,6 C, respiratory rate was 13 breaths/min, oxygen saturation %97. On physical examination, there were pain, swelling, tenderness and limitation of movement in left knee. These symptoms began after stumbling. There were no history of falls or an other trauma to the knee and he had no history of osteoporosis or chronic illness. X-ray and joint tomography were performed. X-ray and Computed tomography (CT) imaging of the left knee demonstrated tibial plateau fracture. (figure 1,2) Orthopedic consultation was requested. The patient was discharged with making a long leg cast and he was called to the clinic control.

Tibial plateau fractures in younger patients are commonly the result of high-energy injuries. But in our patient tibial plateau fracture occurred after stumbling. So there might be a tibia fracture with low-energy trauma. A simple X-ray of the joint prevents us from omitting these patients. Early detection and appropriate treatment of these fractures are critical for minimizing patient disability and reducing the risk of documented complications, particularly posttraumatic arthritis

Keywords: Stumbling, low-energy trauma, Tibial Plateau Fractures



Figure 1 x-ray of tibial plateau fractures-the broken line indicated by the arrow

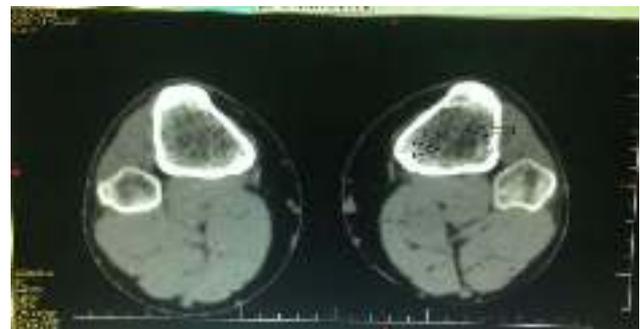


Figure 2 ct image of tibial plateau fractures-the broken line indicated by the arrow

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[Ortopedik Aciller]

BILATERAL RADIAL HEAD FRACTURES

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Objective: Radial head and neck fractures are common in young to middle age adults and are seen in nearly 20 % of acute elbow injuries in this age group. Isolated radial head fractures are not common and include about 2% of all fractures around the elbow. Bilateral radial head fractures are rare. It can be usually associated with severe trauma and associated fractures and dislocations. These injuries can be easily missed by the attending physician if the symptoms are more severe on one side, thus easily neglecting the other.

Case: A 32-year-old man presented to the emergency department following a fall on both out stretched hands in 2 meters height. She complained of pain and swelling in right elbows. On clinical examination the radial heads were found to be tender. Supination and pronation of the fore arms were restricted bilaterally. There was no neurovascular deficit. No other injuries were noted. X-rays and CT scanning showed a Mason type I radial head fracture on both sides. No surgical intervention was needed. Oral analgesia was prescribed, and she was treated with a bilateral sling for approximately 2 weeks followed by elbow mobilization and physical therapy

Conclusion: A highindex of suspicion and thorough clinical and x-ray examination is essential in patients who present with a history of falls on out stretched hands.

Keywords: Radial head fractures, Bilateral fractures



Figure 1. Radius başı fraktürü



Figure 2. Radial head fracture

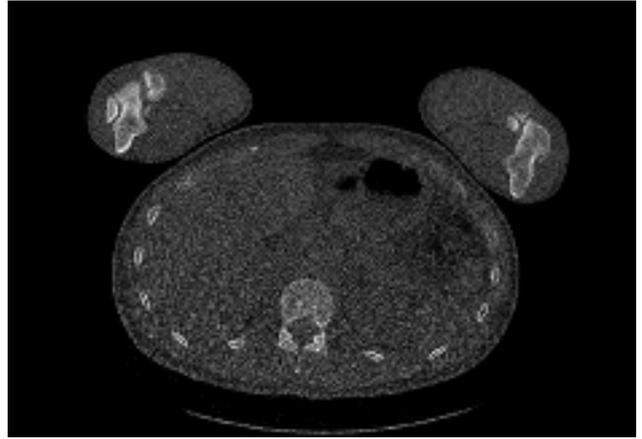


Figure 3. Radial head fracture

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[Ortopedik Aciller]

A RARE CAUSE OF ELBOW INJURY

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Capitellum fractures is important pitfall in emergency medicine for being rare and difficult to diagnose. The mechanism of capitellum injury is usually a fall onto the out stretched hand, with the elbow partially flexed or extended. An axial force is transmitted to the distal humerus from the radius, which results in a shearing force across the capitellum in the coronal plane. In our case, 40-year-old female patient presented with elbow pain after falling.

Keywords: Capitellum fracture, emergency medicine

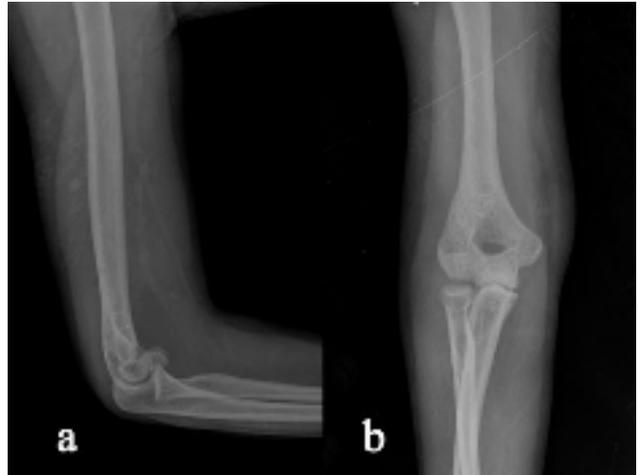


Figure 1a,b. Anterior-posterior and lateral radiographic views of the elbow

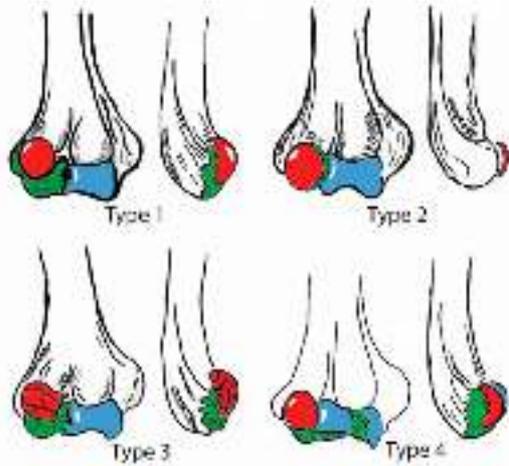


Figure 2. Types of capitellum fractures



Figure 1. Lateral view of the right foot.

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[Ortopedik Aciller]

CLOSED SUBTALAR JOINT DISLOCATION: A CASE REPORT

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Introduction: A subtalar dislocation without fracture of the ankle is a rare clinical entity. It's usually due to a traumatic high-energy mechanism and most common type is medial dislocation (85%). Usually detected in men between the ages of 35-40. Talonavicular and talocalcaneus ankle ligament tears and bone fractures usually accompanies.

Case: We present the case of a 35 year-old male patient who was sprained his ankle while playing football. In a short time severe pain, deformity, redness, swelling and limitation of movement developed at his ankle and because of that he presented at the Emergency Department (ED). When he presented ED he was alert because of pain. His right ankle's medial malleolus was swelling and there was shape deformity. His peripheral pulses were palpable by palpation. Patient's pain was reduced with analgesics. An ankle X-ray performed and it showed subtalar dislocation. Patient was consulted to the orthopedic and immediate reduction was performed under sedation. Patient's ankle was splinted and prescribed analgesic treatment with recommended him to go orthopedic polyclinic.

Discussion: Subtalar dislocation is a rare dislocation and it isn't commonly seen as a sports injury. Because it requires transfer of a large amount of kinetic energy. Early diagnosis and urgent reduction is very important. Patients who don't perform reduction within 3 hours has high risk of avascular necrosis. In patients that undergoing reduction recovery in 4-8 months without sequelae is expected.

Keywords: Subtalar dislocation, Sport accident, Emergency department.



Figure 2. AP view of the right foot.

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[Ortopedik Aciller]

SPONTANEOUS BLADDER RUPTURE AND PELVIC FRACTURE DUE TO BLADDER CANCER

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Introduction: Bladder rupture is a rare complication following bladder cancer, but has a high mortality rate. Since bladder rupture is an emergency, the diagnosis and treatment of the cancer is usually delayed. Here we report a 56-year-old male patient who presented to our emergency department with severe abdominal pain, abdominal distension, left leg pain and difficulty in walking without history of significant trauma and ended up with diagnoses of spontaneous bladder rupture and non-traumatic pelvic fracture caused by bladder carcinoma.

Case Report: At presentation, the patient's pulse rate was 110 beats per minute, the blood pressure was 90/50 mmHg and pulse oximeter value was 93% in room air. CT scan revealed a 10 cm x 9 cm mass with soft tissue components at the left iliac bone along with a pathological fracture and confirmed the presence

of extensive free fluid both in the peritoneal space and extra-peritoneal area (Figure 1).

Discussion: Bladder rupture is an alarmingly mortal pathology (12-22%) which usually occurs in association with blunt or penetrating lower abdominal injuries. It is commonly classified as extraperitoneal or intra-peritoneal. Extra-peritoneal ruptures are found alone in 62% of cases, intra-peritoneal ruptures alone constitute 25% of all bladder injuries and they are combined in a 12% of cases.[3] It is reported that 83% of all bladder ruptures are accompanied by a pelvic fracture. In the presented case we suggest that the cause of the rupture is a combination of pelvic fracture caused by metastatic bladder carcinoma and radiotherapy for pelvic malignancy. Appropriate management of high risk group patients during follow up and at presentation to ED may decrease the morbidity and mortality associated with this condition.

Keywords: Bladder cancer, bladder rupture, emergency department, pelvic fracture

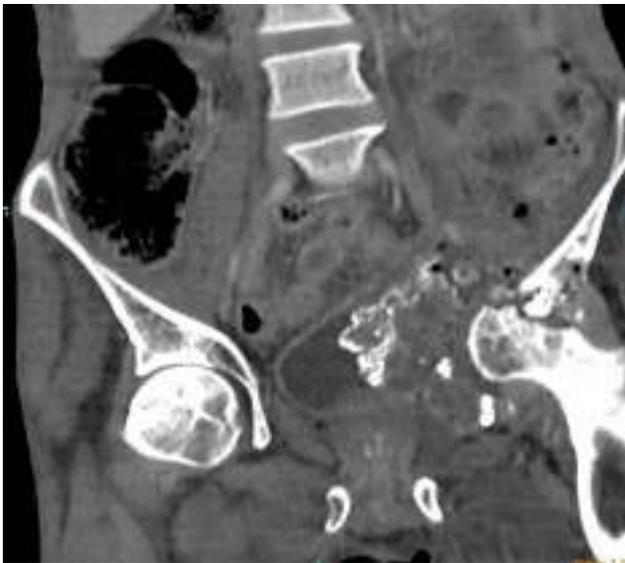


Figure 1. Contrast enhanced abdomen CT showing the iliac bone fracture

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[Ortopedik Aciller]

HAIR-THREAD TOURNIQUET SYNDROME: A PRESENTATION OF AN INFANT

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Introduction: Hair toe tourniquet syndrome is an emergency constrictive injury, infants under 6 months are particularly at risk, in which a hair or thread encircles a digit and results in acute digital ischemia. It usually occurs in children under the age of 1 year. Prompt recognition and surgical removal of the constricting material can save the digit from irreversible tissue necrosis and the loss of digit.

Case: A 3-month old male infant was referred to emergency department by his mother with complaints of unrelieved crying episodes and swelling and redness on the left 5th toe for 4h duration when she recognized. The same event emerged a few days ago cross foot but disappeared itself spontaneously, mother

reported. There was no history of trauma and he was clinically well and a febrile. On examination he had gross swelling of his toe, with purple discoloration. Capillary refill was 4 s; digital sensation was normal. There were no nail abnormalities or skin lacerations noted (Figure). A diagnosis of hair entrapment was made and a hair coil was removed from the digit. After period observation the patient was discharged with a outpatient follow up plan by orthopedic surgeon.

Conclusion: Infants are more susceptible to digital ischemia if a toe is encircled by a strand of hair on some other similar material. An early diagnosis and prompt removal is necessary in order to prevent loss of the part.

Keywords: Tourniquet Syndrome, Hair-thread, infant



Figure 1. shows gross swelling of his toe with purple discoloration and circumferential tissue cleft caused by hair coil.

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[Ortopedik Aciller]

POSTERIOR FRACTURE-DISLOCATION OF SHOULDER: A CASE REPORT

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Introduction: Posterior dislocation of the shoulder is a rare but clinically and radiologically well-defined entity. It accounts for less than 2% of all dislocations of the shoulder, and can be missed in up to 80% of cases but is of diagnostic and therapeutic interest because most are missed on the initial examination (1, 2).

Case: A 18-year-old woman, with a dominant right hand, a student, suffered an injury to her left shoulder. After the injury occurred, the patient was seen in a local emergency room with complaints of left shoulder pain. She had pain in her shoulder. Functions (sensory and motor) of axillary nerve and all peripheral nerves were tested and were normal. Findings from vascular examination were also normal. Plain anteroposterior and lateral radiographs of shoulder showed a posterior fracture-dislocation of the left shoulder. She also underwent a CT scan, which confirmed a posterior fracture-dislocation of the shoulder. A computed tomography (CT) scan revealed approximately involvement of the articulating surface of the humeral head. After the CT scan the patient was submitted to gentle closed reduction

under sedoanalgesia of shoulder in emergency room. An attempt at closed reduction was successful. After the reduction control radiograph was taken and checked reduction. Shoulder was immobilized for 4 weeks.

Conclusion: Posterior dislocations of the shoulder are uncommon, representing less than 5% of all shoulder dislocations; they are often missed on initial presentation and they occur in patients who are younger than the majority of other patients who sustain a proximal humeral fracture (3, 4). The keys to making the correct diagnosis involve maintaining a high index of suspicion, performing a thorough physical examination, and obtaining a complete radiographic series, including an axillary lateral view.

Keywords: emergency, shoulder, trauma



Figure 1.



Figure 2.



Figure 3.

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[Ortopedik Aciller]

NOT STERNAL FRACTURE BUT ISOLATED ASYMPTOMATIC STERNAL WINDOW

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Introduction: Congenital chest wall deformities are usually divided into five categories: pectus excavatum, pectus carinatum, Poland syndrome, sternal defects, and the miscellaneous dysplasias or the thoracic deformities seen in diffuse skeletal disorders.

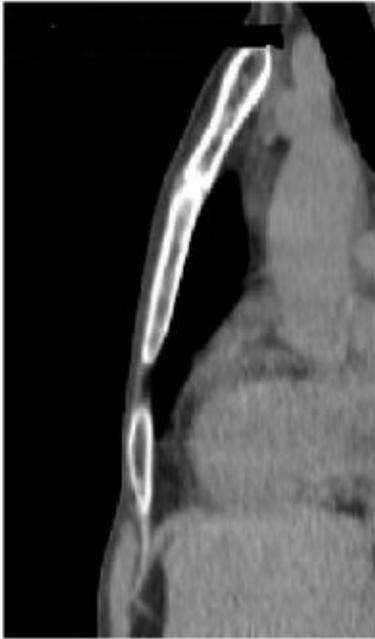
Congenital sternal defects are rare deformities frequently associated with other anomalies of the chest wall and other organ systems. In most cases they are associated with heart and inner organs anomalies. Herein we report an accidental isolated asymptomatic sternal window with no other inner organs anomalies in a traffic accident patient.

Case Presentation: A healthy 29-year-old male was admitted to our emergency department after a traffic accident with the complaints of chest and upper abdominal pain. His initial vital signs was normal (blood pressure: 125/87 mm/Hg, pulse: 70/second, breath rate: 12/second, body temperature 37 °C). He had no other pathological physical examination findings except sternal and flank tenderness. On laboratory biochemical parameters are normal. Performed computed tomography scan was revealed a defect in the lower part of sternum and incomplete fracture both twelfth ribs. Reconstruction of tomographic images revealed sternal window with no fracture (fig1,2). Patient was followed for 6 hours in emergency department and discharged home after the advice of polyclinic follow up. The patient was completely asymptomatic and he did not need any medical or surgical treatment for sternal window.

Conclusion: In some circumstance, trauma patients can have some congenital defects that are uncorrelated with trauma injuries as in our patient who have congenital sternal window. A more detailed analysis should be carried out with 3-D (reconstructed) tomography. Emergency department physicians should be alert in this regard.

Keywords: Congenital chest wall deformities; Congenital sternal window;

Trauma; 3-D (reconstructed) tomography



Figur 1. Not Sternal Fracture but Isolated Asymptomatic Sternal Window

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[Ortopedik Aciller]

A DOMESTIC ACCIDENT CAUSED BY A BLENDER

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Introduction: Accidents that take place in a dwelling or the surrounding area belonging to it are known as domestic accidents. The importance of such accidents is increasing. Domestic accidents represent approximately half of all accidents. They also constitute a significant public health problem since they can result in injury, handicap or death.

Case: A 26-year-old woman presented to the emergency department with an injury to the left 2nd finger. Examination revealed that a blender blade was embedded in the proximal aspect of the distal phalanx of the left 2nd finger. Her general condition was good. Other system examinations were entirely normal. The blade was removed from the patient's finger in a controlled manner. Detailed finger examination revealed a cutaneous and subcutaneous laceration involving no tendon damage or sensation and circulation compromise. The laceration was sutured primarily and the patient was discharged with advice.

Conclusion: Domestic accidents are a wide-ranging health problem, from simple incidents to ones capable of causing death. All family members need to be made aware of this and taught to use equipment and devices in the home with caution.

Keywords: blender, domestic accidents, emergency department

Injured patients with blender



Figure 1. A blender blade was embedded in the proximal aspect of the distal phalanx of the left 2nd finger

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[Ortopedik Aciller]

SUBCUTANEOUS EMPHYSEMA WITHOUT APPARENT BREACH OF SKIN

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Introduction: Extremity subcutaneous emphysema is a pathology characterized by presence of air between the soft tissues which can occur due to infection or trauma. Existence of accompanying signs of infection suggests a necrotizing infection producing gas. It may occur with limb amputation or high pressure injection injuries as well as trivial injuries. We presented a case with subcutaneous emphysema due to a trauma on the hand but without any open wound.

Case: 23 year old male patient referred to the emergency department with the complaint of pain on the hand after squeezing it at the car door. His vital signs were stable. There was tenderness and crepitation on the of the right hand. No limitation of hand and finger movements was observed. No bleeding or laceration on the hand was present. The patient stated that a swelling occurred on the dorsum of his hand immediately after the trauma of the hands and then spread to the surrounding tissues. In X ray imaging a subcutaneous emphysema around the 4th and 5th metacarpal bones and proximal phalanges, extending to the wrist was detected. There was no infection or open wound on the hand to explain it (figure 1) Tetanus vaccine was not applied because of the ongoing immunity. Immobilization with a short arm splint was applied for the patient whose subcutaneous emphysema on the hand recovered completely within a few days.

Conclusion: In an article published in 2010 by Constantine and friends, 22 cases of upper extremity subcutaneous emphysema reported before were discussed. All of these patients had recovered without any additional sequelae. In these cases, the most common mechanism was high pressure injection injuries, lacerations which act as a one-way valve. In lacerations which serve as a one-way valve, the laceration works like a one-way valve with limb movements and causes air passage to the subcutaneous region in a one-way direction. In high-pressure air injection injuries the pressurized

air can propagate to the very remote regions from the insertion site., The most similar case to ours was reported by van der Molen and friends in 1999. This case, occurred while working with a high vibrating tool and there was no apparent breach of skin. This case had recovered without any sequelae as in our case. We consider that the subcutaneous emphysema in our case originate from the air duct sealings on the the car door. When the door is closed, the air with increased pressure may have passed to the subcutaneous region from a defect in the seal by a similar mechanism as high-pressure air injection injuries. Extremity limited subcutaneous emphysema, related to non-infectious processes is often a self-limiting benign pathology.

Keywords: Subcutaneous emphysema, hand injury, minor trauma



Figure 1. Palmar and dorsal images of the patient



Figure 2. Oblique hand x-ray imaging, arrow: subcutaneous emphysema

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[Ortopedik Aciller]

OVERLOOKED DISTAL FEMUR PHYSEAL INJURY AND CATASTROPHIC OUTCOME

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Case: A five years old child was admitted to the emergency department with left knee pain and absent movement of the right knee. He was fell from height (1,5 meters) while playing. Physical examination revealed mild swelling and limited ROM on his knee. Only AP radiograph of right knee was taken, and the physician did not notice a bone pathology. Two weeks later after his first application, he was admitted emergency department with same complaints. He was examined carefully and AP and lateral radiographs were taken left and right knees simultaneously. Right distal femur physeal fracture were identified on two-way AP and lateral X-ray. Radiographs showed callus formation around the right knee.

He was operated with open reduction and internal fixation by two cross k-wires two weeks later after trauma. The lower extremity was immobilized by casting for four weeks. Passive ROM exercises were started two weeks after operation, active ROM exercises were started four weeks later after operation. K-wires were removed and partial weight bearing was allowed in the sixth week, and full weight bearing was allowed in the third month after operation.

Results: In the sixth month after his operation he achieved all the function in dependently. On the other hand at follow up examination (one year later), we detected premature physeal closure in distal femoral physis. In the third year examination there was 3cm leg shortening in his lower extremity and valgus deformity in his knee joint. Fortunately he had full ROM but limping was observed while walking.

Conclusion: The trauma patients admitted to the emergency room should be evaluated carefully. Especially in the age at which physis are open, bilateral limb radiographs should be evaluated. The main problem in treatment of this kind of fracture is correct and timely diagnosis.

Keywords: physeal injury, distal femur, limb shortening



Figure 1. AP-lat right knee X-Ray three year later the operation



Figure 2. Initial AP X-ray of right knee



Figure 3. Preoperative AP-lat X-ray of both knees

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[Ortopedik Aciller]

TYPE 3A OPEN ACROMION FRACTURE DUE TO ATYPIC TRAUMA

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Case: 13 years old male patient was admitted to our emergency department with left shoulder incision. While patient's brother was cutting trees with electrical saw in the garden, he missed tree and the electrical saw cut his brother's left shoulder accidentally. On physical examination, the left shoulder had longitudinal 15 cm long incision properly. Neurovascular examination was normal. Patients with suspected concomitant bone pathology, acromion fracture was observed in radiographs taken (gustillo-Anderson type 3 open fractures). Tetanus prophylaxis and antibiotherapy administered to the patient, and he was operated. Acromion fracture fixed via K-wire tension band and cerclage after surgical debridement. Patient was continued for 48 hours to antibiotherapy. Velpau bandage was kept at 4 weeks.

Results: There was no wound problems and infection in the postoperative follow-up. At the 3th month postoperative examination, the patient's left shoulder has full of ROM, there was no complaints.

Conclusion: Scapular fractures are usually high-energy trauma (fall from height, traffic accidents) are observed less frequently in emergency departments. The acromion of the scapula fractures are much more rare. When the physician saw the extremity traumas with soft tissue injury, should remember that; there may be fractured bone. Because of that we should take X-rays. In addition, open fractures protocols should be strictly enforced in all patients with open fractures.

Keywords: acromion fracture, open fracture



Figure 1. Patient photograph showing the incision



Figure 1. AP X-ray of pelvis



Figure 2. Lateral X-ray of left hip

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[Ortopedik Aciller]

AVULSION FRACTURE OF ANTERIOR INFERIOR ILIAC SPINE IN A ADOLESCENT PROFESSIONAL FOOTBALL PLAYER

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Introduction: Avulsion fractures of the anterior inferior iliac spine (AIIS) are rare injuries in the literature. Avulsion fractures of AIIS are more often seen in sports similar to football as a result of forceful contraction of rectus femoris muscle in adolescents.

Case: Our case was 16-year-old professional sportsman who began to feel pain just after shooting with dominant left leg and heard sound. He admitted to our clinic with moderate pain. There was limitation in the left hip flexion range and weakness while hip flexion in the detailed physical evaluation. X-ray and CT assessments were performed. Avulsion fracture of anterior inferior iliac spine was detected after radiologic evaluations. After this diagnosis the patient was referred to the department of orthopedics.

Conclusion: Isolated avulsion fractures of pelvis are thought to be due to weakening of cartilage apophysis. This fractures occur more often in shooting. Especially those who admitted to emergency department with sudden onset anterior hip pain after shooting should be evaluated for AIIS avulsion fracture.

Keywords: avulsiyon fracture, sport injury

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[Ortopedik Aciller]

A CASE OF BOTH DEPLASED SUPRACONDULER HUMERUS AND DEPLASED RADIUS AND ULNA TORRUS FRACTURE İN ONE TRAUMA

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Objective: The humerus is the most commonly injured joint in sport-related injuries. While sprains are the most common reason for arm injury, fractures can occur frequently. Some sports such as high jump, basketball, football, volleyball, athletics or skiing take place in the high risk factors. Arm fractures usually include isolated supracondylar fractures or isolated torrus fractures. On the other hand, displaced supracondylar fracture and displaced distal radius fracture and distal ulna torrus fracture is a fairly rare injury. Because of the low incidence, as displaced

supracondular fracture and deplaced distal radius fracture and distal ulna torrus fractures can be a diagnostic challenge. In this case we will focus on detection of the fracture, that may not be so obvious at first sight.

Case: A 9-year-old female was admitted to emergency trauma section after falling from board (in a skiing) with complaints of pain and swelling in her left arm. On initial evaluation, the patient's vital signs were stable. On physical examination, there was moderate edema that surrounds the elbow and carpus. The whole arm was tenderness. All other system examinations were normal. so, we ordered a two view (Anteroposterior and lateral views) elbow and carpus radiograph series for the suspicion of both supracondular and distal radius fractures. A/P radiograph of the elbow was evaluated as deplaced supracondular fracture and deplaced distal radius fracture and distal ulna torrus fracture. (Figure 1). An orthopedic surgeon was immediately consulted for further evaluation and treatment of a deplaced supracondular fracture and deplaced distal radius fracture and distal ulna torrus fracture. Immobilization of arm was made by long-arm splint. And then the patient was admitted to the orthopedic ward.

Conclusion: Isolated supracondular and distal radius fractures of the arm are very uncommon and so its diagnosis is more difficult than the other types of arm fractures. Although the findings of the OAR could not indicate that a fracture was likely, plain radiographs could be obtained due to the injury mechanism and physical examination (significant edema and location of tenderness).

Keywords: supracondular humerus fracture, distal radius fracture, ulna torrus fracture., isolated, plain radiography



Figure 1. A/P radiograph deplaced supracondular fracture and deplaced distal radius fracture and distal ulna torrus fracture

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[Ortopedik Aciller]

HAIR TOURNIQUET SYNDROME IN AN INFANT

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Hair tourniquet syndrome is an uncommon condition. This syndrome develops with strangulation of one or more appendages

with hair or fiber. It needs urgent intervention. This syndrome usually occurs in infants but may also be in adults with mental retardation. If left untreated and prolonged ischemia time can progress to loss of appendage.

An 4-month-old infant was brought to the emergency room with complaints of restlessness by her mother. The baby was restless during the night. System examination was normal. There was no fever. For a full examination the baby's clothes were removed. On the examination we have found a deep, circumferential groove over the second and third phalanx. The distal part of phalanx was swollen. We cut hair with a lancet. In our follow the colour of phalanx returned to normal. Edema was decreased.

The physician must be awake when a restless infant come to the emergency department. During the physical examination, the patient clothes must be removed. Hair tourniquet syndrome should be kept in mind.

Keywords: Hair tourniquet, infant, toe tourniquet



Figure 1. İlık başşvuru



Figure 2. Müdahale Sonrası

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[Ortopedik Aciller]

PRIMARY ANGIOSARCOMA OF THE RIGHT SCAPULA

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Angiosarcoma is a rare malign tumor deriving from the vascular endothelium. Epithelioid sarcoma is an uncommon variant of angiosarcoma. It is most commonly seen in the extremities, skin, soft tissue, liver and the chest wall and grows quickly, giving rise to distant metastasis. The scapula is a very rare location for angiosarcoma. A 38-year-old woman presented to our emergency clinic with pain and palpable swelling in the anterior part of the right shoulder. No characteristics were determined at her own or family history. At physical examination, a hard and partly mobile mass approximately 9 x 8 cm in size was palpated in the scapular region in the superior anterior part of the right shoulder. Thoracic tomography revealed a mass invading the supraspinatus, infraspinatus and subscapular muscles and causing destruction in the acromion and the body of the scapula. Incisional biopsy was performed. Epithelioid angiosarcoma was diagnosed as a result of histopathological examination, and the patient was admitted to the thoracic surgery department for further tests and treatment. No metastasis was observed at radiological imaging performed for screening purposes. The patient was taken for surgery in a prone position under general anesthesia. Right scapula tumoral tissue together with surrounding muscle and soft tissues as far as

approximately 2 cm from the proximal aspect of the glenoid fossa were totally resected. Abduction and extension defect developed in the upper right extremity. A right arm Velpeau bandage was applied on the 4th day, and the patient was discharged and enrolled in a physical therapy-radiotherapy program. The purpose of this study is to show that total resection of tumoral tissue and the scapula from which it derives in cases of angiosarcoma without metastasis is one treatment modality due to its known positive effect on survival despite causing serious morbidity.

Keywords: angiosarcoma, scapula, malign tumor

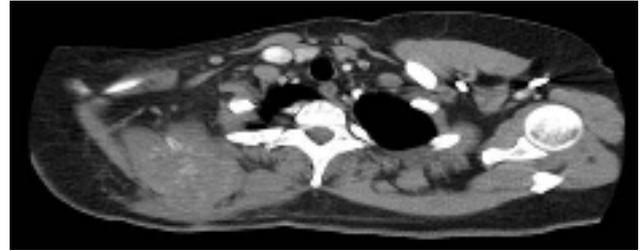


Figure 1.

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[Ortopedik Aciller]

ISOLATED DISLOCATION OF THE SYMPHYSIS PUBIS

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Introduction: Symphysis pubis and / or sacroiliac joint dislocations usually develops due to forcing of the pelvis in the direction of external rotation. The morbidity and mortality of these injuries are high. The breaking down of the integrity of the pelvic ring is often due to the dislocation of the sacroiliac joint. They are usually caused by high-energy traumas. Urogenital injuries and major vascular injuries may associate these injuries. Isolated pubic symphysis separation is a very rare condition.

Case: A 44-year-old male patient was brought to the emergency room because a bus stop was fallen down on him. In the physical examination of the patient swelling in the pubic region, pain in the hips, and severe limitation movement of the hip were present. Other systemic examinations were normal. In the radiography there was a separation in pubic arm and no fracture was observed. Integrity of the pelvic ring was broken down. The patient was taken in the supine position for reduction of dislocated pubic arms. Both of the knees were taken into flexion position, hips were taken into flexion and abduction position and the soles of the feet were brought together. Then the hips were forced to abduction by pushing the knees. The radiography following the manipulation showed that the reduction was successful.

Conclusion: Isolated dislocation of the symphysis pubis is a rare but serious condition which should be considered by emergency physicians and orthopedic specialists. Early reduction of the dislocation can shorten the length of stay in hospital, and prevents serious neurovascular injury.

Keywords: pubic dislocation, pelvic injury,



Figure 1. Successful reduction



Figure 2. There was a separation in pubic arm and no fracture

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[Ortopedik Aciller]

BILATERAL QUADRICEPS FEMORIS TENDON RUPTURE: CASE REPORT: GÜL PAMUKÇU GÜNAYDIN¹, FATİH TANRIVERDİ², SERKAN DEMİRCAN¹, TOLGA ÖZ¹, SELÇUK COŞKUN¹, YAVUZ OTAL¹

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Introduction: Bilateral quadriceps tendon rupture is a rare injury that is usually seen in patients older than 40 years. It is more often seen in male patients. It usually occurs due to falls, other mechanisms are direct trauma and iatrogenic causes. Many conditions have been associated with degeneration of the tendon such as chronic renal failure, gout, obesity, hyperparathyroidism, infections, steroid abuse and immobilization. Patients typically present with acute knee pain and functional loss following fall. We present a case of bilateral quadriceps tendon rupture.

Case: Sixty seven year old male patient was admitted to emergency room after trip and fall from 2 steps on his knees. His major complaint was bilateral knee pain. He had no known history of a chronic disease. He was not on any medication. He

was a former athlete and an active trainer for football. Upon arrival to emergency room he was alert, his Glasgow Coma Scale score was 15, his cardiovascular, neurologic, lung exams were normal. His physical exam revealed bilateral suprapatellar swelling and tenderness with palpation on both knees. He had a palpable gap on quadriceps tendons bilaterally and could not fully extend knees from flexed position. No fractures were seen on bilateral knee radiographs. In ultrasonography of both knees soft tissue swelling and tendon thickening was visualised but no tendon injuries were seen. MRI imaging revealed bilateral quadriceps tendon rupture. He was consulted to orthopedic surgeon. Both knees were immobilised in full extension. The patient wanted to have surgery abroad. He was given NSAIDs and enoxaparin 6000 U before flight. He was transferred to airport by ambulance.

Discussion: Early operative repair is indicated for acute, complete quadriceps tendon ruptures. Since it is a rare injury emergency room doctors should be familiar with symptoms and signs of it to diagnose it early and prevent disability.

Keywords: Quadriceps muscle, tendon injuries, emergency care



Figure 1. Quadriceps tendon rupture MRI

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[Ortopedik Aciller]

A RARE SEEN BILATERAL SHOULDER DISLOCATION CAUSE

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Introduction: The glenohumeral joint dislocation is the most common type of joint dislocation. Anterior shoulder dislocation accounts for the majority of joint dislocations seen in the emergency department. We report a patient with bilateral anterior shoulder dislocation due to chest pressing with overweighted dumbbells in gym that has been reduced in emergency room.

Case: A 26-year-old male patient presented to emergency room with complaints of bilateral shoulder pain. He described

that, as he was weight lifting suddenly he felt pain and unable to move his shoulders. There was no abnormalities in his vital signs on arrival. Physical examination revealed tenderness on movement of both shoulders. Neither evidence for neurovascular injury, nor asymmetry between shoulders was detected. As we diagnosed bilateral anterior glenohumeral dislocation and applied Stimson's method for closed reduction to both shoulders. Post reduction examination and radiographs were satisfactory. Confirmed the reduction with control radiographies, without an evidence about fracture. Consulted with orthopedics and discharged home with bilateral slings for 4 weeks.

Conclusion: Bilateral shoulder dislocation is a phenomenon rarely seen due to electric shock, fall while walking or from height, after seizure, road traffic accidents, minor trauma or without any obvious cause. As the first bilateral shoulder dislocation was reported in 1902 by Mynter in patients with excessive muscle contractions secondary to camphor overdose, we report a bilateral anterior shoulder dislocation due to dumbbell chest press consists of abduction, extension, external rotation of shoulder; that has been successfully reduced in emergency room.

Keywords: Sports injury, Shoulder dislocation, Shoulder pain

X-Ray



Figure 1. Bilateral shoulder dislocation

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[Pediatrik Acil Tip]

IMPERFORATE HYMEN: A RARE CAUSE OF ABDOMINAL PAIN

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Objectives: Imperforate hymen is an uncommon obstructive anomaly of the female reproductive tract. Although it is usually sporadic, familial cases have been reported. The patient usually presents with intermittent abdominal pain. Acute urinary retention is a rare symptom. It is rarely diagnosed in the neonatal period, and most cases occur in the adolescent period. Pelvic ultrasonography is the essential initial diagnostic radiological modality to confirm the diagnosis. We report a 5-year-old girl who presented with main complaint of abdominal pain diagnosed by ultrasonography and computed tomography due to imperforate hymen.

Case: A 5-year-old girl presented to our emergency department with intermittent abdominal pain in the lower

abdomen. She has anorexia, vomiting and fever. She had no menarche. On physical examination, she has bilateral lower quadrant tenderness. Leukocytes 17,200 / pl, platelets: 442,000/pl., CRP 79 g / dl, blood glucose 115 mg / dL, TIT: normal. Pelvic ultrasonography revealed dilated vagina with dense fluid suggestive of hematocolpos. There was no concomitant urogenital abnormalities on US. She was taken to the operating room and incisional hymenectomy was performed. Postoperative US of the pelvis showed resolution of hematocolpos. She was discharged from the hospital on the following day.

Keywords: Imperforate hymen, Hematocolpos, emergency medicine



Figure 1. Hematocolpos



Figure 2. Hematocolpos



Figure 3. Hematocolpos

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[Pediatrik Acil Tip]

MANAGEMENT OF POLYTRAUMA'S CHILDREN

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Objectives: According to the dictionary definition, polytrauma or multiple trauma is a medical term describing the condition of a person who has been subjected to multiple traumatic injuries, such as a serious head injury in addition to a serious burn. The situation is the most dramatic, if the polytrauma occurs to the children. In Republic of Moldova the incidence of polytraumas in children is about 20-30% of all the trauma.

Most of them are critical situations who caused the disability or death of the children.

Materials-Methods: The data presented here are based on emergency assistance files, through Institute of Emergency Medicine, Chisinau In 2013. The analysis given detailed information about prehospital emergency assistance of the 168 children with trauma.

Results: Out of the total number of patients, 92 (54,76%) were boys and 76 (45,24%) - girls. The most frequent reason for polytraumatism is the road accidents. 73 children or (43,45%) got a polytraumatism, 45 children (26,79%) catatraumatism, 30 children (17,86%) fell from a body's height, 10 children (5,95%) aggression, 6 children (3,5%) sport traumatism. According to the polytraumatism breakdown, 80 children or 47,62% suffered from associated traumatism, 88 children or 52,38% from multiple traumatism.

Conclusion: The research result not only identified the incidence level and determining factors, but also highlighted the need for a single concept of polytrauma terms that would be accepted by all traumatologists and would frame a single system of accepted by all treatment and results of such treatment. Therefore, we consider it necessary to analyze the polytraumatized children treatment results depending on the type of rehabilitation.

Keywords: polytrauma, complications, catatraumatism

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[Pediatrisk Acil Tip]

INCIDENCE OF TRAUMAS AND BURNS IN CHILDREN BETWEEN 0-17 YEARS IN REPUBLIC OF MOLDOVA AND MUNICIPALITY CHISINAU IN YEARS 2012-2013

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Objectives: Traumas is frequently encountered in children between 0-17 years, is the leading cause of death and disability. The situation is most dramatical in Republic of Moldova. Every day 145 children are suffering as a result of accidents in home conditions. At least six children up to 5 years arrive daily at the hospital after injuries at home or in the street. Over 100 children ages 0 to 17 are treated in emergency rooms for traumas and burn-related injuries and two children die as a result of complications.

Materials and Methods: The data presented here is taken from the National Centre of Health Management and National Scientific- Practical Emergency Medicine Centre. The analysis given detailed information about traumas and burns in children between 0-17 years in Republic of Moldova and in municipality Chisinau in years 2012-2013.

Results: Conform statistics dates in Republic of Moldova in 2012 were recorded 31860 children with different types of trauma, 19325 from this were recorded in municipality Chisinau. Children with a burns were 750 in Republic of Moldova and 77 in municipality Chisinau. In 2013 in Republic of Moldova were recorded 29555 children with trauma and 19178 children in municipality Chisinau. Children with a burns were 550 in Republic of Moldova and 79 in municipality Chisinau. According to retrospective analysis, most important predictors of mortality are the size of burn, localization of trauma, age of patient, and worst base deficit in the first 24 hours.

Conclusion: Due to public awareness, in 2013 the incidence rate of traumas and burns in children decreased Republic of Moldova by 8 % compared with 2012 and by 0,8 % in Chisinau, but still remains quite high. The most frequently traumas and burns in children can be prevented by parents. Due to anatomical and physiological particularities in children emergency physicians must act quickly and promptly to stabilize a traumatized child.

Keywords: Trauma, burn, children

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[Pediatrisk Acil Tip]

ANALYSIS OF CHILDREN MORTALITY IN REPUBLIC OF MOLDOVA FROM INJURIES AND POISONING BETWEEN YEARS 2012-2013

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Objectives: A frequently and most important causes of death in children between 0-18 years remains childhood injuries and poisoning. Majority of this causes are unintentional injuries and poisoning at home, falls, road accidents, there are specific causes of injury by year of age. In Republic of Moldova general lethality of children constitutes 664 cases in 2012 (9, 2 ‰) and 590 cases in 2013 (8, 4 ‰). Aim of study was to describe the etiology, morbidity and children lethality caused of injuries and poisoning.

Materials-Methods: The descriptive epidemiology study was performed on the basis of medical records of National Scientific- Practical Centre of Emergency Medicine, Chisinau among children between 0-18 years with trauma and poisoning who were served by ambulance and hospitalized in the RIMCHP (Research Institute of Mother & Child Health Protection), Chisinau during the period of 2012-2013.

Results: In Republic of Moldova in 2012 were recorded 31860 children with different types of trauma and 29555 in 2013. Conform statistics dates annual mortality in Republic of Moldova among children between 0-18 years from injuries and poisoning has been 180 cases in 2012 (27, 1 ‰) and 122 cases in 2013 (20, 7 ‰). Road accidents caused death in 44 cases in 2012 (24, 4 ‰) and 24 cases in 2013 (19, 7 ‰). In the structure of deaths from injuries and poisoning according to age apportioned as follow: 28 cases in 2012 and 21 cases in 2013 in children age 0-1 years; 59 cases in 2012 and 51 cases in 2013 in children age till 5 years. Significant thing is that the total home death is 150 cases in 2012 and 138 cases in 2013. Thereof the rate of deaths from injuries and poisoning at home constitute 52 cases in 2012 and 49 cases in 2013.

Conclusion: Children mortality in Republic of Moldova recorded the last 2 years is at stable high level, constituting 1254 cases. The incidence of child mortality has decreased in 2013 by 0, 8 % compared to the year 2012. Decreasing is observed also in the rate of total home death by 1, 8 % and decreasing in deaths from injuries and poisoning at home by 2%. Every fifth child died at home. The rate of death from road accident in children decreased by 3, 7 %. With regard to age we note reduction of deaths from 7, 2% to 5, 9% in the age 0-1 year, from 12, 4% to 11, 4% in the age 0-5 years, which is due to public awareness and granting promptly qualified medical aid.

Keywords: Analysis of children mortality in Republic of Moldova from injuries

and poisoning between years 2012-2013

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[Pediatrik Acil Tip]

A NEWBORN SUFFERING NEONATAL WITHDRAWAL SYNDROME DUE TO THE HEROIN ADDICTED MOTHER

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Introduction: Neonatal withdrawal syndrome (NWS) is a syndrome of drug withdrawal with non-specific signs and symptoms that occur in infants following in-utero drug exposure. One of the substances that cause withdrawal syndrome is heroin. Clinical signs of heroin withdrawal syndrome usually occur within the first 48-72 hours after birth. Central nervous system and gastrointestinal system symptoms are the main symptoms. Affected infants commonly have irritability, high-pitched cry, tremors, hypertonicity, vomiting, diarrhea, and feeding difficulties. In these case we present a newborn who suffered from NWS.

Case: A 4 days of newborn was brought to the emergency department because of irritability, vomiting and feeding difficulty complaints. He was born vaginally at the 36th week of gestation due to the premature contractions. His body weight was 2950 gr and the system examination was normal after the birth. On physical examination; the baby was seemed dehydrated and myoklonik jerks, highpitched cry were observed. In the story we found out that mother was heroin addicted and she had used iv heroin before and during whole period of pregnancy. We consulted the baby to the pediatrics department. She was admitted to the pediatrics department. As the mother was still abusing heroin, the baby was fed with formula. After the iv fluid therapy and phenobarbital and morphine treatment the symptoms resolved.

Conclusion: The diagnosis of prenatal opioid exposure is based upon a positive opioid use of the mother. A large number of infants who are exposed to opiates antenatally become physically addicted and exhibit withdrawal symptoms after birth. Symptoms may appear in minutes, or in 1-2 weeks, but mostly within 2-3 days. Central nervous system and gastrointestinal system symptoms are the leading symptoms respectively. In the presence of central nervous system and gastrointestinal system symptoms of unknown origin, NWS should be kept in mind.

Keywords: Newborn, heroin, withdrawal syndrome



Figure 1. Newborn suffering heroin withdrawal syndrome

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[Pediatrik Acil Tip]

DIAGNOSTIC CONFUSION IN THE EMERGENCY DEPARTMENT: CLOTTING DISORDER, SEIZURE OR CHILD ABUSE?

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Introduction: In Turkey, children who have been the subject of a trauma are assessed in the Emergency department by the department's specialists themselves, but children with other conditions are assessed by pediatrics specialists in their own pediatric emergency department. In this report we will discuss the case of a patient who was assessed multiple times because of head trauma in both emergency departments of our hospital.

Case: A 7-year-old boy was brought with a 4 day history of abnormal or slow behavior, a near-syncope state and repeatedly hitting his head on the floor or on the walls by simple falls. Patient history revealed that the child had been assessed by the medics of our (adult) Emergency Department a day ago and by the medics of our Pediatrics Emergency Department 4 days ago with the same condition. During physical examination his general condition was found to be good, he was conscious and has a Glasgow Coma Scale of 15. Pupils were isochoric and bilateral LR was +/+. His vital signs were stable. The patient had a swollen face with edema and ecchymotic regions of different stages of healings. On the occipitoparietal region of his head he had a cephalic hematoma. Despite the kind behavior that the family showed towards him at the hospital, child abuse was not ruled out and the case was classified as a legal one. On a more thorough investigation it was learned that the child had had an epileptic seizure when he was 2 years old but had used no medications. Moreover the mental development of the child was described by his family to be slow, accompanied with difficulties in understanding and strange periods of recessions. They did not describe any blood clotting disorder. The patient was admitted with an initial diagnosis of a partial epileptic seizure, head trauma and blood clotting disorder and laboratory tests were performed. When the lab results came back normal, as did the clotting profile, a brain computer

tomography was scheduled. The CT scan showed a hypodense lesion of 5x3 cm in the patient's right parietal region and a cephalic hematoma. There were no signs of bleeding or fractures. A contrast head MRI was performed next and the findings were reported as a dysembryoplastic neuroepithelial tumor (DNET) (Fig 1-2). The child was having frequent seizures and traumatic experiences of different degrees because of the aforementioned tumor. The patient's electroencephalography was performed, his antiepileptic treatment started and if the seizures continued, excisional surgery was planned.

Conclusion: Defined as "an usually supratentorial glial-neuronal neoplasm occurring in children and young adults and characterized by a predominantly cortical location and by drug-resistant partial seizures. It is a benign tumor and treatment of DNETs is usually surgical resection. In our country, This case present that emergency medicine be responsible for all of the patients in this age group although nontraumatic pediatric patients are evaluated by pediatric specialists in many hospitals,

Keywords: Emergency department, pediatric, seizure

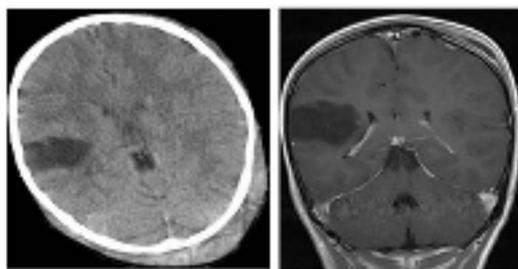


Figure 1-2

Figure 1-2

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[Pediatrik Acil Tip]

ARE WE COMPLYING WITH NICE GUIDELINES IN THE MANAGEMENT OF HEAD INJURY?

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Introduction: We audited the current practice of management of paediatric head injury in our Emergency Department (ED) against the NICE guideline for managing paediatric patients with head injury¹. NICE guideline was first published in 2003, updated in 2007 and 2014¹.

Methods: Data was collected retrospectively from medical records of children < 16 years who had presented to the Emergency Department with head injury between 1st and 30th November 2013. Key features of the history and physical examination were analysed in line with the NICE guideline. Data was analysed using Excel software.

Results: In the first cycle of the audit, 55 children were analysed over the 30 day period. 1 (1.82%) was suspected non-accidental injury (NAI) and 1 (1.82%) showed a focal neurological deficit. 2 (3.64%) exhibited abnormal drowsiness,

2 (3.64%) had three or more discrete episodes of vomiting and 2 (3.64%) suffered amnesia lasting more than 5 minutes.

According to NICE guideline (Table 1), 3 CT scans were indicated but only 2 were performed (Figure 1). Both were normal. The child who did not have CT brain was the case of suspected NAI. Clinical judgement was used to make decision not to scan. 40 patients (72.7%) were discharged after being assessed in ED, 9 (16.4%) were observed in ED, 2 (3.64%) were referred onto the general surgical team, and 4 (7.27%) were referred to either of plastics, ENT or maxillofacial surgical team.

Table 1. NICE Criteria for performing CT head scan

Suspicion of non-accidental injury
Post-traumatic seizure, but no history of epilepsy
On initial assessment GCS < 14, or for children < 1 year GCS (paediatric) < 15
At 2 hours after the injury GCS < 15
Suspected open or depressed skull injury or tense fontanelle.
Any sign of basal skull fracture (haemotympanum 'panda' eyes, CSF leakage from the ear or nose, Battle's sign).
Focal neurological deficit
For children < 1 year, presence of bruise, swelling or laceration > 5 cm on the head
Witnessed LOC > 5 minutes
Abnormal drowsiness
3 or more discrete episodes of vomiting
Dangerous mechanism of injury (high-speed RTA either as a pedestrian, cyclist or vehicle occupant, fall from height of > 3 metres, high speed injury from an object)
Amnesia (antegrade or retrograde) lasting > 5 minutes (assessment not possible in pre-verbal children and unlikely in any child < 5 years).

Conclusion: Based on the results, our current ED practice has not been fully compliant with the NICE guideline. We reiterated the importance to ED physicians of compliance with the guideline in January 2014, and provided print-out checklists. We are currently re-auditing the use of CT in children with head injuries and hope to demonstrate improved compliance with the NICE guideline.

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Keywords: Paediatric, head Injury, NICE guideline

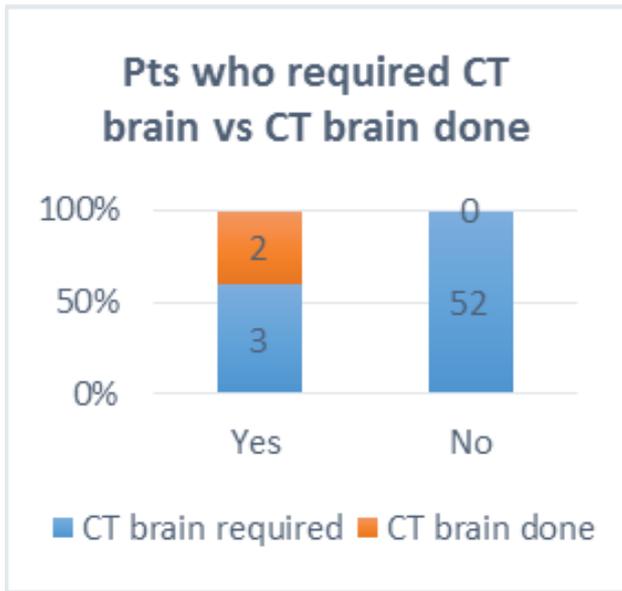


Figure 1. Patients who required CT brain and the number of CT brain done Bar chart showing patients who required CT brain and the number of CT brain done

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[Pediatrik Acil Tıp]

A DIAGNOSE NOT TO MISS: ROTATORY ATLANTOAXIAL SUBLUXATION IN EMERGENCY SERVICE!

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Paediatric patients have a specific spine anatomy. Hence, atlantoaxial rotatory subluxation is one of the main types of cervical spine anomalies seen in paediatric patients. Although rotatory atlantoaxial subluxation (RAS) is a rare condition, it is the most frequent manifestation of the atlantoaxial rotatory dislocation in pediatric population. The clinical manifestation includes ‘cock-robin’ position (lateral flexion and rotation to other side) of the neck with painfull torticollis and limited rotation. The causes are mostly trauma and nasopharyngeal infections.

We want to present 5 paediatric patients, between ages of 5 and 13, who have admitted to Yuksekova State Hospital Emergency Service between 1 July 2014 and 1 November 2014. 3 of them were traumatic and 2 were spontaneous. All of the patients had painfull torticollis with cock-robin position. They were diagnosed by physical examination and the diagnosis were confirmed by cervical CT scan. All the patients were treated by 3 weeks cervical collar by neurosurgery department.

RAS is a rare condition that is often misdiagnosed and therefore incorrectly managed especially in emergency services. In cases without neurological deficits it can be managed by collar therapy without surgical intervention. Due to the ligamentous laxity in paediatric population, who are prone to upper spine injuries; atlantoaxial rotatory dislocation should always be kept in mind especially for emergency physicians.

Keywords: Emergency, Paediatric Patients, Rotatory Atlantoaxial Subluxation

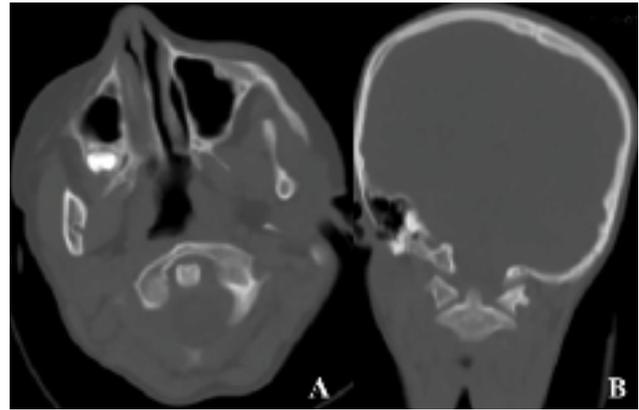


Figure 1. A. Axial, B. Coronal reconstructed cervical CT scan demonstrating the rotation of atlas on the odontoid with no anterior displacement

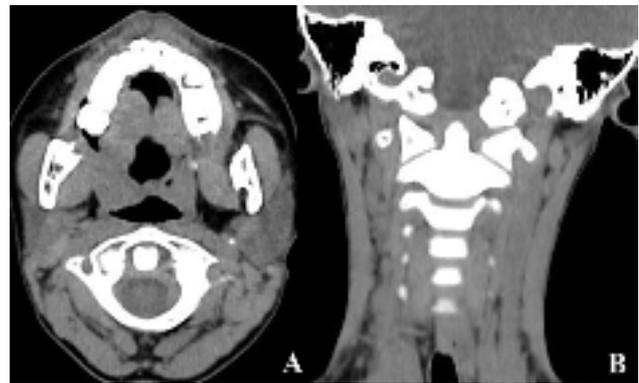


Figure 2. A. Axial, B. Coronal reconstructed cervical CT scan demonstrating the normal alignment of the atlantoaxial complex after collar therapy.

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[Pediatrik Acil Tıp]

HAIR-THREAD TOURNIQUET SYNDROME

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Introduction: Hair-thread tourniquet syndrome (acquired constriction ring syndrome) is a kind of rare toe injury which usually occurs during infancy. It can also be seen in various parts of the body (fingers, penis, clitoris), as well as the toes. Hair or yarn wrapped to a tissue can cause circulatory disorder. If diagnosis and treatment are delayed it may result in permanent tissue damage and necrosis in the related part of the body. It is one of the hidden reasons of irritability in infants. The ligature must be removed completely and quickly in order to allow perfusion and provide skin healing. We presented a case of hair-tourniquet syndrome diagnosed in an eight-month-old baby.

Case: Eight month baby girl was brought to the emergency department with complaints of swelling and redness in the 3rd toe of her right foot. On physical examination a very thin trace of laceration surrounding the medial phalanx of the 3rd toe of the right foot was seen. Swelling and redness were present in the distal of the laceration. The parents told that the baby was restless for the last 3 days and they have just realized the swelling and redness in her toe, today. The arterial color Doppler examination which was performed in another pediatric emergency center was normal.

On inspection the hair-yarn tourniquet syndrome was diagnosed. The hair was dissected after local anesthesia was performed. The capillary circulation and color of the toe improved after intervention. The baby was discharged after prescription of oral antibiotics and analgesics. Plastic surgery clinic control recommended.

Conclusion: Hair-thread tourniquet syndrome is a rare and severe disease which may lead to tissue necrosis and amputation. The circulation of the related part of the body should be corrected immediately, close follow up after discharge is needed and family must be educated.

Keywords: Hair thread tourniquet syndrome, toe, infant



Figure 1. The hair was dissected after local anesthesia



Figure 2. Thin trace of laceration surrounding the medial phalanx of the 3rd toe

P-318

[Acil Tıpta Ağrı Yönetimi]

THE CAUSE OF A RARE STOMACHACHE IN THE EMERGENCY DEPARTMENT: SIMPLE LIVER CYST

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Introduction: While stomachache creates an important part of emergency admissions, pathologies belonging to solid organ are seen much more rarely and they give symptoms more rarely. Simple liver cysts (SLC) usually get diagnosed incidentally, and lead to symptoms in very few cases. We aimed to inform emergency physicians by sharing our cases that applied with stomachache complaint and detected SLC.

Case: A 41 years old female patient is applied with stomachache complaint continued for about 4 hours. There wasn't a meaningful case except the right costovertebral aspect tenderness on patient's medical examination with stable vital sign. There was 50x40 mm well-circumscribed cystic lesion in the right lower pole of the liver in abdominal sonography of the patient with completely normal laboratory values. A contrast enhanced abdominal tomography was planned to evaluate localization of the cyst. There was 48x35 mm, hypodense lesion on 5-6 liver segments in the lower pole of the right lobe of the liver in tomography (Figure 1). According to general surgery clinic's opinion, the patient was discharged by suggested polyclinic control.

Result: SLC rarely causes symptoms like stomachache, backache in patients. With being cyst wall is thin in abdominal sonography, it is separated from microbic cyst and abscesses. Treatment is usually unnecessary and abdominal sonography follow-up is sufficient. Only cysts, which are narrowed to liver parenchyma due to excessive size are needs to operation. Physicians' knowledge about SLC and its possible presentation with stomachache, could facilitate the diagnosis in the emergency service.

Keywords: Liver, simple cyst, stomachache



Figure 1.

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[Acil Tıpta Ağrı Yönetimi]

A RARE CAUSE OF ABDOMINAL PAIN: SPLENIC INFARCT

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Introduction: Splenic infarct is a rarely encountered clinical condition that may mimic other causes of acute abdominal pain. Its diagnosis is based upon clinical findings and radiological imaging. It is commonly seen in association with hematologic diseases and vascular and thromboembolic disturbances. The current study evaluates a case of a patient that presented to the emergency clinic with abdominal pain and was diagnosed as splenic infarct.

Case: A 38-year-old male patient presented to the emergency department with abdominal pain, which was present in a mild form in the last several days and become severe four hours

before his presentation together with nausea and vomiting. The general condition of the patient was good and vitals were stable with a nonspecific past medical history. His cardiac sounds were rhythmic and with normal heart sounds. His abdomen was diffusely tender with no rebound or guarding. He had leukocytosis and a serum amylase level of slightly higher than the upper limit of normal range. The contrast enhanced computerized abdominal tomography revealed a hypodense area at the anterior and middle part of the spleen, which was compatible with an infarct. In addition, a hypodense mass lesion measuring 10x75 mm with regular contours in a cystic appearance next to the kidney on the anterior part at the localization of adrenal gland was seen. This mass had anteriorly displaced the splenic artery (Figure 1). General surgery consultation was ordered and the patient was admitted to the ward. He was operated on under elective conditions; the cyst was drained and a splenectomy was performed. He was discharged in a good condition.

Result: Splenic infarct is one of the ignored and rarely encountered causes of acute abdominal pain. Diagnosis is based upon clinical suspicion and is assisted by radiological imaging. Contrast enhanced computerized abdominal tomography is the first choice for diagnostic imaging. It should always be considered in patients who present to emergency services with abdominal pain, taking into account the underlying and risk producing diseases.

Keywords: Emergency service, abdominal pain, splenic infarct

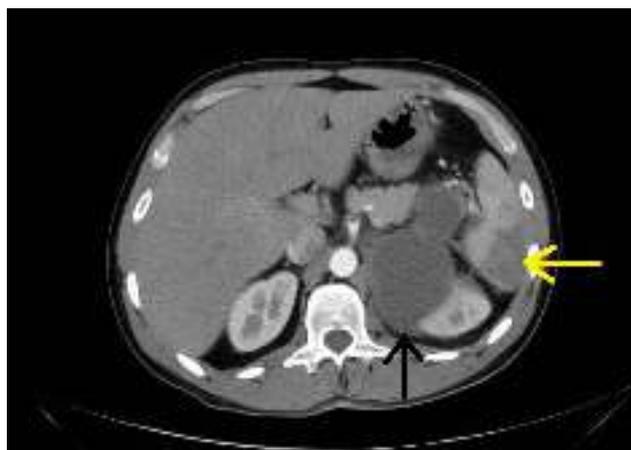


Figure 1.

P-320

[Acil Tıpta Ağrı Yönetimi]

FIBROMYALGIA, PATOPHYSIOLOGY AND TREATMENT

Alfonso Hernandez

Hospital Angeles del Pedregal

Introduction: Recently, pain is the most common reason for patients to consult doctors. The fibromyalgia syndrome (FMS) is known as one of the two major causes of musculoskeletal chronic pain. The study and treatment of FMS is of high importance because pain and stiffness in patients can be so intense to make the performance of even basic tasks impossible. The causes of FMS are unclear. They are believed to involve psychological, genetic and neurobiological factors. There is evidence that environmental factors and certain genes increase the risk of developing

fibromyalgia. It is also believed that FMS can be caused by high stress conditions, emotional factors, lack of exercise, food, and diseases as the Pickwick Syndrome, nephropathies, obesity etc. We favor the view of hormone and metabolic abnormalities in the biochemical cell composition.

Material-Methods: Basic laboratory tests, chemical equilibrium acid/base analysis and electrocardiograms in randomly selected patients.

Background: Normally all humans produce acids. Under certain circumstances, the pituitary gland releases ACTH hormone (Adrenocorticotropic hormone). Through reticular substances in the brain this hormone enters the blood stream and reaches the suprarenal root, where cortisone and catecholamine will be degraded in the form of free radicals, causing a toxic cycle. In a healthy person with good immunity, these toxins are metabolized, but an overproduction of free radicals will create changes in the sensory electric cortex. These alterations may cause tissue irritation and will decrease the amount of oxygen in the cell. It has been observed that a sedentary life style, eating poor food and emotional anxiety based states will turn the suffering from mild to severe.

Treatment: Sleeping pills, modulators to stimulate brain and chemical mediator depressors, analgesic creams, exercise, alkaline diet, positive mental attitude, vasodilators, alkalinizing and cleansing colon, depending on the case.

Conclusion: The endocrine factors, sedentary life and food rich in saturated fats, promote the formation of a layer within the blood stream that affects the hydrogen ion exchange, Free radicals raise the levels of hydrogen ions in the hemoglobin, occupying the space of the oxygen. This atypical metabolism results in the production of lactate and pyruvate acids, which are responsible for causing painful symptoms.

Keywords: Fibromyalgia

P-321

[Acil Tıpta Ağrı Yönetimi]

AN UNDESIRE RESULT OF LEECH THERAPY FOR BACK PAIN

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Introduction: Many countries have approved hirudotherapy as a method of treatment. The most significant indication of leech therapy, also known as hirudotherapy, is its use in the treatment of chronic pain. This case study discusses the emergency approach and treatment of a 33-year-old patient who had resort to leech therapy and subsequently suffered from long-term bleeding complication in the form of leak.

Case: A 33-year-old male patient who presented to the emergency department declared that he had leech therapy for his back pain and then started suffering from uninterrupted bleeding. His general health condition was good in the physical examination and his vital signs were normally. In the lumbar region, there were leech bites of 2-3 mm in 7 different parts. Bleeding was continuing in the form of leak from these bites. There was an ecchymosis around bitten areas. Dressing and tampon were

applied on bleeding parts. Bleeding did not stop despite three hours of tampon application. No abnormal pathology was found in blood tests. The bitten areas were sutured. Then no bleeding was seen during the two-hour observation. Antibiotherapy was prescribed, and the patient was asked to come back for control after 24 hours.

Conclusion: Hirudotherapy, in other words leech therapy, is a treatment used to complement medical therapy. Considering that serious complications are encountered from time to time as well as injuries, the therapy should be used in the light of scientific data. Furthermore, the indications and contraindications of hirudotherapy should be identified clearly by scientific research. Emergency physicians are required to make use of appropriate methods for the removal of leeches and be alert and careful with regard to complications.

Keywords: hirudotherapy, leech, Emergency Department



Figure 1.



Figure 2.

P-322 [Hastane Öncesi Acil Sağlık Hizmetleri]

AIR MEDICAL PREHOSPITAL CARE: A CHALLENGE IN LARGE URBAN AREA

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Background and Aim: The role of Helicopter Emergency Medical Service (HEMS) must be to improve patient care and to ensure the most rapid transport of critically ill or injured patients. Several studies have shown that HEMS have a positive effect on patient's outcome in rural areas, but the use of air medical transport in urban areas is still controversy and subject of debate regarding its role and potential benefit. Sao Paulo, the largest metropolis of Brazil, located in Sao Paulo state, has an area of

1.522.986 km² with a population of 11.821.876 inhabitants, that often hinders access to a trauma center or a university hospital. HEMS have a fundamental first aid role in Sao Paulo, but their use should be better defined. The aim of this study is to determine the utility of HEMS in urban environment, pointing out advantages and disadvantages.

Methods: A literature review of descriptive and population-based studies addressing HEMS in urban area. We searched Medline and Lilacs from 1994 to 2014 in English, Spanish and Portuguese, reviewed and selected potentially relevant studies.

Results: A search of the literature revealed 19 eligible studies.

Discussion: - HEMS bring benefits to the population due to their reduced answer-time and access to areas that are unfeasible through ground ambulances. - Transport by HEMS is much faster when compared with transport by ground emergency medical services and patients may be taken to trauma centers or a referral hospital, which makes it effective at rush hours. - Refinement of triage remains a major challenge to the dispatch of helicopters in the first aid system in large cities. - Inappropriate use of helicopter transport or overuse of the service in urban areas may increase costs and risk of injury. The lack of landing spot may postpone patients transport. - The effectiveness of this service requires a well-trained specialized team, well-equipped and efficient prehospital system.

Conclusion: We believe this work shall provide grants for creating new protocols, encouraging training and improving aeromedical prehospital care in São Paulo.

Keywords: Prehospital care, Helicopter emergency medical service, Urban area

P-323 [Hastane Öncesi Acil Sağlık Hizmetleri]

WORK-RELATED INJURIES AMONG EMERGENCY MEDICAL TECHNICIANS AND PARAMEDICS IN THE WESTERN TURKEY

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Objectives: Emergency Medical Technicians (EMTs) and paramedics are at serious risk for work-related injuries (WRI) during work hours. EMTs and paramedics have higher WRI rates according to the literature data. This study is designed to investigate causes and characteristics of WRI involving EMTs and paramedics staffed in western Turkey.

Methods: All healthcare personnel staffed in EMS in the city were interviewed face-to-face in their off-duty hours to inform them about the study. Excluded from the study were those who declined to participate in the study, those who were not on duty during the two-month study period and those who had been working in the EMS for shorter than a year. The subjects were asked to answer multiple-choice questions.

Results: A total of 163 personnel (117 EMTs, 46 Paramedics) comprised the study sample. Eighty-three personnel (50.9%) were female and mean age was 29.7±8.4. The most common mechanisms of WRI as reported by the personnel were MVAs (31.9%), needlestick injuries (16%), ocular exposure to bodily fluids (15.4%) and sharp injuries (9.8%), respectively. Needlestick

injuries commonly occurred during IV line procedures (59.4%) and inside the cruising ambulance (62.5%). Working inside the cruising ambulance was the most commonly accused cause of the WRI (41.3%).

Conclusion: Paramedic personnel and EMTs are under high risk of WRI. MVAs and needlestick injuries were the most common causes of WRI. Strict measures need to be taken to restructure the interior design to protect personnel from all kinds of WRI.

Keywords: Paramedic, ambulance, work-related, accident

P-324 [Hastane Öncesi Acil Sağlık Hizmetleri]

VOLUNTARY MEDICAL PRACTICE APPLIED BY PHYSICIANS ON BOARD

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During the flight the cabin crew seeking a health professional which medical emergency and/or intervention is likely to be needed on a voluntary basis for the passengers can be heard by an announcement. Physicians who take the responsibility for that patient during the journey are also asked to sign a report of the medical emergency and/or intervention from his physician at the end of the trip. A determination made by the civil aviation in the world, physicians who may take responsibility for the medical situation –especially the ones whose specialty does not suitable- fall on a sleep and remain silent during the flight when the emergency announcement is made.

In our study, e-questionnaire consisting of 14 questions to Acibadem Health Group mail group and Emergency Medicine Specialists’ of Turkey yahoo mail group was sent and they were asked to answer questions about the voluntary medical practice applied by physicians on board in a month period in April 2013.

276 (40.7%) from 678 physicians participated in the survey by filling in surveys fully. 185 were male (67%) and mean age was 43.4 ± 9.3. Participants were actively practicing their profession of medicine average 17.7 ± 8.5 years. Subjects undertook an annual average of 10.05 ± 2.4 one-way flights. Of these flights 2.34 ± 0.8 (23%) were long track (> 4 hours) flights.

46% of the respondents (n = 127) witnessed the announcement for a request of medical assistance made by cabin crew (cabin crew and / or supervisor) during the flight. The responses to the request after the announcement of what the reaction of the participants are shown in Table 4.

154 participants (55.8%) are found voluntary to intervene to the patients even concerns about professional liability and on the other side 69 (25%) reported not to be sure.

Turkish Airlines (THY) has implemented a program called “Smiling Doctors” -which there similar programs abroad- in order to reach to the targeted health professionals easier during flight. As of October 2014 the doctors’ specialty participated to this program is shown in Table 6.

Physicians who deals with medical emergency on board may opt to do nothing with their conscience and lawful fear of making mistakes and patients may suffer. In this study, although most of the physicians have no fears regarding medical liability

to involve in a medical emergency on board, nearly half of the participants reported to be confused or feel under risk. “Good Samaritan Law” which is a regulation to resolve this fear and avoidance to deliberate a medical intervention that prevents criminal proceedings in the United States of America can also to be enacted in Turkey to avoid these drawbacks.

Keywords: Medical emergency, flight, voluntary, onboard, medical liability

Tablo 1. Katılımcıların çalıştığı kurumlar

Tıp Merkezi / Poliklinik	7	%2.5
Devlet Hastanesi	4	%1.4
Eğitim Araştırma Hastanesi	17	%6.2
Askeri Hastane	3	%1.1
Üniversite Hastanesi	32	%11.6
Özel Hastane	213	%77.2

Tablo 2. Katılımcıların çalıştığı pozisyonlar

Pratisyen	22	% 8.0
Araştırma Görevlisi	1	% 0.4
Uzman	135	% 48.9
Öğretim Görevlisi	7	% 2.5
Baş Asistan	3	% 1.1
Yrd. Doç.	19	% 6.9
Doç.	47	% 17.0
Prof.	42	%15.2

Tablo 3. Katılımcıların branslara göre dağılımı

ACIL TIP	79	28.62%
AİLE HEKİMLİĞİ	23	8.33%
ANESTEZİYOLOJİ VE REANİMASYON	22	7.97%
BEYİN VE SİNİR CERRAHİSİ	20	7.25%
ÇOCUK SAĞLIĞI VE HASTALIKLARI	18	5.80%
GENEL CERRAHİ	15	5.43%
GÖĞÜS HASTALIKLARI	13	4.71%
KADIN HASTALIKLARI VE DOĞUM	12	4.35%
ORTOPEDİ VE TRAVMATOLOJİ	13	4.71%
Diğer	63	22.83%

Tablo 4. Tıbbi yardım anonsu sonrası katılımcıların reaksiyonları

Anonsu duyduğum an benediltilen hastanın başına giderim	153	55.43%
Tıbbi pratiğimi görmeye çalışırım ve ancak hiçbir doktorun gelmediğini görürsem giderim.	64	19.57%
Hastanın başına gidemeyerek te dışarı giderim ve müdahale konusuna kendimi tedirgin hissederek gorkoğunu yaparım.	45	17.99%
Genellikle duyduğumdan gelir sorumluluk almamaya çalışırım	11	3.98%
Diğer	9	3.20%

Tablo 5. Katılımcıların uçta tıbbi müdahale istegine cevap vermeme nedenleri

Böyle bir ihtiyaç doğduğunda müdahale gerekeni yaparım	155	57.05%
Mevkiyi mesuliyet ve diğer halle sonucunda haruk idareceğini düşünürsem sorumluluk almamak istemem.	66	23.91%
Çalışma sorumluluğum veya başka hastaları gerektirdiğinde başka bir yere giderim.	29	10.51%
Hastaya ilk ve son müdahale konusunda kendimi yetersiz hissediyorum	27	9.78%
Ben de bir yolcu olarak rahatsız edilmiş istemiyorum	23	8.33%
Genel olarak sorulara cevaplar bir durum olduğundan kendimi hakem olarak tanıtmak istemem.	22	7.97%

Tablo 6. THY Smiling Doctora programına katılan hekimlerin dağılımı

Doktor	1.258	48,05%
Aile Hekimi / Pratisyen Hekim	587	21,54%
Dahiliye ve Kardiyoloji Uzmanı	291	10,84%
Acil Tıp Uzmanı	185	8,77%
Kadın Hastalıkları ve Doğum Uzmanı	100	5,00%
Anesteziyoloji ve Reanimasyon Uzmanı	122	4,88%
Nöroloji Uzmanı / Psikiyatrist	120	4,38%
Toplam	2.754	100%

P-325 [Hastane Öncesi Acil Sağlık Hizmetleri]

ISTANBUL AMBULANCE SERVICE CASE DISTRIBUTION IN 2013

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Istanbul is a metropol populated by around 14.160.467 as announced by the census conducted in 2013 and it is a city of strategic importance due to its geopolitical position.

Istanbul province ambulance service activities

In Istanbul Province Ambulance Service, two chief physicians, one in Asian side and one in European side, and two command centers are providing service. The distribution of personnel is summarized in Table 1.

112 Emergent help ambulances

In 2004, we enlarged and diversified our vehicle fleet. There are 320 registered ambulances in total, 249 active ambulances. 86 spare ambulances. 1 fully-equipped 4x4 snow-paletted ambulance, 2 multi-ambulances, 3 protocol ambulances, 1 obese ambulance, 2 organ transplantation ambulances, 1 intensive care ambulance, 5 motorcycle ambulances, 1 helicopter ambulance, 3 sea ambulances

In 2013, we provided service in our 163 Emergent Help Stations.

The 484 employee in Command Control Center received 24.965.122 calls. 22.768.191 (91%) of these calls were fake calls.

With the 1995 employee in the stations, 464.680 cases were conducted in 2013. 381.503 (82.1%) of these cases were medical cases.

In 2013, 146 patients were transferred by helicopter ambulance while 1193 patients were transferred by sea ambulance

Keywords: Ambulance, Case, Distribution



Figure 1. Emergent Help Stations in Istanbul

Table 1. The status of personnel in Istanbul Province Ambulance Service in 2013

	ASIA	EUROPE	TOTAL
DOCTOR	64	67	131
PARAMEDIC	148	187	335
EMT	649	980	1629
NURSE	39	44	73
MIDWIFE	5	11	16

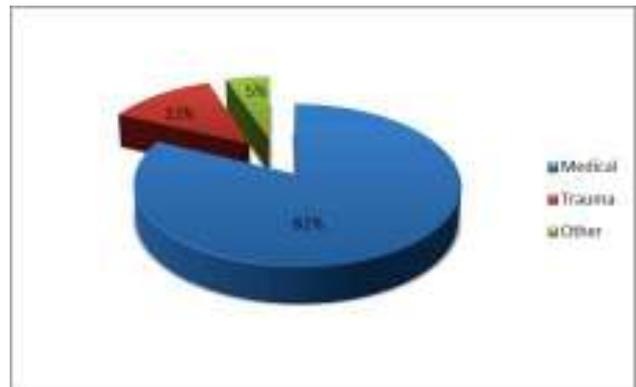


Figure 2. Distribution of the cases of Istanbul Province Ambulance Service in 2013

Table 2. Vehicle fleet of Istanbul Province Ambulance Service

Ambulance type	Model 2014	Model 2013	Model 2012	Model 2011	Model 2010	Model 2009	Model 2008	Model 2007	Model 2006	Model 2005	Model 2004	Model 2003 and before
Ambulance	-	31	68	4	79	1	55	16	9	9	18	18
Snow Track	-	-	1	1	-	-	-	1	-	-	-	-
Multi-Ambulance	-	-	1	1	-	-	-	-	-	-	-	-
Intensive Care and Obese Ambulance	-	-	2	-	-	-	-	-	-	-	-	-
Motorcycle	-	-	-	-	-	-	5	-	-	-	-	-
TOPLAM	-	31	72	6	79	1	60	17	9	9	18	18

Since 2004, we have enlarged and diversified our vehicle fleet.

Table 3. 2013 Training Activities

	Doctor Modules	Doctor Trainee Modules	Allied Health Personnel Modules	Allied Health Personnel Trainee Modules
	Number of Training	Number of Trainee	Number of Training	Number of Trainee
Basic Training Module	2	30	20	531
Trauma Resuscitation Course	4	52	9	210
Advanced Adult Life Support	4	58	6	97
Advanced Pediatric Life Support	5	94	10	212
Training of Ambulance Driving Techniques	-	-	14	196

2013 training activities are listed in Table 3.

Table 4. First Aid Trainings in 2013

Year	Month	The institutions getting first aid training	Number of trainee
2013	January - February	Health Directorate of Istanbul - Prime Ministry Personnel	68
2013	March - April	Health Directorate of Istanbul - Prime Ministry - Ministry of Justice Personnel	127
2013	May - June	Health Directorate of Istanbul - Prime Ministry - Ministry of Justice Personnel	189
2013	September	Republic of Turkey Prime Ministry Disaster & Emergency Management Presidency - Presidency of the Republic of Turkey - Metris T Type Close Prison and Detention House Personnel	40
2013	October	Republic of Turkey Prime Ministry Disaster & Emergency Management Presidency - Yıldız Technical University - Metris T Type Close Prison and Detention House Personnel	60
2013	November	Ministry of Justice - Istanbul University - General Command of Gendarmerie Personnel	100
2013	December	Health Directorate of Istanbul - Republic of Turkey Prime Ministry Disaster & Emergency Management Presidency - Metris T Type Close Prison and Detention House Personnel	110
2013	TOTAL	NUMBER OF TRAINEE	694

2013 first aid training activities are listed in Table 4. Furthermore, 653 people received first aid seminar in 2013.

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[Acil Tıpta Kalite Yönetimi]

THE EVALUATION OF OUR ER PATIENTS WITH CORONARY BY-PASS SURGERY

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Objective: Our study aims to document disease related knowledge and conditions of our ER patients with coronary by-pass surgery. We plan to enrich the management of this patient group needing complex treatment and follow-up process.

Materials and Methods: The study was performed with the volunteer patients who presented ER between 01/01/2014

and 01/08/2014. The patients were over 16 years of age and there was no man-woman separation. Educational and ethical committees approved the study. The patients were selected with basic randomization method by enrolling the patient at his / her first encounter with the researcher or assistant's approval. The sample size was planned as 50 due to long time necessity for study conduction. A survey consisting of 30 questions was applied to the patients with coronary by-pass surgery who presented Kayseri Teaching and Research Hospital and Bursa Şevket Yılmaz Teaching and Research Hospital. The questionnaire challenged these parameters; ER sections during show-up, age, sex, duration after coronary by-pass surgery, type of hospital hosting surgery, compliance for medications, number of medications, co-morbidities, number of show-ups at ER and cardiology clinics, compliance for follow-ups, diets and tobacco usage. In addition, the number and the reasons of hospital visits of the patients were examined retrospectively.

Results: The total enrollment was 49 patients, 36 of them was from Kayseri and 13 of them was from Bursa. %65,3 (n=32) of the patients presented in yellow zone, %16,3 (n=8) in red zone, %16,3 (n=8) in green zone and %2 (n=1) in triage. The majority of them was over 60 years of age, %71,4 (n=35). %69,4 (n=34) of the patients were man and %30,6 (n=15) of them were woman. %49 (n=24) of them had surgery in private hospitals, %28,6 (n=14) in public community hospitals, %18,4 (n=9) in university hospitals and %4,1 (n=2) in other countries. %93,9 (n=46) of the patients were using medications regularly, %6,1 (n=3) were not. %93,7 of the patients were using 2 or more medications. %85,7 of the patients had co-morbidities and the most common disease was diabetes mellitus, %49 (n=24). There was no statistical difference between ER and cardiology clinic show-ups. %55,1 of the patients were compliant with follow-ups. %65,3 of them declared that they have regular diet. %46,9 (n=23) of the patients stopped smoking after the surgery, %44,9 (n=22) have never smoked and %8,2 (n=4) were still smoking.

Conclusion: The patients with coronary by-pass surgery frequently present in ER mainly for cardiac reasons. It was detected that the vast majority of the patients prefer public community hospitals even though they got their surgeries in private hospitals. It is necessary to integrate public and private hospital health records in digital setting to be able to reach them from everywhere. The education about exercise, dietary habits, co-morbidities and their complications is important to increase consciousness. It was found that the patients do use ER for their follow-ups and they do not tell their by-pass surgery unless the physicians asks. It necessary to inform the physician after the registration about these patients. %98 of the patients were detected as voluntary to be educated. Since the most common co-morbidity is diabetes, it is necessary to educate the patients about diabetes and other diseases.

Keywords: Emergency management, coronary By-Pass Surgery, patient behavior

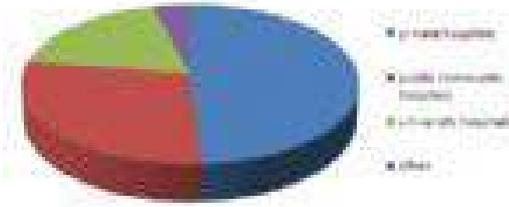


Figure 1. Which hospital have you been operated in ?

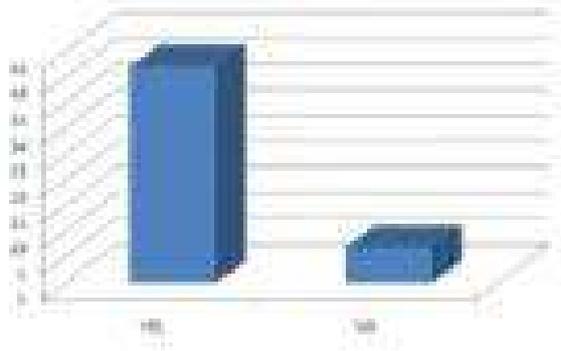


Figure 2. Do you have any other diseases ?

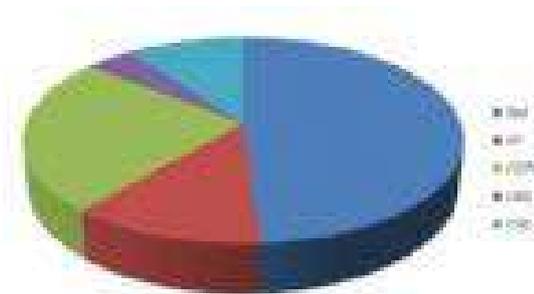


Figure 3. Which other diseases do you suffer from ?

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[Acil Tipta Kalite Yönetimi]

EVALUATION OF THE PATIENTS TRANSFERRED FROM EMERGENCY DEPARTMENT TO ANOTHER HEALTH INSTITUTE; A TWO-YEAR RETROSPECTIVE STUDY

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Introduction: We aimed to determinate the outcomes and properties of the transferred patients from Dokuz Eylül University Hospital Adult Emergency Department (DEUHAS) to another health institution.

Method: In this study, the retrospective data of the patients who were admitted to DEUHAS and had been planned for admission to hospital but transferred to another health institute

with various indications during a two-year period between 01.01.2011 and 31.12.2012. Patient data were pooled from Hospital Information Management System and the patient transferred registration forms in our hospital. The information of the patient at the transferred hospital was obtained via patient epicrisis.

Results: 164,810 patients had been admitted to the DEUHAS during the study period. Of all referred 539 (0.3%) patients, 429 transferred patients had been included in the study. The most common reason for referral was unavailable intensive care beds (51%). The most common medical problem for referral was respiratory disease (50%). There was no cardiopulmonary resuscitation during transport of any transferred patient. Of 429 transferred patients, patients (26%) died at the transferred institute. The mortality rate in the first 24 hours and in the first 28 days were 0.7% and 25%, respectively.

Conclusion: Groups of patients were transferred to the group with the highest mortality were those with respiratory illnesses. Groups with a high early mortality in these patients need referral to the emergency department of health workers and other emergency medical services should be increased for effective delivery of precision.

Keywords: Emergency Department, transfer, transferred patients

Table 1. The first presenting symptoms of patients transferred

Medical problems	n	%
Respiratory system diseases	194	45.2
Mental illness	42	9.8
Cardiovascular diseases	38	8.9
Cerebrovascular diseases	26	6.1
Trauma patients	21	4.7

Table 2. Reasons for transfer of patients

	n	%
Empty lack of ICU beds	219	51.0
Empty lack of service beds	154	35.9
Need of microsurgery	16	3.7
Patients and / or relatives refeed request	9	2.1
Social security coverage of the patients	3	0.7
Others	28	6.5
Total	429	100

Table 3. Outcomes of the transferred patients

	n	%
Discharged	279	65
Exitus	113	26.3
Leaving at his own request	25	5.8
Transferred to an other institute	10	2.3
Others	2	0.5
Total	429	100

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[Acil Tıpta Kalite Yönetimi]

CHARACTERISTICS OF REVISITS WITH SIMILAR COMPLAINTS IN 72 HOURS AFTER THE FIRST VISIT TO DOKUZ EYLUL UNIVERSITY HOSPITAL EMERGENCY DEPARTMENT

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Objective: To detect the characteristics of revisits with same/similar complaints in 72 hours after the first visit to Dokuz Eylul University Hospital Emergency Department.

Materials and Methods: This retrospective, cross-sectional study was conducted between 06.01.2011 and 05.31.2012 in Dokuz Eylul University Hospital Emergency Department. "The revisits" were defined as the visit of the patient with same/similar complaints in 72 hours after the first visit to Dokuz Eylul University Hospital Emergency Department. The charts of the revisits were screened from Hospital Information System (HIS) and the patient data were scrutinized and compared the data between the first visit and revisit(s)

Results: Taranan 83.578 hastadan 1.952'si (%2.3) dahil olma kriterlerini karşıladı. 1.952 of total screened 83.578 patients has met the inclusion criteria. This is also the overall revisit rate of our study. The most common complaint was dyspnea (n= 195, %10) and the most common diagnosis was renal colic (n= 195, %10) among the revisits. The death rate among the revisits was 11 patients (%0.6). The comparison of Triage scoring between the first and revisits were unremarkable; only two patients with a triage score of 4 were revisited with a lower score of 1. It was also detected that the presence of comorbid disease statistically effected the rate of revisits and admissions to hospital.

Conclusion: Measuring and assessment of the revisit charts of patients is a very important method of quality assurance. The rate of the revisits should not to be under estimated according to our results. Patients in this group were associated with several factors. Although the death rates were lower than expected, it can be concluded that the co-morbidity was the main factor of revisits in our study.

Keywords: Emergency Department, Revisit, Readmission

Table 1. Second application in the clinical outcomes of patients admitted again

	n	%
Discharged	1.651	84.6
Hospitalization services	187	9.6
Intensive care admissions	18	0.9
Clinical leave of his own accord	76	3.9
Dispatch	9	0.5
Death	11	0.6
Total	1.952	100

Table 2. Time intervals readmissions

	n	%
0-24 hour	586	30
25-48 hour	850	43.6
49-72 hour	515	26.4
Total	1.952	100

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[Acil Tıpta Kalite Yönetimi]

PATTERN OF ICU ADMISSION DUE TO DRUG PROBLEMS

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Critical care, Cairo university

Introduction: Drug related problems (DRPs) are of major concern, affecting patients of both sex. They impose considerable economic burden on the society and the health-care systems.

Aim of the work: The aim of this work was to identify and categorise drug-related problems in adult intensive care unit.

Patients and Methods: The study was a prospective, observational study as eighty six patients were included. They were consecutively admitted to ICU through the emergency room or transferred from the general ward due to DRPs. Parameters included in the study as length of stay in ICU, need for cardiovascular support or mechanical ventilation, dialysis, as well as APACHE II score were recorded.

Results: Drug related problems represent 3.6% of the total ICU admission. The median (range) of APACHE II score for 86 patients included in the study was 17 (10 - 23), and length of ICU stay was 2.4 (1.5 - 4.2) days. In 45 patients (52%), DRP was drug over dose (group 1), while other DRP was present in the other 41 patients (48%, group 11). Patients in group 1 were older (39 years versus 32 years in group 11), with significant impaired renal function. The need of inotropic drugs and mechanical ventilation as well as the length of stay (LOS) in ICU was significantly higher in group 1. There were no significant difference in GCS between both groups, however APACHE II score was significantly higher in group 1. Only four patients (4.6%) were admitted by suicidal attempt as well as three patients (3.4%) due to trauma drug-related admissions, all were in (group 1). Nineteen percent of the patients had drug related problem due to hypoglycaemic medication followed by tranquillizer (15%). Adverse drug effect followed by failure to receive medication were the most causes of drug problem in (group 11). The total mortality rate was 4.6%, all of them were eventually non preventable.

Conclusion: The critically ill patients admitted due to drug related problems represented a small proportion (3.6%) of admissions to the ICU. Hypoglycaemic medication was one of the most common causes of admission by drug related problems.

Keywords: Drug Related Problems, ICU, Cost, Safety

AN EXAMINATION OF EMERGENCY MEDICINE JOURNALS PUBLISHED IN TURKEY

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Introduction: There are two emergency medicine associations in Turkey, the Emergency Medicine Association of Turkey (TATD) and the Emergency Medicine Specialists Association(ATUDER). The Turkish Journal of Emergency Medicine and the Journal of Academic Emergency Medicine are published by these two associations. This study investigated the types of paper published in these journals and their characteristics.

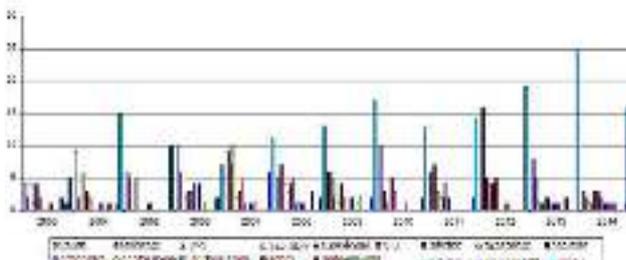
Materials-Methods: Publications in both journals (reviews, papers, case reports etc.) were identified by retrospectively reviewing the two journals published in Turkey backward from 2014. Papers (questionnaire studies, retrospective record examinations, prospective patient studies, animal experiments etc.) were then examined in detail. Papers were classified in terms of content type (trauma, toxicology, cardiac emergency etc.).

Results: 84 issues of the two journals were examined; these contained 256 case reports (27.6%), 266 retrospective studies (25.5%) and 150 prospective studies (16.2%). One hundred sixty-five (32%) studies involved subjects such as triage, education and cost analysis. Subject matter was trauma in 92 (17.8%) studies, toxicology in 53 (10.3%) and the cardiovascular system in 50 (9.7%).

Conclusion: Due to procedural difficulties in studies planned in recent years in particular, physicians are turning mainly toward questionnaire and retrospective studies.

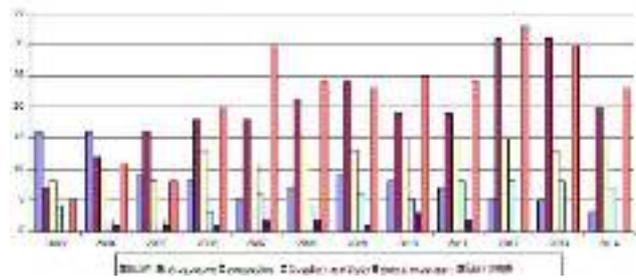
Keywords: emergency department, journal of emergency medicine, research articles

Selected Issues by Year



Comparison of study subjects between the years of 2003-2014

The Methods Used By Year



Comparison of the methods used between the years of 2003-2014

TURKEY'S CONTRIBUTION TO EMERGENCY MEDICINE LITERATURE OF THE WORLD IN LAST 20 YEARS

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Intraduction: Emergency medicine is a separate branch in Turkey since year 1993, and specialization education is provided in a total of 80 institutions, including 51 universities and 29 training and research hospitals as of the year of 2013. The number and qualifications of the publications of training clinics in international or national indexes and the number of attributions are important indicators from the aspect of academic development. In this study, in 2nd decade of emergency medicine in Turkey, in order to find the articles of emergency medicine clinics published scope of Index Medicus.

Method: Between 1st January 1994 and 31st December 2013 in journals indexed within the scope of Index Medicus, a scan has been made by entering "emergency" medicine and "Turkey" words into affiliation section of "http://www.ncbi.nlm.nih.gov/pubmed/" webpage.

Through search engine in ISI Web of Knowledge, it has been detected if the journals are in SCI or SCI-Expanded list. By searching the found articles in Google scholar, the numbers of attributions were determined.

The publications involving first name from other departments and the ones before the establishment of emergency medicine department were not involved in this study.

Findings: Of the articles found in scanning 719, 86% were from clinics in universities, 10.6% were from clinics in training and research hospitals, and 3.5% were from 2nd stage hospitals (state hospitals, private hospitals). Of the published articles, 38.1% were prospective clinic studies, 35.2% were case presentation, 16.8% were retrospective clinic studies, 9.2% were animal experiments, and 7% were reviews. The annual mean number of articles published from Turkey in last 20 years was 35.9 articles per year.

The annual distribution is shown in Figure 1.

Figure 1: Distribution of publications by year

Analyzing the distribution of publications by subject made 5 issues most publications; Toxicology 22.3% (n = 160), trauma 20.7% (n = 20.7), Cardiology 12.2% (n = 88), General Surgery, 7.9% (n = 57), and Neurology 4,6% (n=33) was listed as. Publication of the most frequently observed at the magazine

National Trauma and Emergency Surgery Journal of 11.8% (n = 85), the American Journal of Emergency Medicine %11.8 (n = 85), and the Emergency Medical Journal, 11.8% (n = 85) were. Considering the distribution between the institutions, it was seen that, of the clinics providing the highest contribution to the literature in last 20 years, the contributions of the clinics were 7.5% for Medical Faculty of Akdeniz University, 7.2% for Medical Faculty of Dokuz Eylül University, and 4.9% for Medical Faculty of Karadeniz Technical University.

Result: The results of this study indicate that the number of emergency medicine publications from Turkey increased year by year. The publication analysis studies are important for enlightening the future by showing the status of emergency medicine in our country. The studies, where the more detailed analyses of the publications are made, will be guiding for the researchers.

Keywords: emergency medicine in Turkey, scientific publications, references

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[Araştırma ve Metodoloji]

THE IMPORTANCE OF NEUROLOGICAL HISTORY AND PHYSICAL EXAMINATION IN THE EMERGENCY DEPARTMENT

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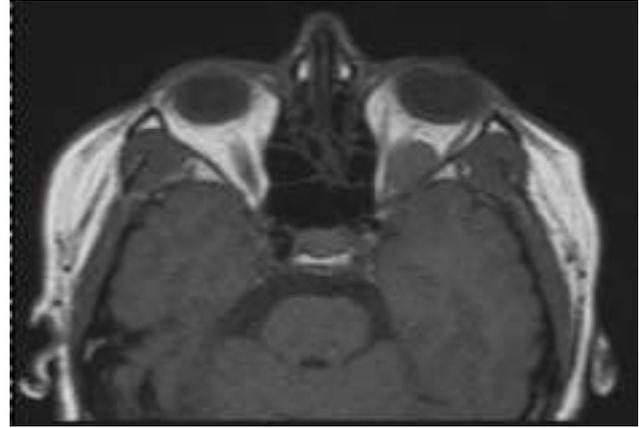
Entrance: Medical history and physical examination in the emergency room, like it is an indispensable part of every department. The neurological examination and history of these systems are known in the emergency room physicians and done part should be applied on top. The applicant in this case epilepsy and migraine diagnosis of a patient's emergency department with complaints of diplopia were examined and diagnosed with post-infraorbital mass.

Case: 52 years female patient was admitted to our emergency department with headache and double eyesight complaints. History in today's left eye 10 minutes after which the patient developed sudden loss of eyesight but according to a large extent opened-topped double-bottomed adde according to the complaint. Due to the patient's migraine and applied resume was learned that the follow-up. He is 1 or 2 times a month migraine attacks. Price clonazepam use what disease epilepsy and seizures spend 20 years is not. Blood pressure of 150/110 mmHg with the patient's other vital signs were stable. Physical examination were available only vertical diplopia. Does the patient brain diffusion imaging was performed where no acute pathologic finding it was reported by radiology consultation was opened onto the neurology section. Providing neurology department of patient's current condition might be related analgesia and observation of the patient with migraine has been pointed out. Patients was seen again a few hours later developed mild ptosis and proptosis in the left eye when evaluated. Lobule contoured at the widest spot 12X19 mm in size, including the radiology department of the proposals by the contrast of brain MR recall inferior retrobulbar space of patients rectus muscle and the lateral rectus muscle of the right orbital apes, well-circumscribed mass was detected. Patient admissions were made to be operated over department of Ophthalmology.

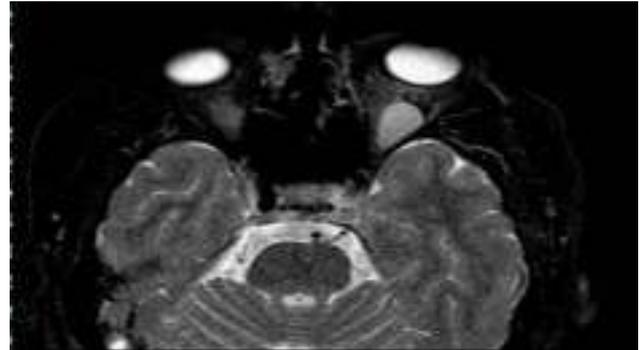
Results: Patients can contact in the emergency room with various eyesight disorders. In those patients diagnosed with such as usually migraine, simple eye problems, transient ischemic attack often temporary and sometimes cerebral or orbital tumor could turn lead to this complaint. Thus of emergency physicians especially in patients with symptomatic treatment of orbital relaxation that eyesight impairment and cerebral tumors should be kept in mind.

Keywords: Diplopia, Emergency Medicine, Neurological examination

MRI1



MRI2



MRI3



SPONTANEOUS HEMOTHORAX DUE TO METASTATIC GASTRIC ADENOCARCINOMA

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Introduction: Hemothorax is the presence of blood in the pleural space. The source of blood may be the chest wall, lung parenchyma, heart, or great vessels. Most common cause of hemothorax is trauma. But we can see spontaneous hemothorax with some diseases. Spontaneous hemothorax is an extremely rare presentation of malignant disease, and spontaneous hemothorax is only rarely reported in the literature as a presentation of gastric adenocarcinoma. We describe the case of a 32-year-old woman with metastatic gastric cancer admitted to emergency department with spontaneous moderate hemothorax.

Case: A 32-year-old woman was brought to the emergency department with dyspnea and right pleuritic chest pain within 16 hours after symptom onset. In her medical history; 1 year ago, she was diagnosed with gastric adenocarcinoma and underwent partial gastrectomy. Multiple metastatic lymph nodes and pulmonary nodules were detected 3 months after the surgery and the patient received six cycles of a cisplatin-based chemotherapy regimen over 6 months. On the day of admission, the patient experienced dyspnea and right pleuritic chest pain. Physical examination on admission body temperature of 36.7°, pulse rate of 120 beats per minute, blood pressure of 110/65 mmHg, and a respiration rate of 28 breaths per minute. Laboratory test results included hemoglobin 11.3 g/dL, hematocrit 31.4%, white blood cell count $6.24 \times 10^3/\mu\text{L}$, AST 54 IU/L, ALT 64 IU/L, total bilirubin 2.2 mg/dL. Other blood test results were normal. Chest X-rays showed a moderate right-sided pleural effusion (figure 1). Breast surgery consultation was requested. Thoracentesis was performed. Moderate hemothorax was diagnosed by thoracentesis. A chest tube was inserted and approximately 1,100 mL of bloody fluid was drained. CT images of the chest revealed pleural thickening due to metastasis with moderate hemothorax (figure 2). These findings indicated that the moderate hemothorax was caused by a spontaneous rupture of a metastatic gastric adenocarcinoma into the intrapleural space. While the patient under observation, she underwent surgery because she continued to bleed.

Conclusion: Finally spontaneous hemothorax is a very unusual presentation of ruptured gastric adenocarcinoma. It is a very rare condition, but it is potentially fatal. The main symptom is the sudden or slowly onset of dyspnea and chest pain. Other signs are palpitations and hypotension, consistent with hypovolemic shock. Reported rare signs included massive hemoptysis and respiratory failure. Our patient also developed hemothorax with sudden-onset chest pain, dyspnea, and tachycardia. For definitive diagnosis; thoracentesis should be performed after see pleural effusion on chest x-ray. Hemorrhagic fluid is seen in thoracentesis for definitive diagnosis.

Keywords: Hemothorax, Gastric Adenocarcinoma, Dyspnea

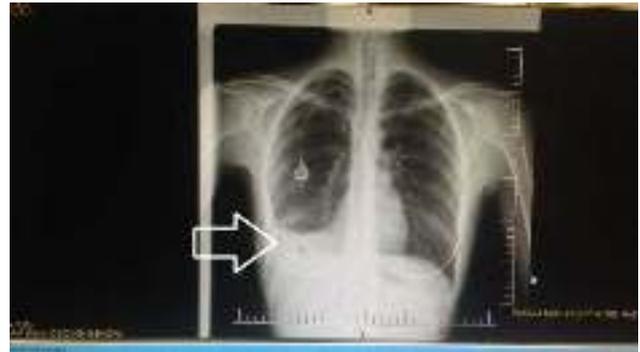


Figure 1. Admission x-ray showed right-sided pleural effusion

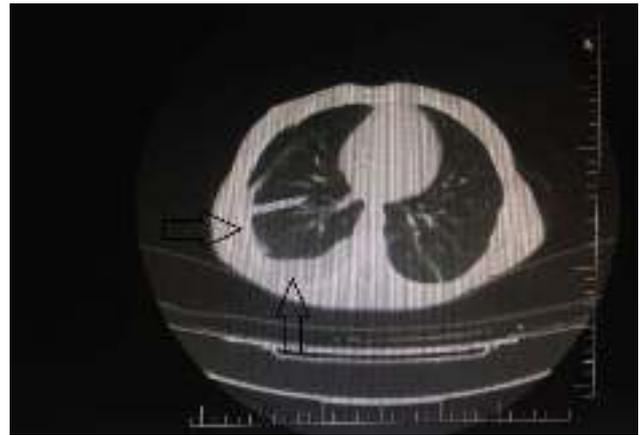


Figure 2. CT images of the chest - Arrows show pleural thickening due to pleural metastasis and hemothorax

SCIMITAR SYNDROME

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Objectives: Scimitar syndrome is a rare anomalous pulmonary venous drainage. It is characterized with the drainage of right pulmonary vein mostly to the inferior vena cava or the right atrium. In this case we aimed to scimitar syndrome presenting with hemoptysis, chest pain, cough

Case: 34-year-old male patient was admitted to the emergency department with cough which is during 1 month, hemoptysis and chest pain radiating to the back. Patients are often treated medically due to lung infection. The patient's history; He had no systemic diseases, daily medication. Physical examination was unremarkable, the general condition was good. Blood pressure 120/80 mmHg, body temperature: 36.4, heart rate: 105/dk, respiratory rate 24, oxygen saturation: 94, GCS: 15. Normal chest radiograph, ECG: sinus tachycardia. Laboratory tests: hemoglobin: 14.3gr/dl, WBC 5,900 / pl, ABG: ph: 7.423 PCO₂: 28 mmHg PO₂: 90 mmHg SO₂: 97.3% BE: -4 mmol / l HCO₃: 18.3. Pulmonary CT angiography; The right lung pulmonary vein thicker than normal, and was being drained to the inferior vena cava. The image is compatible with scimitar syndrome. The pulmonary artery and secondary branches did not compatible

with embolism. Patients was recommended with chest diseases clinic for further evaluation and treatment.

Conclusion: Patients who admitted to the emergency department with complaints of recurrent pulmonary infections and hemoptysis, Scimitar syndrome should be kept in mind.

Keywords: Scimitar syndrome; pulmonary veins, emergency medicine

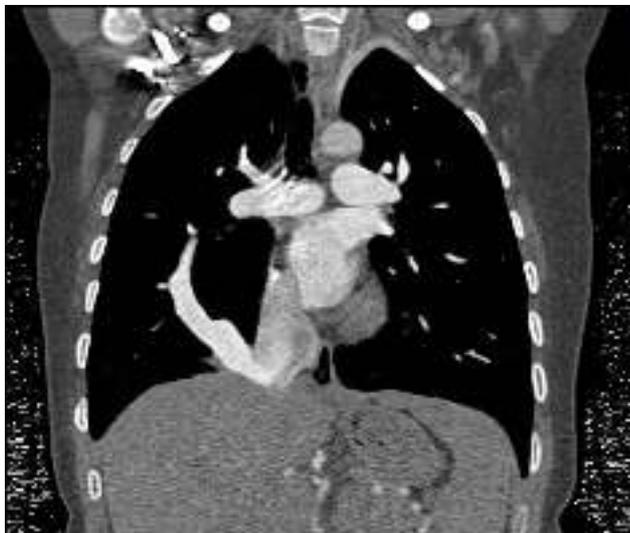


Figure 1. The right lung pulmonary vein was being drained to the inferior vena cava

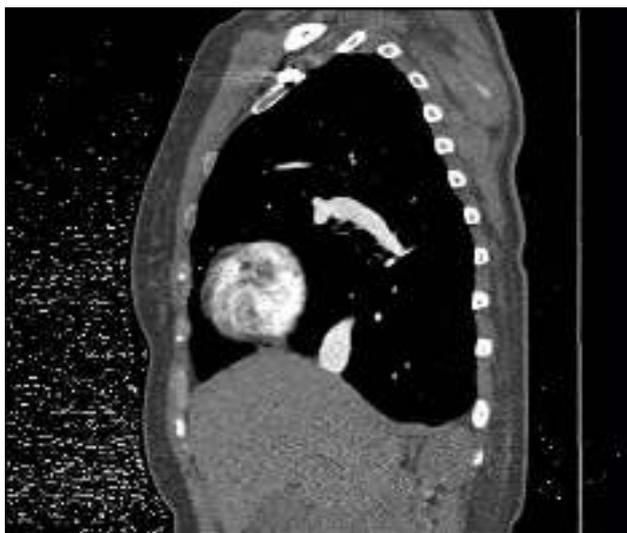


Figure 2. The right lung pulmonary vein was being drained to the inferior vena cava

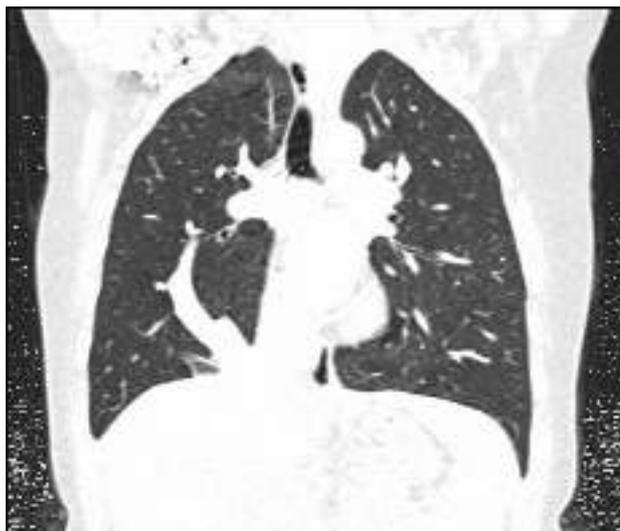


Figure 3. The right lung pulmonary vein was being drained to the inferior vena cava

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[Solunum Acilleri]

AN UNUSUAL CAUSE OF HIGH GRADE FEVER

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Introduction: Fever is one of the chief complaints of emergency department (ED) patients. Careful examination, laboratory and radiological studies identify the source of fever frequently. Non-infectious causes can cause hyperthermia in patients with certain risk factors and pulmonary embolism is one of them.

Case: 61 year old male with a history of pancreas malignancy presented to our ED for new-onset fever of 40.1° C. He denied any palpitations or shortness of breath.

Physical examination showed tenderness and swelling of left leg with positive Homans sign. Inspection of possible sources of fever was normal. Deep vein thrombosis was suspected and venous doppler ultrasound showed thrombus in left femoral and popliteal veins. Elevated d-dimer with hypocarbia suspected pulmonary embolism and intravenous contrasted computed tomography of thorax showed bilateral segmental pulmonary embolism. Both blood and urine cultures were negative. Patient was hospitalized for follow-up and initiating of anti-coagulation.

Conclusion: Fever can be a possible presenting feature of pulmonary embolism patients and its presence is not solely caused by sepsis. High grade fever is rare and can be a warning sign for patients with risk factors for pulmonary embolism.

Keywords: pulmonary embolism, hyperthermia, pancreatic neoplasm



Figure 1. Coronal sections of computed tomography angiography of thorax showing pulmonary embolism

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[Solum Acilleri]

ANGIOEDEMA AND NECROTIC ARACHNIDISM SECONDARY TO SPIDERBITE

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Case: A 21 years old man presented to the emergency department with an intensive swelling and ecchymosis in his upper lip launched out after a spider bite, occurred one day ago during the sleep in the prone position. Parenterally methyl-prednisolone and antihistaminic were administered to the patient in another hospital and he was discharged with the prescription of steroid, antibiotic and anti-histaminic. However, the patient's symptoms as swelling progressed rather than improving. Physical examination revealed a severe angioedema of the upper lip and malar area, and also acyanotic area of the upper lip leaning to necrosis (Figure 1). There were also multiple cyanotic and eroded areas with inside the upper lip (Figure 2).

Discussion: Necrotic Arachnidism, characterized by ulcerated lesions of the skin, is caused by *Loxosceles* species spiders. It is healed with a scar tissue. Five types of *Loxosceles* species might cause necrotic arachnidism and most known is called as Brown Recluse, never found in Turkey. *Loxosceles rufescens* with a habitat in Turkey may also cause Necrotic Arachnidism (1). *Loxosceles* venom includes enzymes such as hyaluronidase, deoxyribonuclease, ribonuclease, alkaline phosphatase, lipase and sphingomyelinase D, responsible for tissue destruction and hemolysis. (2,3). Itching, pain and slight erythema reveal after 6-12 hours of *Loxosceles* bite. Erythema expands during the 24 hours and transforms to a blue-purple lesion which may progress to a skin necrosis with a bullae formation, cyanosis and hyperesthesia. Sams et al. defined a categorization of *Loxosceles* bites for treatment and prognosis. Stage 1 involves a slight

erythema without necrosis, stage 2 with erythema, mild edema, vesicle formation and a skin necrosis of < 1 cm² and stage 3 with a serious erythema, edema, bullae formation, ulcers and skin necrosis of > 1 cm². Necrotic ulcers occur in 20% of patients. Necrotic Arachnidism in the present case might be categorized as stage 3 with a rapid progression. Treatment of *Loxosceles* bites and necrotic arachnidism is conservative covering wound care. In the presence of infection, antibiotics generally should be recommended. Alternatively, vasodilator agents, hyperoxygen, electrical therapy and topical nitroglycerin had been tested, however, failed to benefit. There is no human study to show benefit of dapsone despite its common usage with also potential side effects (4).

Keywords: Angioedema, Necrotic Arachnidism, Spider Bite



figure 1



figure 2

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[Solum Acilleri]

DIFFUSE ALVEOLAR HEMORRHAGE RARELY SEEN IN EMERGENCY DEPARTMENT: CASE REPORT: YILDIRAY ÇELENK¹, FARUK ÖZŞAHİN², MEHMET EKİZ³, MEHMET COŞKUN AYKAÇ⁴

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**Mehmet Coşkun Aykaç* *Yüzüncü Yıl University, School of Medicine, Department of Emergency Medicine*

Diffuse alveolar hemorrhage syndrome (DAHS) is a group of heterogeneous disease with high risk of mortality characterized by diffuse bleeding into the alveolar spaces caused by the destruction of the alveolar septa and rarely by the damage of the arterioles and venules. It can develop due to several immune diseases such as systemic vasculitis, Good pasture syndrome, collagen tissue diseases and pulmonary-renal syndromes and also non-immune diseases such as infections haemostatic disorders, some toxic agent, drugs, malignancy and uremia. DAHS can appear in three different ways; the “pulmonary capillaritis” developing with the neutrophilic infiltration in alveolar septas, the “moderate pulmonary hemorrhage” without damage or inflammation in septas and the “diffuse alveolar damage” depending on the acute respiratory distress syndrome. 50% of the cases admit to the emergency service with a picture of acute respiratory failure requiring mechanical ventilation. While mortality varies according to the etiology, it is reported to be between 25% and 50%. Here we presented that a case with a different clinical picture was diagnosed as alveolar hemorrhage.

Case: 28 year old female patient was admitted to emergency department (E.D) after an epileptic attack. Patient was alert but lethargic. Her Glasgow Coma Scale was 12 and she was postictal clinically. In her vital signs; BP: 110/60 mmHg, pulse: 90 bpm, Temperature: 36,7 C0 RR: 14/min and Sat O2:84%. Cranial CT scan was assumed as normal. The laboratory results is presented in Table 1. In detailed history of the patient, she had hemoptysis along with intermittent cough since morning and in the evening she had epileptic convulsions. Therefore torax CT was ordered. While scanning, she had respiratory arrest. During endotracheal intubation, diffuse bleeding came out from trachea. In her thorax CT findings (Fig1-2), idiopathic diffuse alveolar hemorrhage was diagnosed and she was send to another health care center.

Conclusion: Diffuse alveolar hemorrhage is a serious picture that should be diagnosed before respiratory failure develops and requires early treatment. Regardless of etiology, 3 or 5 day high dose(250-1000 mg/day) corticosteroids is given in treatment. Because of acute respiratory failure, mechanical ventilation required in about 50 % of the cases and mortality rates are reported as 25-50 %. In this case we presented a patient who was admitted with a different clinical picture was diagnosed as diffuse alveolar hemorage, which is rare in E.D. In conclusion a patient admitted to E.D in a postictal clinical picture should be evaluted carefully in terms of history and physical examination also diffuse alveolar hemorhage should be kept in mind.

Keywords: Alveolar Hemorrhage, Hemoptysis, Seizure

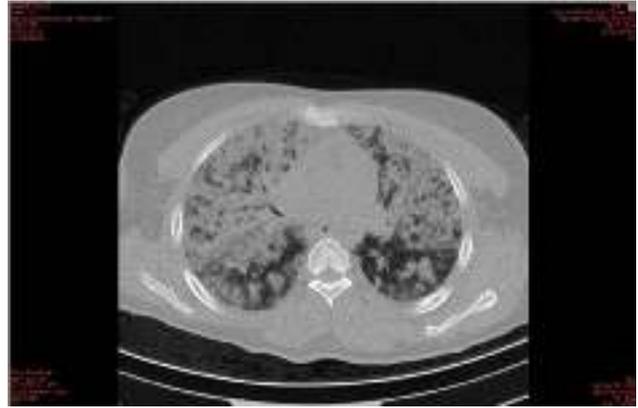


Figure 1. Diffuse alveolar hemorrhage in thorax CT in parenchyma view

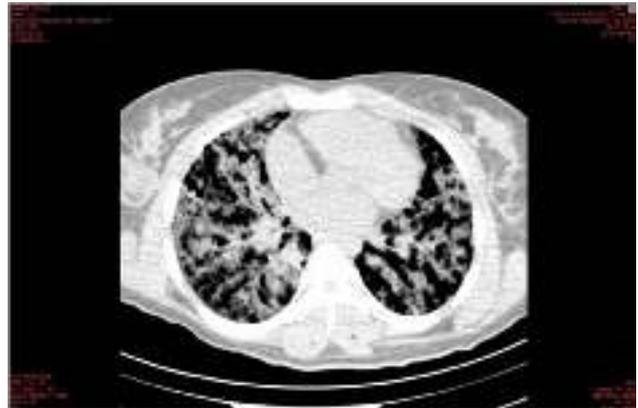


Figure 2. Diffuse alveolar hemorrhage in thorax CT in mediastinum view

Table 1. The laboratory findings

Parameter	Value
1. Hemoglobin (mg/dl)	8,3
2. Hemoglobin (mg/dl)	7,3
Platellet (mm3)	157000
BUN(mg/dl)	14,6
Creatin(mg/dl)	0,85
Na (mEq/L)	139
K (mEq/L)	4,1
Glucose (mg/dl)	142
PT INR	1,61
PT	17,6
PH	6,84
HCO3 act	9,9
PCO2	59
PO2	57
Troponin	0,054

ACUTE PULMONARY EMBOLISM IN A PATIENT WITH HIDRADENITIS SUPPURATIVA

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Introduction: Pulmonary embolism (PE) is a life-threatening condition occurring about 23–69 patients/100000 population. It can range from an asymptomatic patient to a massive PE. The implementation of its appropriate treatment at presentation is usually effective and life-saving. PE is also recognized in about 50% of patients with deep venous thrombosis (DVT) and nearly 80% of those who are being diagnosed with PE have DVT. Some main predisposing factors, either acquired or inherited, of DVT and the resultant PE include deficiencies of blood coagulation agents, immobilization, hypercoagulable states caused by cancer, pregnancy, trauma, oral contraceptives, and major surgery. Hidradenitis suppurativa (HS), also known as acne inversa, is a chronic, inflammatory, skin disease affecting terminal hair follicles in apocrine-gland-bearing skin. Associated comorbidities include depression, obesity, and metabolic syndrome. Metabolic syndrome is a multifaceted disorder strongly associated with increased risk for development of cardiovascular disease. We present a case of DVT and subsequent massive PE caused probably by HS in otherwise a healthy man.

Case: 48-year-old man presented to ED with dyspnea, palpitation and weakness ongoing the last 3 days duration. In his background, there was only hidradenitis suppurativa. He was mobile, there was no history of travel or any drug that would induce thrombosis, no known malignancy. His Glasgow Coma Scale (GCS) was 15, body temperature was 36° C, blood pressure was 70/40 mmHg, pulse rate was 104 bpm, oxygen saturation 88% and respiration rate was 25 breaths/minute. In the physical examination; there was active grade 3 HS lesion in gluteal region. Electrocardiography was normal. The laboratory tests showed us normochromic normocytic anaemia with 6.6 gr/dl level of hgb. There were hypoxia and hypocarbia in arterial blood gas analysis, D-dimer was high. After his initial therapy and blood transfusion, he became stable. Thorax CT angiography revealed filling defects in both pulmonary arteries. In his lower extremity doppler USG, there was deep vein thrombosis. He sent to an intensive care for mechanical thromboectomy or thrombolysis.

Discussion: HS is a disease that can fall under the umbrella of metabolic syndrome, which is associated with metabolic and physiological alterations like central obesity, elevated blood pressure, increased levels of fasting blood glucose, elevated triglyceride (TG), and reduced high density lipoprotein (HDL)-cholesterol. Uptodate there are no case reports for the association of HS and thrombosis or PE. Only one of the most notable and under reported associations of HS for hematological system is anemia. But this patient had no predisposing factor other than HS for DVT and PE. So there may be an association between thrombotic events and HS, HS like psoriasis may induce a pro-inflammatory and prothrombotic state. So ED doctors should consider concurrent incidence of venous thromboembolism in HS patients.

Keywords: Acute Pulmonary Embolism, Hidradenitis Suppurativa, Coagulopathy, Metabolic Disorders

ECG image



Pulmonary Embolism Computed Tomography Scan



You can watch our patients CT scan with this barcod

HOSPITALISATION IN PATIENTS WHO REFERRED TO EMERGENCY SERVICE WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND ASSESSMENT OF THE FACTORS THAT AFFECT PROGNOSIS

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Introduction and AIM: Chronic obstructive pulmonary disease (COPD) is a disease that's course can contain acute exacerbations and is characterised by chronic dyspnea and cough and/or sputum changes which may require changes at the initial therapy regime. Acute exacerbations of COPD are serious causes of morbidity and mortality. There is no consensus on standard signs, findings and conditions in order to identify exacerbations correctly. In our study, we aimed to identify the factors for hospitalisation, intensive care need and the factors that affect prognosis in COPD patients that refer to emergency services.

Method: We retrospectively analyzed the files of patients that referred to PAÜTF Hospital Emergency Service between 01.01.2011 – 31.12.2013 with shortness of breath and accepted as COPD with ICD10 diagnosis code of J44. In this manner, we identified patient's age, sex, application months and dates, lower respiratory tract infections, and we assessed their hemogram and arterial blood gas parameters.

Findings: In this study, files of 2840 patients who referred to PAÜTF Emergency Service with shortness of breath complaint were analyzed retrospectively and 1113 patients that proven to be COPD attacks were included in the study.

It became evident that 51.7% (n= 576) of the patients were discharged and 7.2% (n= 80) were taken into intensive care unit. Of the patients that were included in this study, 84.9% (n= 945) were male and 51.4%(n= 572) were elderly. When the patients were classified according to their attack severity, 37.8% (n= 421) were mild and 19.4% (n= 216) were in severe attack. 514 cases were spotted to have lower respiratory track infection and it is found that pneumonia was significantly more evident in patients with hospitalisation need (p= 0.000). There was no difference in hospitalization need between sexes (p= 0.183), but it is found out that intensive care unit admission were seen more on women (p= 0.000). Elderly patients were spotted to need more hospitalization and intensive care requirement (p= 0.000). Arterial blood gas parametres were important for determining hospitalization and intensive care requirements. Elevations in arterial or venous haematocrit values were in positive corelation with hospitalisation and intensive care requirement (p=0,000, p=0,009), but arterial haematocrit values were spotted to be more decisive at prognosis of the disease (r=0,324). Severity of the COPD attack was found out to be significantly associated with age (p=0,015), sex (p=0,042), existence of pneumonia and CHF (p=0,000), arterial blood gas and venous hemogram values (p=0,000).

Conclusion: We found that elderly, female sex, having pneumonia or CHF, and in patients with respiratory asidosis, hypoxic and hypercapnic patients hospitalisation and intensive care requirement was more evident. We also found that COPD attack numbers were higher in winter season so emergency services has to prepared for potential patients. In addition, it is found that hematocrit levels can be an indicator of unspecified pulmonary hypertension and cor pulmonale.

Keywords: Chronic obstructive pulmonary disease, prognostic values, emergency department, arterial blood gas, pneumonia, hospitalization.

Severity	Description
Mild (%0)	An exacerbation treated with antibiotics but no systemic corticosteroid. If no blood gases are available the absence of respiratory failure is assumed
Moderate (%37,8)	An exacerbation treated with parenteral corticosteroids with or without an antibiotic. If no blood gases are available the absence of respiratory failure is assumed
Severe (%28,3)	Type 1 respiratory failure with hypoxaemia but no carbon dioxide retention or acidosis; Pa,O2 <8 kPa (60 mmHg) and Pa,CO2 <6 kPa (45 mmHg)
Very severe (%14,5)	Type 2 respiratory failure, compensated with hypoxia, carbon dioxide retention but no acidosis; Pa,O2 <8 kPa (60 mmHg), Pa,CO2 >6 kPa (45 mmHg) and hydrogen ion concentration <44 nM (pH>7.35)
Life-threatening (%19,4)	Type 2 respiratory failure, decompensated with acidosis and carbon dioxide retention; Pa,CO2 >6 kPa (45 mmHg) and hydrogen ion concentration >44 nM (pH<7.35)

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[Solunum Acilleri]

THE IMPORTANCE OF MTHFR C677T/A1298C COMBINED POLYMORPHISMS IN PULMONARY EMBOLISM IN TURKISH POPULATION

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Background and Objective: Pulmonary embolism (PE) is an important cardiovascular emergency with high mortality. There are still problems on diagnosis stage of PE and genetic researches may play a key role on diagnosis as well as determining risk stratification. In the present study, it is aimed to evaluate MTHFR C677T and A1298C polymorphisms that play role on folate metabolism in PE patients.

Methods: One hundred and eighteen PE patients and one hundred and twenty-six controls were enrolled in the current study. Genomic DNA was isolated and genotyped using polymerase chain reaction (PCR) analyses for the MTHFR C677T and A1298C polymorphisms.

Results: There was no association between clinical and demographic characteristics of PE and both MTHFR C677T and A1298C polymorphisms. Allele frequencies showed a significant difference between patients and controls. T allele was significantly higher in patient group than control group. It was found that there was an association between PE and patients with combined MTHFR C677T and A1298C polymorphisms.

Conclusion: There is a strong association between MTHFR C677T/A1298C combined mutations and PE in Turkish population. It is known that PE is not only affected by genetic factors but genetic predisposition has a powerful impact on the pathogenesis. The genetic research of MTHFR C677T/A1298C combined mutations may be used to determine the risk groups for PE. With further studies that include larger groups, it will give rise of prophylaxis studies.

Keywords: pulmonary embolism, mutation, MTFHR, C677T, A 1298C, polymorphism

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[Solunum Acilleri]

A RARE COMPLICATION OF HEPATIC HYDATID CYST: BRONCHO-BILIARY FISTULA

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Purpose: Hepatic hydatid cyst (HHC) is still a public health issue at developing countries and could be endemic. Complications with different mortality and morbidity rates could be seen such as sepsis, anaphylaxis, icterus and rarely broncho-biliary fistula (BBF) because of perforations, due to devalopment of diagnose and treatment. We will present you the patient with BBF after bile duct stent placement.

Case: 36 year-old male patient admitted to emergency department with coughing for two hours with yellowish green sputum. In the patient's medical history there was cholecystectomy and bile duct stent placement due to hepatic cyst that compresses bile ducts. There were no findings of acute abdomen at the patient's examination. There were crepitanant rales at base of the patient's right lung but no pathological findings at his thorax radiogram. There were acinar infiltrations, bronchiectasis, peribronchial thickening at the patient's thorax CT scan. The lab results of the patient's sputum were bilirubin 37.2 and amylase >1500. We referred the patient to hospital that have thorax surgeon and ERCP with the suspicion of broncho-biliary fistula.

Conclusion: Broncho-biliary fistula is a rare complication of hepatic hydatid cyst that is a transhepatic penetration between bile ducts and bronchial system and reported for the first time in the literature at 1850. It is usually caused by thoracoabdominal trauma, biliary surgery, hepatic cyst, hepatic amebiasis, malignancy, and biliary obstruction. Bilioptysis is pathognomonic. Technetium 99 m diisopropyl is gold standard for diagnosis. Early diagnosis and treatment is important because of mortality and morbidity rates of pneumonia caused by bile. Many protocols could be used for treatment such as percutaneous drainage, ERCP and stent placement, necrosectomy of lung and segmentectomy. We must consider to diagnose BBF to patients with coughing with yellow sputum that have biliary procedure history.

Keywords: Hepatic hydatid cyst, anaphylaxis, icterus, broncho-biliary fistula

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[Solunum Acilleri]

TOOTH IN THE LUNG; ASSAULTED BY HER HUSBAND: CASE REPORT

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Aspiration of foreign bodies is common in pediatric age group but adults can also be at risk. We describe the management of an adult trauma victim who aspirated tooth after assaulted by her husband. Patient presented to our emergency department with cough, fever and dyspnea. Our initial diagnosis were pneumonia and pulmonary thromboembolism. Thorax CT scan detected a foreign body in the lung. Foreign body was tooth and couldn't be removed with rigid bronchoscopy and performed thoracotomy. The tooth should be removed as soon as possible or it may result in complete airway obstruction, lung collapse, abscess and infection. Foreign body should be considered in differential diagnosis of hypoxia in Emergency Department.

Keywords: Aspiration, assault, foreign body, pneumonia, tooth



Figure 1. CT scan showing right lung consolidation indicating pneumonia



Figure 2. Arrow showing foreign body (a tooth) in the right inferior lobe bronchus.

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[Solunum Acilleri]

NEEDLE ASPIRATION; A DIAGNOSIS THAT IS LIKELY TO BE MISSED IN THE EMERGENCY DEPARTMENT

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Foreign body aspiration is rarely seen in adults. About 80% of the reported cases are children under age 15. Foreign bodies frequently lodge in right main-stem bronchus, as this bronchus is wider and stands more vertically than left bronchus. We present two female patients attending to the emergency department with a history of swallowing a needle.

Case 1: A 19 year-old female patient attended to the emergency department with a history of swallowing a needle. She had no other complaints and had normal vital signs with oxygen saturation 99%. She had no abnormal respiratory symptoms and findings. Her chest x-ray showed a foreign body in left bronchus without evidence of pneumothorax. The needle was tried to be removed by bronchoscopy which was unsuccessful, but removed surgically, with thoracotomy by the thoracic surgeons.

Case 2: A 36 year-old female patient was holding the needles in her mouth when realized that one of the needles was missing. She had no other complaints. Her vital signs were normal with oxygen saturation 98%. She had no abnormal respiratory symptoms and findings. Her chest x-ray showed a needle in left bronchus. Under general anesthesia, rigid bronchoscope was used

to take off the foreign body. As the procedure was unsuccessful pediatric bronchoscope was used to remove the needle.

Although aspirated materials are mostly located in right bronchus, they may also be seen in left side without any respiratory symptoms. After diagnosis, further imaging may need to reveal the exact location.

Keywords: Aspiration, emergency department, foreign body, needle



Figure 1. Foreign body aspiration



Figure 2.

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[Solunum Acilleri]

ACUTE CHEST SYNDROME ON DYSPNEIC SICKLE CELL PATIENT

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Introduction: Sickle cell anemia(SCA) is caused by the substitution of the amino acid valine for glutamine at position 6 in the 3-globin chain. This is the most common variant of hemoglobin and is known as hemoglobin S (HbS). As a result of this mutation, deoxygenated HbS polymerizes, deforming the RBC and producing the characteristic sickled appearance. The distorted cell results in premature RBC destruction and also increases the viscosity of blood, leading to obstruction within the microvasculature. The overall effect is chronic ongoing hemolysis and episodic periods of vascular occlusion, resulting in tissue ischemia affecting most organ systems. Patients who have sickle cell anemia have acute chest syndrome at 21%. After first time acute chest syndrome again 80%.

The patient who apply emergency medicine with respiratory distress we must questions background.

Case: A 29 years old male appealed to emergency due to respiratory distress. His blood pressure: 110/70 mm Hg, heart rate: 120/min, spo2:85% and respiratory rate: 32/min. In physical examination, both of hemithorax was observed that provided respiratory equivalently and he had crackling in left middle zone. In background of patient, he has SCA and he was thromboemboli at three times. In EKG, sinus tachycardia and in anterior derivation negative of T existed. The laboratory test parameters; pH:7.34 PCO2:26.8 PO2:70 HCO3:14.3 laktat:4.63, hemoglobine:13 hemotokrit:39.4 lökosit:51 platelet:269 retikülosit:24.2 mcv:24 monosit:1.06 nötrofil:14.9 and creatinine kinase: 322, creatinine kinase mb: 54, indirect bilirubin: 397, lactate dehydrogenase: 583, troponine: 0,147, di-dimer:4350 was measured. Head of bed, eco: tachycardia, no defect of movement, cavities of right heart were expanded and left ventricle hypertrophic pulmoner arterier pressure was 80mmHg. In toraks tomography with contrast of patient was not determined storage defect for the benefit of emboli in pulmoner arteries. There was frosted glass opacity on both of hemithorax superior segments. There was 16x16mm consolidation on apicoposterior at left superior lob. There was ploroparenchymal fibrotic band formation on posterobasal segment at right inferior lob. Diagnostic coroner angiography was nature. Patient were applied support of oxygen with mask, 300mg acetylsalicylic acid per oral, 6000IU/0.6ml enoksaparin sodium subcutaneous, 2 g ceftriakson intravenous. In patient, vasokluziv crisis, acute chest syndrome were thought, so after 2IU flebotomi, 1 IU suspension of erythrocyte was planned. In 6th hour, cardiac arrest consisted and patient responded kardiyopulmoner resusitasyon during 2 minutes. The patient who was taken intensive care unit, arrested again in his 10th hour and he did not response kardiyopulmoner resusitasyon during 45 minutes. Therefore, the patient was accepted as an exitus.

Conclusion: When Patients who have SCA appeal to emergency service with distress of respiratory, thromboemboli, vasokluziv crisis, acute chest syndrome have to been thought in definitive diagnosis.

Keywords: Acute Chest Syndrome, Vasoocclusive crisis, sickle cell anemia



Figure 1. Cardiomegali + consolidation



Figure 2. Frosted glass opacity

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[Solunum Acilleri]

A RARE CAUSE OF CHEST PAIN: SPONTANEOUS PNEUMOMEDIASTINUM

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Introduction: Spontaneous pneumomediastinum is an uncommon, usually benign, and self-limited clinical entity defined as the presence of free air in the mediastinal structures without an apparent cause such as trauma. It most frequently occurs in young male patients. It usually develops after alveolar rupture and air penetration into the pulmonary interstice, followed by air penetration towards the hila and into the mediastinum. The most common presentation is nonspecific pleuritic chest pain with dyspnea. The incidence of spontaneous pneumomediastinum is 1/25.000–42.000. We report a case of spontaneous pneumomediastinum presenting with chest pain and dyspnea.

Case: A 19 years old man presented to our hospital emergency department with acute chest pain and dyspnea. His vital signs were in normal range. The pulmonary auscultation and the remainder

of the patient's examination were unremarkable. A postero-anterior chest X-ray showed a slight layer of air surrounding the trachea (Figure 1). The chest CT showed presence of air surrounding the thyroid gland (Figure 2). Thus, the diagnosis of spontaneous pneumomediastinum was attained. The patient was hospitalized and treated with inhaled bronchodilators, analgesics, and maintained amoxicillin/clavulanate. There was clinical and radiological improvement; the patient was discharged on the 3th day of hospitalization.

Discussion: The differential diagnosis of patients presenting with chest pain is extensive, ranging from benign musculoskeletal etiologies to life-threatening cardiac diseases. Spontaneous pneumomediastinum is uncommon, usually benign, and self-limited clinical entity. In this case the diagnosis of spontaneous pneumomediastinum was confirmed by radiological imaging technics. Treatment of spontaneous pneumomediastinum may be conservative or surgical. In conclusion, spontaneous pneumomediastinum is a rare situation of patients who apply to emergency department with chest pain and we want to emphasize it as a differential diagnosis topic.

Keywords: Spontaneous Pneumomediastinum, Chest Pain, Emergency



Figure 1. Slight layer of air surrounding the trachea.



Figure 2. Air surrounding the thyroid gland

VENOUS AIR EMBOLISM: CASE REPORT: GULLU ERCAN HAYDAR¹, ALP ŞENER¹, UGUR OZKULA¹, GÜL PAMUKCU GUNAYDIN¹, FERHAT ICME¹, SERVAN GOKHAN²

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Introduction: Venous air embolism, a subset of gas embolism and may has potential for severe morbidity and mortality. Venous air embolism is a predominantly iatrogenic complication that occurs when atmospheric gas is introduced into the systemic venous system. The spectrum of effects is largely dependent on the rate and volume of entrained venous air embolism. We wish to describe the clinical course and management of a patient with this complication.

Case: In this case we reported; 31 year-old man presented with hemophthysis and an iatrogenic venous air embolism caused by computed tomography (CT) injector occurred in undergoing thoracic computed tomography for evaluation pulmonary thromboembolism. The patient presented hemophthysis and pleuritic chest pain. He had normal physical examination. The patients BP: 110/60, he was 110/min tachycardia, fever: 37,1 °C. His Wells score was moderate. To exclude the pulmonary thromboembolism CT planned for the patient. After the CT procedure, we noticed air images on patients' pulmonary artery and right ventricle during scan inspection. (Figure 1,2) Patient was placed left lateral decubitus and trendelenburg position immediately and nasal oxygen support was arranged. Patient was not symptomatic and his vital signs were stabil, also he was clinically stabil. During the patients observation, cardiology and cardiovascular surgery consultation planned. His echocardiogram was normal and also he had not an atrial septal defect. After 12 hours of a close follow-up, a control thorax CT performed to the patient and there was no air inspected in right ventricle and pulmonary artery. (Figure 3) Patient discharged after 16 hours of asymptomatic observation from the ED.

Conclusion: Venous air embolism should be considered on patients who become dyspneic after intravenous insertion. And the patients should be test quickly as possible.

Keywords: Venous air embolism;Diagnosis; Computed tomography;Treatment



Figure 1. Air embolism in pulmonary artery



Figure 2. Air embolism in right ventricle



Figure 3. Control thorax computed tomography was normal after 12 hours

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[Solunum Acilleri]

MASSIVE PULMONARY EFFUSION AND CONCOMITANT PULMONARY EMBOLISM IN A PATIENT WITH OVARIAN HYPERSTIMULATION SYNDROME

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The concomitance of massive pleural effusion and pulmonary embolism is uncommon presentation of ovarian hyperstimulation syndrome (OHSS). The pathogenesis of effusion may be associated with an increase of capillary permeability due to the release of vasoactive substances. The rising estrogen level may lead to hypercoagulability. Early recognition of this condition is important for an appropriate diagnostic and therapeutic management. We report a rare case of OHSS with massive pleural effusion and concomitant pulmonary embolism diagnosed with computed tomography.

Keywords: ovarian hyperstimulation syndrome, pleural effusion, pulmonary embolism

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[Solunum Acilleri]

SPONTANEOUS PNEUMOTHORAX WITH SUBCUTANEOUS EMPHYSEMA

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Objective: Presence of air in the pleural cavity without a history of trauma is defined as spontaneous pneumothorax. Subcutaneous emphysema occurs when air gets into tissues under the skin. This usually occurs in the skin covering the chest wall or neck, but can also occur in other parts of the body. Pneumothorax and subcutaneous emphysema can be seen together in trauma to chest, in iatrogenic cases or in patient who have underlying chronic lung disease like tuberculosis. In this case we discussed a patient who have primary spontaneous pneumothorax and subcutaneous emphysema without any underlying condition.

Case: 65 years old male patient applied to emergency room with dyspnea and swelling in his face and neck. We learned from his history that he only had progressive dyspnea for one week. He did not any other complaints, chronic disease or chronic drug use. On physical examination his general condition is good, conscious, cooperated and oriented. His initial vital signs were; blood pressure 184/92 mm/Hg, pulse rates 84/min, temperature 36,6 C, respiratory rate 18 breaths/min, oxygen saturation %91. There has swellings and hyperemia in his face, neck, chest and back. Crepitation was detected with palpation in same areas. In chest auscultation respiratory sounds was decreased in left side. X-Ray was performed and subcutaneous emphysema in neck and chest and pneumothorax in left lung were detected. The patient hospitalized by chest surgery department after tube thoracostomy.

Conclusion: Pneumothorax is presence of air in the pleural cavity. It can be secondary to trauma or spontaneously. Spontaneous pneumothorax can be primary or secondary. If the condition occurs without an underlying disease, it is described

as a primary spontaneous pneumothorax, whereas if it is brought about by a concurrent disease it is called a secondary spontaneous pneumothorax. Chest X-ray is a standard procedure for diagnosis CT can be need in some cases. The aim of the treatment is to achieve pulmonary expansion and to prevent a recurrence. The tube thoracostomy is a method applied during the acute phase. Subcutaneous emphysema is characterized by painless swelling of the tissues because of air tracking along tissue planes. Pneumothorax and subcutaneous emphysema is rarely seen together spontaneously without any trauma or chronic lung disease.

Keywords: Spontaneous, Pneumothorax, Subcutaneous Emphysema



Figure 1. Subcutaneous Emphysema on the Face



Figure 2. Pneumothorax, Chest X-ray

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[Solunum Acilleri]

PNEUMOTHORAX AND RIB FRACTURE DUE TO SEVERE COUGH IN PREGNANCY: A CASE REPORT

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Introduction: Pneumothorax secondary to trauma or may occur spontaneously. Emergency physicians use some examination and imaging methods for Diagnosis and treatment. We presented the patient who has normal chest X-ray and that pregnant patient is diagnosed with physical examination

Case: A 20-year-old, 33 weeks pregnant female patient admitted to the emergency department with left chest pain begun after a severe cough in the morning. Physical examination was normal but she had severe pain. Breath sounds in the left lung was slightly decreased. Crepitation on the left 7th rib was felt by palpation. PA chest X-ray was normal. CT of thorax was considered because of suspected pneumothorax but patient did not accept due to radiation risk. In thoracic ultrasound assessment a fissure type fracture and minimal pneumothorax were detected. Intercostal nerve block was performed with consultation with thoracic surgery department. In the follow up of the patient in the emergency department her complaints resolved and no anomalies occurred. The patient was discharged.

Conclusion: Pneumothorax may occur spontaneously. PA chest X-ray, CT scanning and ultrasound examination are efficient in the diagnosis. In physical examination findings such as palpation of rib fractures and crepitus should be suggestive of pneumothorax. CT or ultrasound should be used in differentiative diagnosis.

Keywords: cough, Pneumothorax, Crepitation



Figure 1. A AC grafi

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[Solunum Acilleri]

FOREIGN BODY ASPIRATION

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Introduction: Despite aspiration of foreign bodies can occur at any age, it is more common in childhood period. It appears via various symptoms and prognosis depending on partial or complete airway obstruction. It may cause death without immediate treatment. Especially children of 6 months – 3 years old and people with mental retardation and psychological diseases are risky groups for foreign body aspiration. Other risk factors include maxillofacial trauma, unconsciousness, intoxication, dementia, drug or sedative use, dental treatments. It may lead to acute respiratory distress in children and sometimes it can also be asymptomatic. Side pain, choking, and productive coughing can be symptoms in adults though they may be asymptomatic as well. Asymptomatic cases may face with lung diseases, bronchiectasis or pneumonia in due course. Most frequently aspirated objects by infants are seeds, nuts, peanuts, hard plant parts, and small parts of toys. In adults, aspiration of needle is the most frequent case. Immediate extraction of foreign body is very important in order for the comfort of the patient and for preventing the development of any complications. We describe here our case, a 43-year-old male who aspirated his dental prosthesis during having his breakfast.

Case Presentation: A 43-year-old male patient presented with a sensation of dull stinging pain during deep breath at admission to emergency department. The patient was stable without any other complaints. His pulse oximeter and saturation was 96%. The patient did not have a diagnosed disease, a history of drug use, and he did not use any sedative substance prior to aspiration. The patient reported that he had noticed the lack of his dental prosthesis after having breakfast. He was conscious, oriented, and cooperative during medical examination. Auscultation revealed equal level respiratory sounds in both hemithoraces. Laboratory test results were normal. Posteror anterior (PA) lung graphy and thoracic Computerized Tomography (CT) showed the dental prosthesis at the right main bronchus. The patient was transferred to thoracic surgery and emergent bronchoscopy was planned. The patient remained under observation for 24 hours after the extraction of foreign body by bronchoscopy. The patient was discharged from hospital since no complication occurred and the results of Chest X-ray were normal.

Conclusion: Tracheobronchial foreign body aspirations cause a variety of problems which may also lead to the death of patient. Though it may occur at all ages, it is more frequent in children than in adults. Risk factors are mental retardation, maxillofacial trauma, unconsciousness, intoxication, dementia, sedative substance use, dental prosthesis. Differently from these risk factors, our patient had been using a fixed, irremovable dental prosthesis.

Keywords: dental prosthesis aspiration



Figure 1. Chest X Ray-dental prosthesis aspiration

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[Solunum Acilleri]

HOW DIFFICULT CAN INTUBATION BE IN THE CASE OF WOUNDING BY FIREARMS WHICH DISRUPTS AIRWAY UNITY?

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Background: Difficult intubation is a case which all the healthcare staff may encounter. All the healthcare staff might have difficulty in intubation, especially in the situations in which there are patients with trauma whose airway unity has been disrupted. We presented here a case report about a patient whose airway unity was disrupted by wounding by firearms.

Case: The 57-year-old male patient was admitted to the emergency service, after his suicidal attempt, by 112 due to wounding by shooting himself from under his chin. From the patient's medical history, it was found out that he was taken to an emergency service in another hospital after his wounding, and that his emergency medical intervention was carried out there by launching serum physiological replacement and then he was brought to our emergency service by compressing on his entrance-and-exit bullet holes. He was conscious, and his overall condition was unwell. We measured his pulse: 130beat/min, blood pressure: 170/90 mmHg, respiratory number: 28 breath/min, sato2:94%. His eye and motor response were full. Glaskow coma score couldn't be accurately calculated for the patient whose verbal response couldn't be assessed because his airway unity was disrupted. In his physical examination, there was a 4*5cm entrance hole under his chin and a 2*3cm exit hole 3cm above his left eyebrow on the frontal part. His mandibula was found to be fractured in palpation. An ecchymosis was observed near the left side of the nasal root and left orbita's medial part. Middle-left part of the frontal bone was found to be fractured in palpation. The patient's other physical examinations were normal. However, the patient was intubated by conducting rapid sequence intubation protocol (RSI) to retain his respiratory tract. The patient's lab examinations were sent, and in the light of the results, only his ethanol level was abnormal (125 mg/dl). He was taken to CT scan for his brain and maxillofacial. Common subcutaneous emphysema was seen in his neck. Displaced fracture and common hematoma was observed in mandibular anterior.

Multiple fractures were seen in hard palate, maxilla anterior, nasal septum, ethmoid cellular, frontal bone, anterior side of the left maxillary sinuses, left orbita medial side, frontal and both parietal bones. And there was a defect on the frontal bone. From this defect level was seen the external herniation of brain parenchyma. Parenchymal and subdural hemorrhage was observed in both frontal lobe level. The patient had common pneumocephalus. The patient was consulted by neurosurgery, ent surgery, plastic surgery and ophthalmology. Plastic surgery and ENT surgery both took the patient to the theatre and operated on him in order to staunch the bleeding, and then he was taken to the intensive-care unit by the neurosurgery.

Discussion: Intubation may be demanding for the cases with disrupted airway unity. In these cases, the most experienced healthcare staff should carry out the rapid sequence intubation, particularly because anatomical variations may occur in wounding by firearms, including airway and nearby structures. Essential equipment must be made available for alternative airway methods.

Keywords: Difficult Intubation, Wounding by Firearms, Disruption of Airway Unit

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[Solunum Acilleri]

PNEUMOTHORAX WITH ECG CHANGES

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Introduction: Pneumothorax occurs when air enters in the potential space between the viceral and parietal pleura as a result of blunt trauma, penetrating trauma or spontaneously. Major clinical findings are sudden onset chest pain, shortness of breath, tachycardia, hypotension, diaphoresis, pallor and cyanosis. In our case, a patient with chest pain admitted to the emergency department, detected alteration on electrocardiogram(ECG) and determined pneumothorax with tests is described.

Case: A 59 years-old man admitted tothe emergency department with chest pain and shortness of breath. When he arrived he was conscious, but uncomfortable. His appearance was cyanotic. In his history there was no known disease. Tension was 240/120 mmHg, pulse was 130 beats/min, oxygen saturation was 86%, respiratory rate was 40-45 braeth/min and temperature was 36,5C. In first lung auscultation, both lungs were involved in breathing evenly. In cardiac auscultation there were S1+, S2+, no murmur and tachycardia. Pulses in all four limbs were equally palpable. In the fist taken 12-lead ECG, there were appropriately 1 mm ST elevation on D1,D2 and AVF leads and tachycardia (130 beats/min). By echocardiograpy wall motion abnormality was detected. At portable chest X-ray taken at the bedside, pneumothorax in the right was detected. Chest CT was taken to exclude bullous lung. In CT, it was detected that degree of pneumotoraks was increased and there were minimal mediastinal shift and unexploded bulla also.

Chest tube was inserted to the patient. Follow-up, significant improvement was observed in patient's syptoms and signs. After chest tube insertion tension was 140/80 mmHg, pulse was 98 beats/min, oxygen saturation was 95% and respiratory rate was 24breath/min. On ECG taken again ST elevation returned to normal and normal sinüs rhythm was observed. Follow-up, the

patient with normal cardiac enzymes was admitted to thoracic surgery service

Conclusion: Emergency medicine physician should be able to different diagnosis of fatal disease that cause chest pain. It should be noted that pneumothorax can cause ECG changes as a result of coronary perfusion disorder due to mediastinal shift and this condition can mimic acute coronary syndrome.

Keywords: pneumothorax, chest pain, emergency

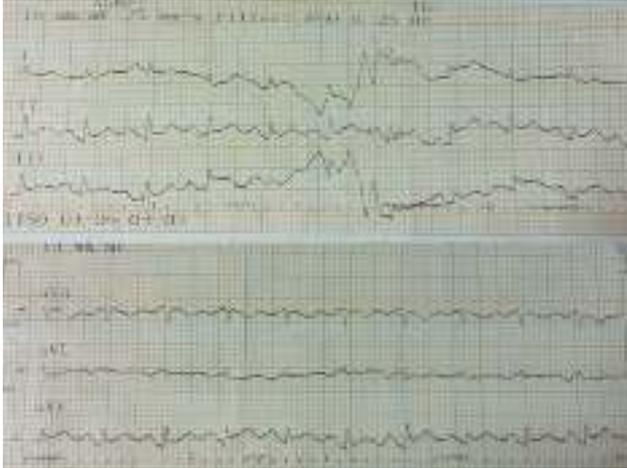


Figure 1. (patient's ECG first taken)

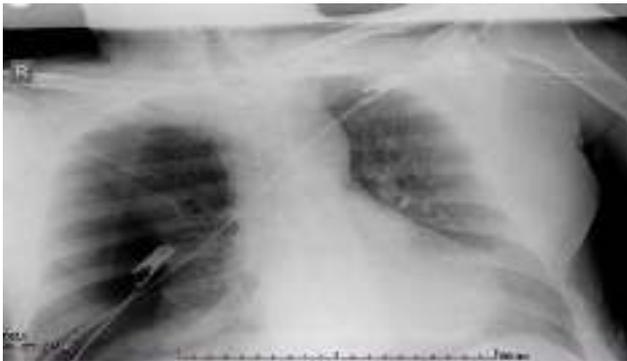


Figure 2. (patient's chest X-Ray first taken)

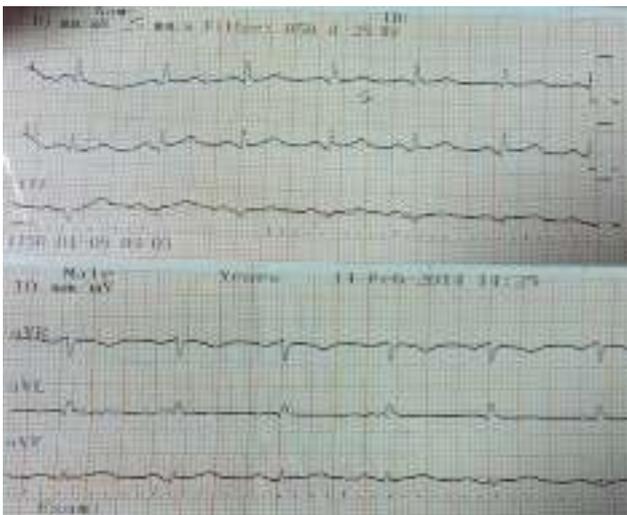


Figure 3. (patient's ECG after chest tube insertion)

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[Solunum Acilleri]

SEKONDARY SPONTANEOUS PNEUMOTHORAX AN ELDERLY PATIENT

Emel Erkuş Sirkeci, Ismail Fırat Arslan, Fatma Ekiz Cin, Ismail Yeşiltaş, Onur Incealtın, Aykut Yüksel, Didem Ay

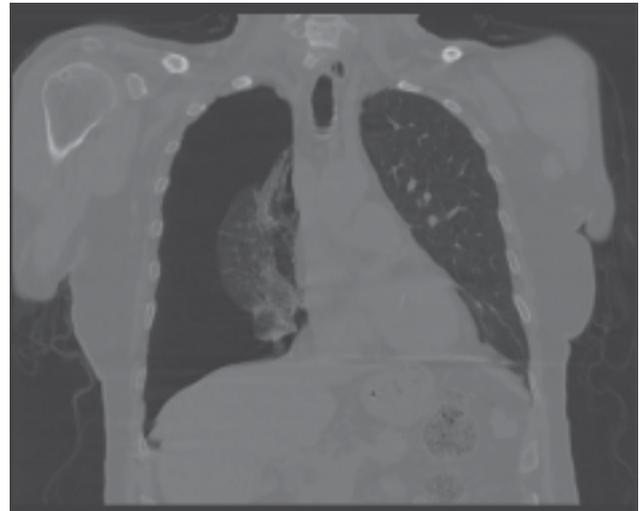
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Pneumothorax, is defined as the presence of air in the pleural space. Trauma, factors to pneumothorax or without surgical intervention 'spontaneous pneumothorax is called. Pneumothorax of the lung appears normal 'primary spontaneous pneumothorax'; pneumothorax occurs in patients without chest X-ray is normal 'Secondary spontaneous pneumothorax' is called. The first PE in patients without any lung disease graphite subsequent If a lung pathology observed in tests (emphysema, bullae, mass, such as cysts) and that this pathology If there is the possibility of creating pneumothorax, illness 'secondary spontaneous pneumothorax' is called.

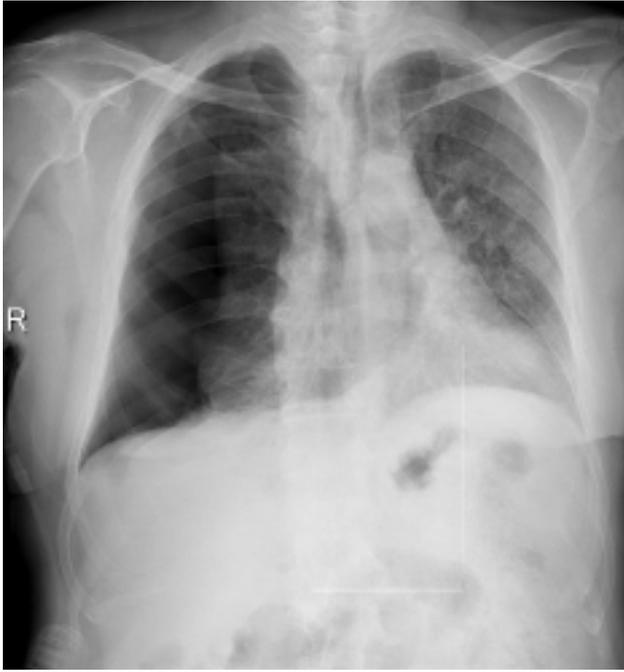
Case presentation: A 73 year-old obese male patient was admitted to the emergency department with the complaints difficulty in breathing. On his history there was no previous illness or drug intake or trauma. On examination, there were dyspnea, tachypnea, tachycardia and cyanosis. The patient's blood pressure was 160/80 mmHg, pulse 113 per second, oxygen saturation 80%, respiration rate 25 per minute. There was no fever. On auscultation, his breath sounds were severely diminished on the right lung. Patient's blood tests normal. At chest X-ray examination, a right sided pneumothorax and bullous lesions were found. The patient was diagnosed as secondary spontaneous pneumothorax. A thoracostomy tube was inserted. The patient was referred to the department of cardiothoracic surgery.

Keywords: elderly, primary, pneumothorax

Pneumothorax



Pneumothorax



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[Solunum Acilleri]

EARLY INTUBATION IS LIFE-SAVING IN ARDS DUE TO DROWNING

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Introduction: Drowning remains a significant public health concern, as it is a major cause of disability and death, particularly in children. Drowning was previously defined as death secondary to asphyxia while immersed in a liquid, usually water, or within 24 hours of submersion. Immediate threats include effects on the central nervous and cardiovascular systems. Thus, the most critical actions in the immediate management of drowning victims include prompt correction of hypoxemia and acidosis. This case about success management with early intubation in ARDS due to drowning.

Case: Forty-one years old man was admitted to the Emergency Service for drowning by the sea after two hours then recovery. The patient was dispneic and hipoxic despite high-flow supplemental oxygen. Physical examination finding; state of consciousness was confuse with any motor deficiency, there were ralles on right basal lung zone. In vitals BP:121/68mmHg, HR:127/min, RR:48/min, SaO₂: %69. ABG: pH:7.30, pO₂:37, pCO₂:41.4, HCO₃: 19.9, BE:-6, SaO₂:67, Lac:3.39, His ECG is compatible with sinus tachycardia and RBBB. In blood analysis; WBC:6.560, INR:1.1, Glucose:171, BUN:14, Cre:1.01, Na:155, K:4, Cl: 123, Ca:8.9, CRP:0.10, AST:24, ALT:16. These symptoms consistent with pulmonary lung injury. The patient who was cervical collar had entubated orotracheal by used propofol and rokuronyum and supported by mechanical ventilator. Start in control volume mode with initial tidal volumes of 6 mL/kg, the respiratory rate 35 breaths/min, end-expiratory pressure (PEEP) 8cm H₂O. After stabilization, take cranicervical and whole body scan. there were any evidence compatible with

intracranial or spinal injury. the CT finding was aspiration and pulmonary eudema. The patient who care in the intensive care unit for eight days, was outpatient without any complications as infection or neurological defisits.

Discussion: In the symptomatic patient, indications for intubation include the following: Signs of neurologic deterioration or inability to protect the airway, inability to maintain a PaO₂ above 60 mmHg or oxygen saturation (SpO₂) above 90 percent despite high-flow supplemental oxygen, PaCO₂ above 50 mmHg. In the ARDS, patients ventilated with lower tidal volumes, upper than 35 breaths/min respiratory rate required higher levels of PEEP to provide oxygen saturation at 85% or more and permissive hypercapnia (7) Wet clothing should be removed and rewarming initiated in hypothermic patients. There is no good evidence to support the routine use of glucocorticoids or prophylactic antibiotics in nonfatal drowning victims (7) (8). Antibiotics should be used only in cases of clinical pulmonary infection or if the victim was submerged in grossly contaminated water.

Conclusion: Our patient was drowning by salty water and no information notified by initial rescuer about trauma mechanism. Clinical finding was comitted with ARDS and we entubated him orotracheal way and ventilated by mechanical ventilator with low tidal volume, high PEEP and permission fast rate. We performed spinal imaging which was negative and we didnt use antibiotics or steroids. The patient was extubated after two days and discharged at the end of week with healing. Early intubation was life-saving in our management.

Keywords: ARDS, drowning, intubation

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[Resüsitasyon/KPR]

THE RELATIONSHIP BETWEEN THE POST-RETURN OF SPONTANEOUS CIRCULATION(ROSC) ELECTROCARDIOGRAM (ECG) AND CORONARY ANGIOGRAPHY(CAG) FINDING IN OUT-OF-HOSPITAL CARDIAC ARREST(OHCA) PATIENTS

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Objectives: Coronary artery disease is the most common cause of out-of-hospital cardiac arrest. However, there are no definite indications of coronary angiography followed by percutaneous coronary intervention (PCI) in patients with OHCA for making diagnosis and treating them. This study aimed to identify correlation between ECG findings and results of CAG of patients with return of spontaneous circulation after OHCA. Materials and methods We collected data from January 2010 until April 2014. CAG was performed in patients with ROSC after OHCA who had ST-elevation or left bundle branch block(LBBB) on their ECG. If the ECG showed other rhythms and no obvious non-cardiac cause of cardiac arrest, CAG was performed as an agreement between the emergency physician and cardiologist. Results and conclusions CAG was performed in 75 patients among 131 patients who were successfully resuscitated from OHCA. We divided patients into two groups, the ST-elevation or LBBB group and the other group.

29 patients of the ST-elevation or LBBB group had coronary lesion and 9 patients of the other group had a coronary lesion on CAG (P<0.01). The number of patients who underwent PCI in the two groups were 15 patients and 5 patients, respectively (P=0.02). ECG findings of ST-elevation or LBBB were highly associated with coronary lesions in successfully resuscitated patients from OHCA. However, these ECG findings are not absolute indications for performing CAG because coronary artery lesions were also observed in patients of the other group.

Keywords: Coronary artery disease, Coronary angiography, Out-of-hospital cardiac arrest, Electrocardiogram

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[Resüsitasyon/KPR]

HOW EFFECTIVE IS PREHOSPITAL RESUSCITATION? A REPORT ON RESUSCITATIONS PERFORMED IN AN UNIVERSITY HOSPITAL

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Objectives: In this study, we aim to investigate the effect of emergency ambulance service, whether it is used or not, on cardiopulmonary resuscitations (CPR) of patients who presented with cardiopulmonary arrest (CPA) in our emergency department (ED).

Methods: All patients who received CPR in the ED of an university hospital from 01.01.2013 to 31.12.2013 were surveyed retrospectively. Age, gender, cardiac activity in presentation (CPA or spontaneous circulation present), their way of transport to ED (via emergency ambulance service or other), duration of CPR, outcome of CPR and blood lactate levels were recorded.

Results: 208 patients are included in the study. 109 patients (52.4%) presented with CPA and 99 patients (47.6%) developed CPA in ED. 94 of those 109 patients with CPA in presentation were transported by an ambulance and 36 of them responded CPR. On the contrary, of 15 patients who were brought by untrained acquaintances, only 5 responded CPR. The correlation between being transferred by ambulance or by other means and the result of CPR in ED was found statistically significant (p=0.475). Also, return of spontaneous circulation (ROSC) in patients who developed CPA in ED was found statistically significant (p<0.001).

Conclusion: The close success rate between non-professional transport of patients and prehospital emergency transfer service is both confusing and startling. Prehospital medical care must be thoroughly studied and all problems should be addressed by the authorities.

Keywords: Resuscitation, emergency, prehospital cardiac arrest, witnessed cardiac arrest

Table 1. CPR outcomes of patients who were transported by ambulance or by other means

Way of transport		CPR outcome		Total N(%)
		Exitus n(%)	ROSC n(%)	
Ambulance	Number	78(54.2%)	66(45.8%)	144(69.2%)
Other	Number	28(43.8%)	36(56.2%)	64(30.8%)
Total	Number	106(51%)	102(49%)	208(100%)

Table 2. CPR outcomes according to presentation

	CPR outcome		Total N(%)
Presentation	Exitus n(%)	ROSC n(%)	
Spontaneous Circulation	38(%38.4)	61(%61.6)	99(%47.6)
Present Cardiopulmonary Arrest	68(%62.4)	41(%37.6)	109(%52.4)

Table 3. Correlation between CPR durations and lactate levels of witnessed and non-witnessed cardiopulmonary arrests

Presentation	CPR duration(minutes)	Lactate level
Spontaneous circulation present	24.54	7.36
CPA transported by ambulance	29.44	11.34

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[Resüsitasyon/KPR]

CEFTRIAZONE INDUCED ANAPHYLAXIS

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Introduction: Ceftriaxone is a third-generation cephalosporin commonly used for bacterial infections. The incidence of ceftriaxone-related hypersensitivity skin reactions is between 1% and 3%, whereas anaphylaxis is rare. Although ceftriaxone is a frequently used antibiotic, only a few cases of anaphylaxis in response to the first dose of ceftriaxone have been reported.

Case: A 87-year-old woman was admitted to our emergency department because of high fever, cough, sputum and weakness. There was no history of allergy or anaphylaxis. Vital signs were as follows: 38.2°C, heart rate of 123 beats per minute, spO2:%96 and blood pressure of 140/78 mm Hg. On physical examination, there were crackles in the right lung. Examination of the other systems was unremarkable. On electrocardiography, there was only sinus tachycardia. Laboratory tests showed a leukocytosis of 14 900/μL with 69.3% neutrophils, 20.1% lymphocytes, and 0.7% eosinophils. Other abnormal laboratory values were as follows: blood urea nitrogen 24 mg/ dL (normal 7-18.7 mg/dL), creatine 1.17 mg/dL(normal 0.57-1.11 mg/dL). The other laboratory parameters were within normal limits. Initial chest X-ray revealing right lower lobe pneumonia. Then, an infusion of 2 g of ceftriaxone was started slowly for the empiric treatment of pneumonia. Approximately 1 minute later, the patient developed cyanosis, hypotension, circulatory failure and respiratory failure. The ceftriaxone infusion was stopped and

tracheal intubation were performed immediately. Patient were resuscitated with intramuscular 1:1000 epinephrine 0.3 ml and normal saline infusion. The time of symptom onset was suggestive of ceftriaxone-induced anaphylaxis. The patient was transported to the intensive care unit for further management. The patient was discharged in good clinical condition on the 10th day of admission.

Discussion: It is generally quite difficult to prevent anaphylaxis, although effective advanced life support and postresuscitation care may improve survival. In our case, the patient developed respiratory failure after his first dose of ceftriaxone and was discharged in good clinical condition due to a successful resuscitation. Emergency physicians should be aware of the possibility of anaphylaxis occurring with the first dose of ceftriaxone. As a result, they should make sure to offer all patients and also receiving detailed informed patient consent, too.

Keywords: emergency medicine, ceftriaxone, anaphylaxis

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[Resüsitasyon/KPR]

A CASE OF SUCCESSFUL RETURN OF SPONTANEOUS CIRCULATION (ROSC) AFTER CARDIAC ARREST FROM PULMONARY EMBOLISM VIA EMERGENT THROMBOLYTIC THERAPY

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Introduction: Pulmonary Embolism is a diagnosis that carries significant morbidity and mortality in the emergency department setting. It is often a common and fatal disease. Mortality can be mitigated by prompt diagnosis and therapy so as to prevent cardiac arrest. Anticoagulation is the mainstay of therapy for these individuals and thrombolytic therapy is recommended in individuals where an acute pulmonary embolism causing hemodynamic instability is diagnosed or suspected as a diagnosis.

Case Description: A 53 year old female with past medical history of uterine bleeding secondary to a large fibroid and recently started on exogenous hormone therapy to help alleviate symptoms of uterine bleeding, presented with acute onset of chest pain and shortness of breath and in cardiorespiratory extremis. She was hypotensive, tachycardic, tachypneic and hypoxic. A bedside ultrasound revealed enlargement of the right ventricle and bowing or intrusion of the right ventricle wall into the left ventricle on parasternal short axis view of the heart; this finding was suggestive of right heart strain and a pulmonary embolism as the cause of the patient's clinical presentation. The patient proceeded to lose consciousness and required intubation with initiation of cardiopulmonary resuscitation (CPR). The patient had immediate return of spontaneous circulation within 2 minutes of initiation of CPR. A central line was placed for access and rapid medication administration as well as a femoral arterial line for monitoring of blood pressure. The patient proceeded to undergo cardiopulmonary arrest once again shortly thereafter and experienced an additional subsequent return of spontaneous circulation. Given bedside cardiac ultrasound findings and critically unstable hemodynamic status of patient, the decision was made to administer intravenous thrombolytic therapy to treat a suspected pulmonary embolism. Pulmonary Medicine was

consulted and the patient was admitted for further observation in the ICU after stabilization of her vitals and hemodynamic status. Repeat ultrasound of the heart after administration of intravenous thrombolytics resulted in objective improvement in appearance of the right ventricle and its initial bowing into the left ventricle. The patient did not experience any vaginal bleeding, despite her past medical history, and suffered an isolated complication of a left-sided femoral artery hematoma from arterial line placement. The patient was subsequently discharged on hospital day four from the ICU and ambulated from the hospital, without neurologic deficit, on anticoagulation.

Discussion: This case illustrates the critical nature of pulmonary embolism. Pulmonary embolism is an emergent condition that warrants rapid intravenous thrombolytic therapy as long as there is no absolute contraindication to its administration. Thrombolytic therapy was life-saving in this case, despite a relative contraindication of recent uterine bleeding, and bedside ultrasound of the heart was instrumental in the achievement of diagnosis of the disease. It represents a successful resuscitation of a cardiopulmonary arrest after administration of thrombolytics for pulmonary embolism. Additionally, it illustrates both the utility of bedside ultrasound as a diagnostic tool for cardiopulmonary arrest, as well as the therapeutic potential of thrombolytic therapy in the setting of an acute pulmonary embolism causing hemodynamic instability and cardiopulmonary arrest.

Keywords: Pulmonary Embolism, Cardiac Arrest, Thrombolytic Therapy

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[Resüsitasyon/KPR]

ONE OF THE 5 TS OF CPR

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Introduction: Cardiac tamponade is a clinical syndrome caused by the accumulation of fluid in the pericardial space, resulting in reduced ventricular filling and subsequent hemodynamic instability. If the tamponade is untreated, hemodynamic compromise ensues consequent to the diminishing cardiac output. Therefore, as a continuum, cardiac tamponade constitutes a medical emergency, the complications of which include pulmonary edema, shock, and death.

Case: A 42-year-old man was admitted to our emergency department with the complaint of generalized weakness. He had been diagnosed with laryngeal cancer and received several cycles of chemotherapy with doxorubicin and cisplatin (the last cycle was 2 months earlier). Vital signs were as follows: temperature 36°C, blood pressure 110/60 mmHg, pulse 68 beats/min, SpO₂ %92. On physical examination, lung sounds were decreased bilaterally, other systemic examinations were normal.

Because of electrical alternans detected in ECG, echocardiography was planned. Within minutes, he experienced cardiac arrest. Cardiopulmonary resuscitation (CPR) and intubation were performed. During resuscitation, arterial blood gas revealed severe decompensated metabolic acidosis, and high lactate levels were observed. During CPR for rapidly declining vital signs, emergent 2-dimensional transthoracic echocardiography confirmed a massive, global, tamponading pericardial effusion. Emergent subxiphoid pericardiocentesis was performed, and

more than 200 cc of dark, unclotted, bloody fluid was drained. The patient's vital signs returned to normal levels immediately after pericardiocentesis and he was transported to the intensive care unit for further management.

Discussion: Cardiac tamponade, is a life-threatening condition that requires prompt diagnosis and immediate treatment. Among etiologies for tamponade, Merce et al reported the following incidence rates: Malignant diseases (30-60% of cases), uremia (10-15%), idiopathic pericarditis (5-15%), infectious diseases (5-10%), anticoagulation (5-10%) and connective tissue diseases (2-6%).

As in our case, patients come to the emergency department with nonspecific complaints may decompensate rapidly. Therefore, we need to know ECG and echocardiography findings which have crucial clues in diagnosis of tamponade.

Electrocardiograms in cardiac tamponade may show low-amplitude QRS complexes, signifying low voltage, and may also depict quasi-specific electrical alternans; this latter effect is seen in 10% to 20% of tamponade cases. Moreover, variants of electrical alternans can also accompany pulmonary embolism, myocardial ischemia, and certain tachyarrhythmias.

Echocardiography is not only readily available, inexpensive but also easy to use and in most cases pinpoint the cardiac tamponade. This method enables direct views of inferior vena cava and right ventricular changes and it can exclude the diagnosis of tamponade. Additional causes of tamponade, such as infiltration, mass rupture, or heart wall rupture, can be ascertained.

Another important issue about our case is that cardiac ultrasound performed during CPR will increase the chance of success, in fact, protocols such as CAUSE (cardiac arrest ultra-sound exam), FEEL (focused echocardiographic evaluation in life support) and FATE (focus assessed transthoracic echocardiography) is available. As emergency department physicians, we should implement these protocols as one of the steps of ACLS guideline in cardiac arrest patients.

Keywords: CPR, cardiac tamponade, electrical alternans, echocardiography

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[Resüsitasyon/KPR]

POST ARREST BISPECTRAL INDEX MONITORING

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Introduction: Bispectral index (BIS) is electroencephalography (EEG) based technology is used to monitor sedation. BIS is a processed EEG parameter, that was designed specifically to assess patient responses to sedation and anesthesia. It used primarily in an operating room setting, is being used increasingly in the ICU setting. It has a sensor is placed across the patient's forehead to detect electrical activity in the brain. Multivariate statistical analysis was performed and relevant EEG features were combined to produce the BIS, a number with a strong correlation to clinical endpoint of hypnotic state and displayed on a linear scale (0-100). There are arousal states on this scale like awake, sedation, deep sedation and coma. A BIS value approaching 100 corresponds with an awake state. A BIS value below 60 corresponds with deep

sedation. A BIS of 40 and below corresponds with deep anesthesia or hypnotic state.

Case: A 64 year old man presented to the emergency department with cardiopulmonary arrest. His family mentioned that he was admitted hospital several times and he was discharged a week ago from coronary intensive care unit. The patient had a history of hypertension, congestive heart failure. Cardiopulmonary resuscitation was performed successfully for half an hour. After resuscitation her vital signs were: body temperature 36.1°C; blood pressure 85/64 mmHg; and heart rate 74 beats per minute. He was intubated and connected to a volume controlled ventilator. Patient was monitored with BIS. BIS values between 0 and 10 for half an hour. Then his BIS started to rise and it was 61 in the fiftieth minute after resuscitation. He transferred to intensive care unit.

Discussion: BIS is a parameter originated by a mathematical analysis of data taken from the electroencephalogram. It is a simple, easy to interpret and noninvasive method. A BIS of 100 represents an awake individual, while a BIS of 0 represents complete electrical silence. BIS is a simple, easy to interpret and noninvasive method. Using BIS may greatly benefit clinical management by providing an assessment of central nervous system function. A high BIS value reflects cerebral activity and should encourage the team to continue CPR but a low BIS is much difficult to stop CPR and death decisions. Many care reports show the potential benefit of BIS monitoring during resuscitation from cardiopulmonary arrest. Our case showed that in post resuscitation patient BIS can be low also zero but it can rise after a hour.

Keywords: Bispectral index, electroencephalography, resuscitation

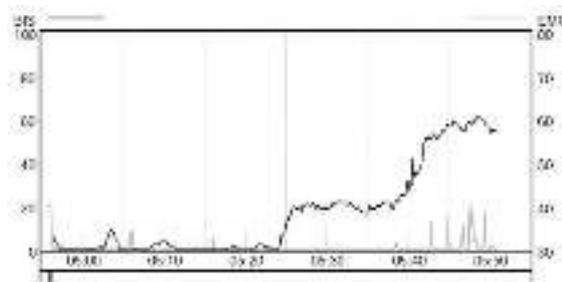


Figure 1. Bispectral index

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[Resüsitasyon/KPR]

THE RELIABILITY OF TURKISH " BASIC LIFE SUPPORT " AND "CARDIAC MASSAGE" VIDEOS POSTED ON INTERNET

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Objective: In this study, the reliability of Turkish cardiac massage and Basic Life Support videos which already downloaded to three main website such as YouTube, Google, Yahoo following the publication of 2010 CPR guideline and the suitability of them to 2010 CPR guideline were researched.

Methods: The videos which have been uploaded to the three largest website (YouTube, Google, Yahoo) to search videos on internet, were queried by using of keyword as “cardiac massage” and “basic life support” on July 2014. Videos that had been uploaded between January 2011 and July 2014 were analysed and scored by two experienced emergency specialists.

Results: 1126 videos was obtained. 1029 of videos (91.4%) were excluded by researchers. 97 videos were detected as accord with study criterias. Despite the most videos were found on Google website by keywords, the enormous part of videos proper to criterias were sourced from YouTube website (n=65, 67.0%). One in four videos (24.7%) were observed to not suitable on 2010 CPR guideline. In a slight part of videos, the using of AED was mentioned (14.4%). Median scores of the videos is 5 (IQR: 4-6). The rate and scores of the videos uploaded by official instution or association were significantly higher than others (p=0.007 and 0.006, respectively). Moreover, scores of the videos compatible with guideliness uploaded by official instution or association and medical personel also were found higher (p=0.001).

Conclusion: Eventually, all the data obtained in this study support that Turkish videos were not reliable on the subject of BLS and cardiac massage. It is promising that videos with high follow-up rates also have been scored higher.

Keywords: YouTube, Cardiac Massage, BLS, İnternet

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[Toksikolojik Aciller]

ACUTE DELIRIUM; A RARE COMPLICATIONS OF INTRAVENOUS TRAMADOL

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Tramadol is a widely used medication by physicians and is held to be a safe analgesic. It has been claimed to be helpful in the elderly and hepatic and renally compromised subjects. Delirium is an acute confusional state, commonly seen in clinical practice but rarely precipitated by drugs. Tramadol hydrochloride, commonly used as an analgesic, can be an offending agent, and rarely, severe delirium can be precipitated by a single dose of tramadol. We report a case of intravenous tramadol-induced acute delirium

A 65-year-old man was brought to the emergency service and admitted with history of severe, widespread body and abdomen pain. he was suffering from terminal stage gastric cancer. Ultrasonography of abdomen report was unremarkable. Her routine blood counts, renal and liver profiles, and biochemistries were unremarkable, and chest skiagram and electrocardiogram revealed no abnormality. Conservative management was initiated with intravenous fluids and intravenous tramadol hydrochloride 100 mg. Within half an hour of receiving tramadol, he developed confusion and violent behavior, irrelevant talk, and inability to recognize family members. These symptoms persisted for the next six hours till she was sedated with injectable midazolam 3 mg. Mental status examination revealed a delirious state with disorientation and presence of visual hallucinations. He was diagnosed as a case of tramadol-induced delirium.. Emergency blood glucose, liver and kidney profiles, electrolytes, and thyroid profile were found to be within range. After 36 hours he was

discharged from hospital, and during this time he was fully lucid and never had another episode of confusional behavior.

In conclusion, tramadol, which is a commonly used analgesic in surgical settings, has the potential to lead to delirium. It is important for surgeons to have a high index of suspicion in order to be able to recognize promptly this uncommon but serious adverse effect of the drug and withdraw the offending agent along with having effective liaisoning with their psychiatric colleagues for appropriate management.

Keywords: tramadol, delirium, analgesic

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[Toksikolojik Aciller]

ISOLATED UVULAR EDEMA RELATED WITH LANSOPRAZOLE - QUINCKE'S DISEASE

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Edema of the uvula usually manifests as fullness of the oropharynx and difficulty in talking. It can be accompanied by difficulty in breathing and since it affects the vocal cords, dysphonia. Constitutional and mechanical anatomical defects (such as a long uvula) have been reported as predisposing factors. There have been few studies of this medical condition. Most of the reports in the literature are isolated clinical cases describing a variety of etiologies including allergy and consumption of nonsteroidal antiinflammatory drugs, angiotensin-converting enzyme inhibitors, and angiotensin II receptor antagonists. There are only few case angioedema related with lansoprazol and there are no reported case isolated uvular edema related with lansoprazol. Our case is isolated uvular edema related with lansoprazole.

A 48-year-old male patient was admitted to the emergency department with the complaints of difficulty swallowing, a sensation of something “stuck” in his throat and a swollen uvula. His complaints had started 6 hours before the admission after taken oral lansoprazol. He denied any fever, cough or breathing difficulties. His vital signs were stable with blood pressure 120/70 mmHg, heart rate 86/min, respiration rate 12/min and body temperature 36.6°C. On physical examination, his lung sounds were normal. No lymphadenopathy was noted, but his uvula was erythematous and edematous. Right tonsillar hypertrophy was seen. He had no medical history of trauma, known food or drug allergy, asthma or frequently repeating infections. The only remarkable point in his medical history was that 6 hours before he had been prescribed oral lansoprazole for peptic ulcer. He was treated with intravenous steroids, feniraminin, ranitidin in the emergency department and prescribed oral antihistaminic tablets for the next 48 h. Patient was discharged after uvula edema regressed.

Isolated uvular angioedema was first defined by Quincke in 1882. Isolated uvular angioedema, or Quincke's disease, is a relatively rare presentation of angioedema of the upper airway. Isolated uvular angioedema is usually caused by a type I hypersensitivity reaction. In this situation, the primary strategy should involve maintaining the airway. In spite of being a rare condition, uvular edema may cause obstructive respiratory distress and require immediate airway care. The general treatment

strategies in the emergency department consist of intravenous H1 and H2 histamine blockers, corticosteroids and infrequently epinephrine. We should start treatment immediately in patients admitting with uvular edema to avoid obstruction of the upper airway.

Keywords: Isolated uvular angioedema, Quincke's disease, Lansoprazole

Isolated Uvular Edema



Figure 1. Edema of the uvula after taken oral lansoprazol

P-364

[Toksikolojik Aciller]

A RARE COMPLICATION OF DULOXETINE POISONING - RECURRENT GENERALIZED TONIC-CLONIC SEIZURES

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Seizures are uncommon, but serious, adverse effects of antidepressant drugs.

Duloxetine is a potent and selective inhibitor of serotonin and norepinephrine reuptake (SNRI) with a weak activity over dopamine reuptake used in the treatment of major depressive disorder. Daily doses of 60 mg are effective in treatment of major depression. There are few cases of isolated duloxetine overdose in humans and among these cases there are only two reports of a generalized tonic-clonic seizure following isolated duloxetine poisoning with a very high dosage. But these cases are not recurrent seizures. Our case is recurrent generalized tonic-clonic seizure following isolated duloxetine poisoning. So we want to report this case.

A 38-year-old female patient who had no previous ailment or history of drug use was taken to emergency services 2 to 3 hours after she had taken 47 duloxetine 60mg tablets, which was used by her mother. GI decontamination, activated charcoal was performed. The patient, whose general medical condition was good and who was conscious and adequately cooperative, had stable vital signs with a GCS of 15 points. The patient was taken to the observation room and were monitored. Under observation

presenting symptoms included irritability, anxiety, worsening tension were started and She had a generalised tonic-clonic seizure for 4 hours just after her hospitalisation. The convulsive seizure was intervened with intravenous Diazepam (5 mg) but after 15 minutes She had second generalised tonic-clonic seizure and no response was received diazepam. Seizures can not be stopped and patients were considered status epilepticus. Seizures were stopped with using neuromuscular agents and patients were intubated. Patients were admitted to the intensive care unit. Additional antiepileptic treatment was administered. 36 hours after admission to hospital no condition which could cause seizures was determined. patients were extube. The patient had no problems in the follow-up and was discharged on the fourth day of her hospitalisation.

Seizure risk for most antidepressants increases with dose (or blood level). Even if the patient's admission examination and vital signs was normal, in drug poisoning we should keep the patient under observation for a certain period. Because late term effects of the drugs especially antidepressant drugs, can be serious and fatal.

Keywords: Duloxetine, Generalized Tonic-Clonic Seizures, Antidepressant drugs

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[Toksikolojik Aciller]

CARDIAC ARREST AFTER SMOKING BONZAI(K2 SPICE) DESPITE NORMAL CORONARY ANGIOGRAPHY

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Bonzai(K2 Spice) is a kind of a new generation of synthetic cannabinoids. Recently it is spreading rapidly in our country and around the world..It is very cheap and easy to obtain. All of the common side effects are the same as synthetic cannabinoids. Clinical presentations following the use of synthetic cannabinoids have included agitation, anxiety, emesis, hallucinations, psychosis, tachycardia, and unresponsiveness. Even if it is very dangerous and there is a risk of death at one time smoking. But cardiac arrest due to synthetic cannabinoids are very rare. To our knowledge there are only two reports about cardiac arrest related with bonzai. We describe a case of out-of-hospital cardiac arrest temporally related to abuse of the synthetic cannabinoid street drug known as bonzai

A 32-year-old man with no medical diseases of hypertension, dyslipidemia, coronary artery disease, presented to emergency service after he suffered a witnessed out-of-hospital cardiac arrest. The family described that the patient had recently been smoking increasing amounts of bonzai. Upon arrival of emergency service the patient was found to be in ventricular fibrillation and cardiopulmonary resuscitation was initiated. The patient was defibrillated twice and resuscitation was provided according to the advanced cardiac life support protocol. Despite 45 minutes active resuscitation, patients did not respond the resuscitation. Laboratory analysis at the time of admission showed elevated troponin T and elevated CKMB. Other Laboratory analysis were normal. Patient was diagnosed as sudden cardiac death due to the use of bonzai.

Most cases of sudden cardiac death occur in subjects with no prior history of heart disease. The incidence of sudden death in a general population has been shown to increase contemporaneously

with substance abuse. As a result we should be noted that the risk of cardiac arrest after the use of bonzai despite normal coronary angiography.

Keywords: Bonsai, Cardiac Arrest, K2 Spice

P-366

[Toksikolojik Aciller]

CANNABINOID ABUSE AS AN EMERGENCY CASE:

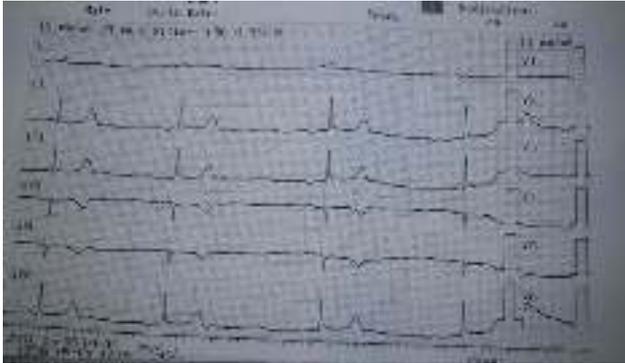
Feriyde Çalışkan Tür, Orkun Ünek, Zeynep Temizyürek, Özge Duman Atilla, Gökben Kayacan

Tepecik Training and Research Hospital

The emergencies of drug abuse develops are frequently encountered recently in emergency departments. In this presentation, a 33 year old male patient referring to the emergency department with bradycardia after ingestion of an illicit drug is reported. Emergency physicians should be competent and be able to predict the potential life-threatening conditions about substance abuse without having any bias to the patient.

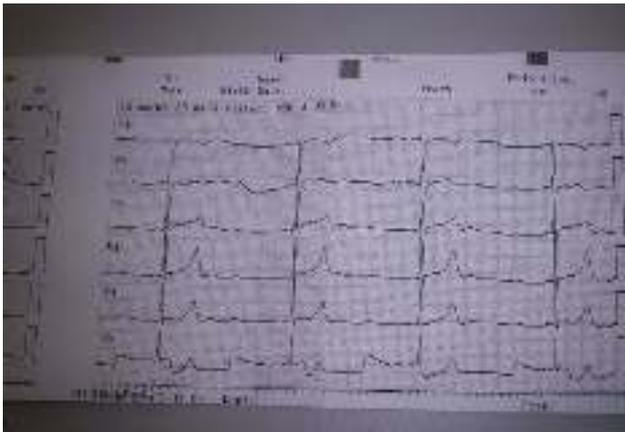
Keywords: Cannabinoid, AV-Block, syncope, drug abuse

EKG



The electrocardiography from the cannabis abuser show Mobit's Type 2 block.

EKG 2



P-367

[Toksikolojik Aciller]

A LETHAL ORGANOPHOSPHATE INTOXICATION DEPENDING ON ORAL METHADION TAKING

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Introduction: Organic phosphorus compounds are used widely in homes, gardens, agriculture and veterinary medicine throughout the world. Because of easily accessibility, they commonly used for suicide. More than 200,000 deaths are observed due to organophosphate purchase per year all over the world. Methadion is a pesticide, derivated from organophosphate. There are many registered emulsifiable concentrate form of the commercial preparation in our country.

Although it's pathophysiology is not fully understood, hypohyperthermia can be seen in organophosphate intoxication and may be associated with high doses of atropine or mortality.

Case: A 28 year old male patient was admitted to our emergency department due to suicidal attempt with purchase of methadione. At admission he was unconscious has shoallow breathing, Glaskow Coma Scala was 5. He had fecal and urinary incontinence and hypersalivation. Atropine and pralidoxime (PAM) treatments was applied. Patient's clothes were removed completely and washed with soap and water. Patient was delivered to emergency intensive care unit. Because of his hypersalivation continued, atropine and pralidoxime treatments were continued. At 6th hour he began to respond to verbal stimuli. At 12th hour, patient's consciousness was opened and began to talk. PAM treatment was stopped. At 24th hour he was intubated due to closing of his consciousness, increased bronchial secretions and decreasing of oxygen saturation. After intubation patient developed cardiac arrest and after CPR was performed about 10 minutes, cardiac rhythm returned. Atropine and PAM treatments were restarted. Because of patient began agitated, midazolam infusion was started. A central venous catheter was inserted to jugular ven and lipid emulsion solution was applied to patient.

At 36th hour patient extubated, due to his clinic and vital signs got beter.

At the end of second day patient's consciousness was reclosed and oxygen saturation decreased. So that patient was intubated again. Patient was consulted to hematology department to evaluating of plasmapheresis started. At 4 4th day, patient's fever was increased, blood urine and tracheal aspirate culture were taken. Midazolam, plasmapheresis, atropine and PAM treatments were continued. Patient died at 8th day.

Discussion: Organic phosphorus intoxication is one of the populer subjects of the world of medicine because of the clinical course could not be expected and the istreatment difficult. In our case; partial responses to the treatments have been applied but clinical course of the patient observed changes. Finally, the patient's clinic deteriorated with the forefront of the fever and patient died. Thinking that, fever table that had seen at patient could be early indicator of mortality in organic phosphorus intoxication.

Keywords: Intoxications, Methadione, Organophosphate.

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[Toksikolojik Aciller]

TRAMADOL INDUCED SEIZURE: A CASE REPORT:

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Introduction: Tramadol is widely consumed in the market, due to the increased use as analgesic and low potential of addiction. In cases of poisoning is rare, but serious complications can be seen as a seizure. It is reported that the smallest dose of tramadol associated seizure is 500 mg. In our case, the seizure was at a lower dose. In this study; we aimed to present case that was brought in emergency department with convulsions complaint after using 350 mg of tramadol.

Case: 22 year old male Azerbaijani patient was brought to the emergency service with the complaint of confusion after 20 seconds lasting contraction of whole body. Patients general situation was moderate he was unconscious and his pupils were isocoric. His vital parameters were normal. Soon after he had been brought to the emergency service agitation was observed at the patient. Because of the agitation 3 mg midazolam (Dormicum, F.Hoffmann-La Roche Ltd, Fontenay, France) was applied. No acute pathology was determined at cranial CT of patient which is performed in terms of confusion and seizure etiology. Laboratory tests were normal. 15 mg/kg phenytoin loading was recommended to the patient consulted to the neurology department because of confusion and seizure story. 1000 mg iv phenytoin was loaded to the patient (Epitotin, Vem drug industry Ankara, Türkiye). 6 hours after at the emergency service his awareness started to refresh. According to the story taken from the patient and his friends it is learned that he had come from abroad one day ago and he had taken total 7 capsules of drug containing tramadol (tradol 50 mg capsule, Rowex Ltd, Cork, Ireland) because of headache. After he was observed for 24 hours at the emergency service asymptomatic patient was discharged with suggestions.

Conclusion: Tramadol is a usually prescribed drug for pain management. Low addiction potential of tramadol increases safety of its usage. Worldwide usage of tramadol varies on a large scale. Many cases related with abuse and toxicity of tramadol were reported. Major symptoms of tramadol toxicity were depression of central nervous system, seizures, headache, somnolence, tachycardia, constipation, nausea and vomiting. 500 mg of tramadol is reported as the minimal dose causing convulsion, tachycardia, hypertension and agitation. At the case we reported seizure was observed after usage of 350 mg tramadol. Symptoms usually decrease in 24 hours time. As a result; it is learned that tramadol can be provided without prescription, it is used frequently as an analgesic in the country that the patient has come from. Though drug intoxication is popular among pre diagnoses in young patients consulting to the emergency service with seizure tramadol is usually forgotten in that contain. Tramadol should be questioned in patients who previously without a history of epilepsy and presenting to the emergency department with complaints of seizures.

Keywords: Tramadol, seizures, toxicity

P-369

[Toksikolojik Aciller]

RECURRENT SEIZURES AFTER LIDOCAINE INGESTION; A CASE REPORT

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Introduction: Lidocaine has a concentration-dependent effect on seizures. concentrations above 15 µg/mL frequently result in seizures in laboratory animals and man. We report a case of central nervous system (CNS) lidocaine toxicity and recurrent seizure after erroneous ingestion of lidocaine solution.

Case: A 4-year- old boy presented to the emergency department of Imam Hospital of Sari in December 2013 due to tonic-clonic generalized seizures approximately 30 minutes ago. 3 hours before seizure, his mother took him erroneous 2spoons (amount 20-25 cc) lidocaine hydrochloride 2% solution instead of pediatric gripe. Seizure with generalized tonic-clonic were 3 times in home. Neurologic examination was essentially unremarkable except for the depressed level of consciousness. The personal and medical history was unremarkable. No evidence of intracranial ischemic or hemorrhagic lesions in CT scan. There were no further seizures, remained stable and the patient was discharged 2 days after admission.

Conclusion: The use of viscous lidocaine may result in cardiovascular and central nervous system toxicity, particularly in children

Keywords: recurrent seizure, lidocaine ingestion

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[Toksikolojik Aciller]

PHYSOSTIGMINE TREATMENT IN AN ADOLESCENT WITH AKINETON OVERDOSE

Sabiha Sahin
Sabiha Sahin

Case: Fourteen-years-old boy who was taken to Paediatric Emergency Department due to hallucinate and agitation has a story of received 12 tablets of akineton which belong to his aunt about 9 hours ago. Before he was referred to our hospital, he applied to a healthcare centre after 2 hours and he treated with gastric lavage and activated charcoal. During the initial evaluation in our Emergency Department, blood pressure (BP) was 110/60, pulse was 84/min, respiratory rate (RR) was 20/min and temperature was 36.8, and euphoric state and visual hallucinations were observed. Poison Information Centre was called considering the biperiden intoxication due to existing symptoms. They said that there is no any toxic dose in biperiden toxicity, the half-life of drug is 8-48 hours, absorption is low and haemodialysis and peritoneal dialysis is ineffective. They noted that toxic effects include somnolence, hallucination, delirium, mydriasis, hypertension, urinary retention, slowing in intestinal mobility and respiratory depression. The patient was taken to Paediatric Intensive Care Unit to give physostigmine for delirium if needed and to close follow-up. Diazepam was given due to ongoing agitation. During the intensive care follow-up, physostigmine was introduced two times and his hallucinations and agitations decreased markedly. On the third day of follow-up, his general situation improved and Glasgow Coma Scale (GCS)

score was 15. Patient's biochemical parameters and ECG become normal. He was evaluated by paediatric and adolescent psychiatry and he was discharged advising polyclinic control after 15 days.

Keywords: biperiden, poisoning, Physostigmine

P-371

[Toksikolojik Aciller]

FATAL HYPERNATREMIA DUE TO DRINKING A LARGE QUANTITY OF SHOYU (JAPANESE SOY SAUCE)

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We report a case of fatal salt poisoning in a 55-year-old woman who suffered from depression and drank a large quantity of shoyu (Japanese soy sauce). She presented with the highest ever documented serum sodium level of 187 mmol/L. This was associated with symptoms of cerebral damage which developed within hours after drinking the soy sauce. She died as a result of massive pulmonary edema, despite intensive medical treatment. Viewing the results of clinical and postmortem investigations together, her death could clearly be attributed to drinking a large quantity of soy sauce.

Keywords: Hyponatremia, Soy sauce, Autopsy



Figure 1. Japanese soy sauce (shoyu) was on the desk.

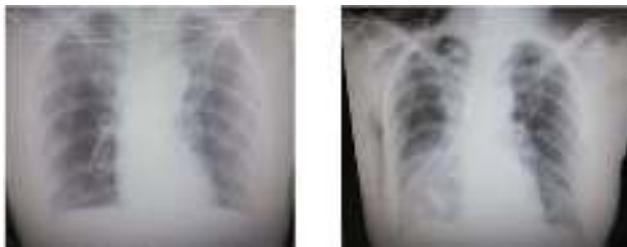


Figure 2. The clinical examination of the lung fields revealed massive pulmonary edema.

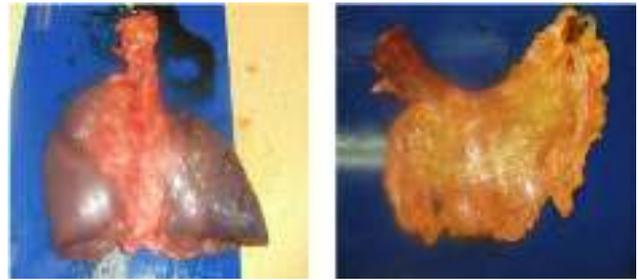


Figure 3. The esophageal mucosa was red-brown.

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[Toksikolojik Aciller]

OCREOTIDE INDUCED BRADYCARDIA

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Objective: Ocreotide is a long acting synthetic octapeptide with pharmacological actions similar to those of the natural hormone somatostatin. Ocreotide is used for the treatment of portal hypertension and seems to have remarkably few side effects. It may be administered by the subcutaneous or the intravenous route, in patients with variceal hemorrhage intravenous route is preferred. Ocreotide is used in order to reduce portal tension by selective splanchnic vasoconstriction. Here we presented a patient who developed bradycardia after ocreotide infusion.

Case: A 85-year-old woman was admitted to the emergency room with haematemesis and melaena. We followed her approximately for 3 years with cirrhosis due to hepatitis B. On examination, she was alert and oriented, with a blood pressure of 110/60 mmHg and heart rate of 96/minute. Her lab values were as follows; Hb: 8.3 g/dl, Plt: 20 000/ μ L, Wbc: 1.500 / μ L, T.blb: 2 mg /dL, and alb: 3.0 g/dL. She was resuscitated with crystalloid solutions and packed red cells. After 250 mg somatostatin IV push we followed with 250 mg/ hour infusion treatment. After the stabilization we performed gastroscopy. There were 3 colon esophagus varices with red spots. And we performed band ligation on the varices. There were not any other pathology in the stomach or in the duodenum which can explain the bleeding.

Two days later because we had no somatostatin we passed to ocreotide infusion (50 μ g/h intravenously). After ocreotide infusion her heart rate dropped to 40 beats/ minute. ECG showed sinus bradycardia. All other laboratory values were within normal limits. We stopped ocreotide infusion. The patient's heart rate steadily rose throughout the day, peaking at 70 beats/ minute. No further ocreotide was given. The cardiologist determined that there was no need for further electrophysiologic evaluation.

Conclusion: Mild bradycardia has been described after ocreotide administration, though not frequent. The mechanisms of ocreotide-induced bradycardia are still unknown. Ocreotide increases systemic vascular resistance, and bradycardia may be a baroreceptor-induced reflexive response to an increase in the systemic blood pressure. Ocreotide, long-acting somatostatin analogue, has similar mechanism of action with somatostatin. In our case, patient received somatostatin infusion for two days, subsequently ocreotide infusion had to be given because somatostatin couldn't be supplied. During the transfusion, drug

infusion 50 µg/hour was started with a dosage pump. Three-four hours after, the patient developed bradycardia. Infusion rate is controlled and there wasn't any problem in vital signs before the treatment. Therefore, rather than reflex response against octreotide, it is more likely to be a direct cardiovascular effect.

Intravenous administration of octreotide may cause significant bradycardia and cardiac conduction defects. In patients presenting with bradycardia because of octreotide administration, applying suggested diluted form doesn't seem to be protective against bradycardia. In fact in our case diluted form is used as recommended. As a conclusion, although clinical trials report quite reliable profile and fewer side effects for both somatostatin and octreotide, electrocardiographic monitoring is advisable while octreotide is administered.

Keywords: Octreotide, Bradycardia, Toxicology

P-373

[Toksikolojik Aciller]

SULFURIC ACID VAPORS INDUCED DERMATITIS IN CHEMICAL INDUSTRY WORKER

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Introduction: Sulfuric acid (SA) and SA mists are corrosive and can cause severe irritation with symptoms including erythema and pain. Concentrated SA is commonly used as a drain cleaner in Turkey and can cause severe irritation and burns which may result in permanent scarring or, when extensive (>50%), death. In this case the authors report a chemical industry worker with diffuse multiple erythema on different body surface because of SA vapors.

Case: A 34-year-old man was admitted to the emergency department with papular appearance of necrotic lesions in the hands, forearms and multiple erythema in the body (Figures-1,2). He was feeling hot and having intermittent chills. He denied shortness of breath, abdominal pain, chest pain, calf muscle pain and periferal edema. He resorted to his occupational physician several times for whom he prescribed some drugs for his complains. He took medications without any relief. The patient's complaints increased especially on Mondays when he was working in drain cleaner factory and decreased on weekends. By the light of these informations the patient was diagnosed with sulfuric acid induced dermatitis. Intravenous H1,H2 antagonists and corticosteroid was given to the patient. His dermal discomfort and itching decreased within one hour.

Conclusion: Despite various precautions are taken, SA induced injuries are still seen. Especially SA vapour may cause pathological skin findings in chemical industry workers. Protective clothing reduces the influence of SA vapors.

Keywords: sulfuric acid, dermatitis, chemical industry



Figure 1. Erythema in front of the body



Figure 2. Rashes observed on the patient's forearm

P-374

[Toksikolojik Aciller]

TOO MANY ADVERSE DRUG REACTIONS TO DEAL WITH IN A CARDIAC TRANSPLANTATION CANDIDATE

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Objective: Hypersensitivity reaction may occur against any group of medications and this situation prevents performing appropriate treatment algorithms in the emergency medicine. Although treatment strategies in hypersensitive cases may vary and many of the strategies may be replaced by other drug groups in some cases you may run out of alternatives. Here we present a case who was really hard to treat because of his earlier documented hypersensitivity reactions to the first-line therapy drug regimens.

Case: A 39 year- old man was admitted to the emergency room with abdominal pain and diaphoresis. He was known to be a candidate for cardiac transplantation because of terminal dilated cardiomyopathy, and waiting for the donor. He was

documented to be allergic to furosemide, beta blockers, calcium channel blockers, digoxin, Clexane® and Aspirin®. It was previously documented that whenever any one of these drugs was given, the patient had serious angioneurotic edema. He was taking Warfarin as an anticoagulant and Amiodorone for the atrial rate, Aldactone® as the diuretic, and Levotiroxine® for hypothyroidism.

At his arrival the vital signs were TA: 67/54 mmHg, HR: 130/ min/ arrhythmic, RR: 16/min, Temperature: 36.2°C. He complained of diarrhea and decrease in urine volume during the examination. The frequency of the stools was 3 times a day and he was not dehydrated. Physical examination revealed apical systolic murmur, and diffuse abdominal tenderness without any specific location in the quadrants. Our primary diagnoses were decompensated cardiac failure, mild gastroenteritis, and atrial fibrillation. The laboratory results were Na: 119 meq/L, K: 5 meq/L, BUN: 48 mg/dL, Creatinine: 2.23 mg/dL, Total bilirubin: 2.39 mg/dL, direct bilirubin: 0.93 mg/dL. He was anticoagulated by Warfarin. His abdominal USG was normal. The cardiologist performed an echocardiography which revealed the similar findings as the previous reports; Ejection Fraction: 25%, dilated left ventricle, severe MR and severe TR. In short the patient had new onset renal failure triggered by mild gastroenteritis, and fast atrial fibrillation which needed to be paced down to improve cardiac motility.

Our patient was given fluid therapy but as the therapy started he got more decompensated and rales were audible in both of the lungs. His atrial fibrillation got worse, but we could not start any rate controlling drugs due to the previous allergic reactions nor any diuretic therapy. After 3 hours of observation and controlled fluid resuscitation of 420 ml saline, the vital signs were cardiac rate 152 beats/min, TA: 54/34 mm/Hg, RR: 22/min. We started Amiodorone infusion for the rhythm control and dopamine and dobutamine infusion for positive inotropy. Finally, the patient was transferred to the intensive care unit to follow-up the cardiogenic shock. At the ICU, the patient was intubated and treated with Amiodorone, dopamine, dobutamine and then noradrenaline infusions. The patient died the following day.

Conclusion: Decompensated cardiac failure of a transplantation candidate is a very challenging issue because of the underlying pump failure. As the patient described above in most of the cases there is a need both for fluid resuscitation and for inotropic activity. Decompensated cardiac failure in transplantation candidates has very discouraging survival rates. In patients with any adverse drug reaction the results are even more catastrophic.

Keywords: Cardiac failure, Cardiac Transplantation, Adverse Drug reaction

P-375

[Toksikolojik Aciller]

METHEMOGLOBINEMIA CAUSED BY DAPSONE OVERDOSE

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Increase of methemoglobin level is named as methemoglobinemia characterized by functional anemia and tissue hypoxia. Methemoglobinemia can be congenital, but acquired form are more often caused by various drugs and toxins. Methylene blue is the most effective antidote for acquired

methemoglobinemia. When methylene blue is not available, alternative treatments such as ascorbic acid and hyperbaric oxygen can be useful. We presented a case of methemoglobinemia due to dapson overdose.

Keywords: Dapsone overdose, methemoglobinemia, emergency medicine

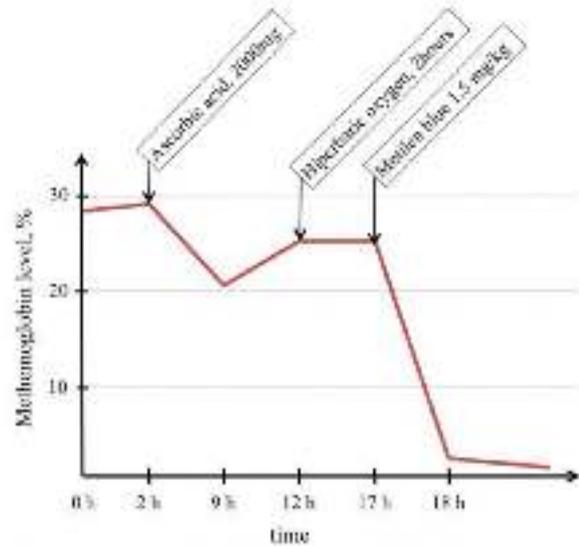


Figure 1. Methemoglobin levels with treatments

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[Toksikolojik Aciller]

THE ANALYSE OF THE CASES ADMITTED TO EMERGENCY ROOM WITH COMPLICATIONS AFTER SYNTHETIC CANNABINOID (BONZAI) USE: CONFUSION AND RESPIRATORY DEPRESSION

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Objectives: For therapeutic purposes, many cannabinoid receptor agonists were produced; on the other hand cannabis became the most produced and consumed illegal substance around the world (1). Substances which contain synthetic cannabinoids (SC) are being sold with various names like “spice”, “K2”, “Bonzai” or “Jamaika”. In this study we aim to analyse gradually increasing numbers of patients who admit to emergency room after using the substance named “Bonzai”.

Material-Methods: For this study, patients who used the substance called “Bonzai” and have the symptoms of respiratory/ cardiovascular complications were included. Patients’ fever, blood pressure, pulse rates, finger tip O2 saturation, finger tip blood glucose values, Glasgow Coma Scale (GCS), ages, gender, complaints and blood gas measurements (pH, PCO2, lactate) were recorded at the time of their admittance. Electrocardiography (ECG) was performed for every patient and the rhythm, rate, segmental and axial specialities were determined and recorded to their files. Finally, after their treatments, the discharge methods were noted.

Results: In our study; 64 patients arrived to the emergency room(ER) with the complaints due to “Bonzai” use. Only 20 of them; whose complaints matched the inclusion criteria,

were examined. Nineteen (95%) of them were male, and 1(5%) of them was female with mean age of $24,6 \pm 8,768$ (95% CI: 20.5%-28.7%). While only 3(%15) of the patients had the GCS > 13, 12 (%60) of them had GCS: 9-13, 5 (%25) of them had GCS < 9. Among these patients 1(%5) of them had the GCS<3 with cardiopulmonary arrest and hospitalized to an ICU after a succesfull CPR. Only 3 (%15) patients had an SpO2 < %94. Main complaints of patients, who arrived to ER were; agitations, sleep tendency and confusion. Ten (%50) of the patients were discharged after 8 hours of observation in ER, 7 (%35) patients hospitalized to services and 3 (%15) were hospitalized to ICUs.

Respiratory acidosis were determined in 17 (%85) of the patients with PCO2 > 45 mmHg and their pH value was calculated around $7,26 \pm 0,15$ (95% CI: 7.19%-7.34%).

Conclusion: In a study (2), 1898 SC use, was notified to the National Poison Data System in America, only 7,3 % (n=99) of the cases had life threatening symptoms and only 7 cases (<1 %) had respiratory depression. In our study, 5 (%25) patients with GCS<9 and 17 (%85) patients who had CO2 retention as an indicator of respiratory depression is an issue of attention. It shows us that SC product called "Bonzai" may have a unusual ingredient. With other additives "Bonzai" causes unexpectedly serious sedation and respiratory depressions more often.

As conclusion it should be remembered that with the use of these substances in which the ingredients change continuously; may cause different types of side effect profiles. The new(!) "Bonzai" materials which are used commonly in our country nowadays, causes deaths by respiratory depression more than ever.

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Keywords: emergency, synthetic, cannabinoid, bonzai, respiratory, depression

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[Toksikolojik Aciller]

TOXIC HEPATITIS AND COAGULOPATHY DUE TO SCORPION STING

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Introduction: Scorpion sting can cause a wide array of clinical signs and symptoms ranging from simple symptoms of local reddening and pain to severe complications including respiratory failure and cardiac arrest. However, cases of toxic hepatitis and coagulopathy have been rarely reported so far. In this paper we report a 30-year-old scorpion sting victim presenting with toxic hepatitis and coagulopathy.

Case: A 30-year-old woman presented to our emergency department with pain and numbness from finger to elbow after a scorpion sting. She had stable vital signs. Initial hematological and biochemical parameters were normal. After being monitored at the emergency department for 6 hours she developed restlessness, nausea, vomiting, and hypersalivation. She was administered a single dose of scorpion antiserum diluted in 500 cc isotonic

saline solution and given in one hour through a peripheral IV line. At 8th hour, her laboratory tests revealed increased liver enzymes (Table 1), alterations in hematological parameters (thrombocytopenia, leukocytosis), and impaired coagulation tests (PT-INR prolongation and increased D-dimer) (Table 2). Fibrinogen level was 270.9 mg/dl (reference range (rr): 175-400 mg/dl) and amylase, lipase, renal function tests, electrolytes, and cardiac enzymes were within normal limits. The patient was admitted to hospital by gastroenterology and hematology departments with a working diagnosis of toxic hepatitis and coagulopathy due to scorpion sting. After being followed at hospital for 6 days her laboratory tests and clinical condition improved and she was discharged upon recommendation.

Conclusion: Laboratory tests may have to be checked 6-8 hours after the initial tests in patients with scorpion sting who develop systemic signs. Physicians should particularly monitor hematological and coagulation parameters, liver function tests and cardiac enzymes and be able to apply the appropriate therapy as needed.

Keywords: Scorpion, sting, toxicity, liver, coagulation

Table 1. Biochemical parameters during hospitalization period

Values	AST U/L	ALT U/L	ALP U/L	GGT U/L	T. Bil U/L	D. Bil U/L	CK U/L	CK-MB ng/mL	CRP mg/L
Arrival	13	12	64	11	0.3	<0.1	88	1.13	3.8
8. hours	606	271	125	136	1.7	1.1	77	0.5	10
1. day	372	259	94	160	2.5	0.9	82	1.2	125
2. days	146	161	-	-	2	1.2	-	-	165
3. days	52	94	-	77	1.1	0.5	76	0.15	157
4. days	68	109	-	--	-	-	65	0.5	102
5. days	36	73	133	119	1.8	0.2	-	-	-

Aspartate aminotransferase [referans range (rr: 0-32)], ALT: Alanine transaminase (rr: 0-31), ALP: Alkaline phosphatase (rr: 40-150), GGT: Gamma-glutamyl transferase (rr: 0-36), T.Bil: Total bilirubin (rr: 0.3-1.2), D.Bil: Direct bilirubin (rr: 0-0.3), CK: Creatine Kinase (rr: 0-145), CK-MB: Creatine Kinase-MB (rr: 0-5), CRP: C-reactive protein (rr: 0-5).

Table 2. Hematological and coagulation parameters during hospitalization period

Values	WBC x10	HGB g/dL	PLT X 10	PT sn	INR	aPTT sn	D-Dimer ng/mL
Arrival	8.5	11.6	341	10.7	0.9	22.3	405
8. hours	3.2	11.7	130	15.7	1.4	34.7	3300
1. days	11.4	9.3	103	16.7	1.5	41.9	4760
2. days	11.8	8.8	81	16.5	1.4	49.5	-
3. days	16.3	9.1	86	11.8	1.1	28	-
4. days	14.2	9.2	80	12.6	1.1	32	5000
5. days	13.5	11.3	178	11.8	1	24	

WBC: White blood count [referans range (rr: 4.5-11x10³)], HGB: Hemoglobin (rr: 11.7-15.5), PLT: Platelets, (rr: 150-400 x10³), PT: Prothrombin time (rr: 10-14.5), INR: International normalized ratio (rr: 0.8-1.2), aPTT: Activated Partial thromboplastin time (rr: 0-35).

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[Toksikolojik Aciller]

PROTECTIVE EFFECT OF RESVERATROL AGAINST ACUTE PARACETAMOL TOXICITY-INDUCED BRAIN INJURY IN RATS

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Objective: The aim of this study was to investigate the protective effect of resveratrol against acute paracetamol toxicity-induced brain injury in rats.

Material-Method: Thirty-two Wistar Albino male rats were randomly divided into four groups with eight rats each: (I) control group (distilled water), (II) resveratrol group (100 mg/kg resveratrol intraperitoneally), (III) paracetamol group (5 g/kg paracetamol orally by gavage), and (IV) paracetamol + resveratrol group (5 g/kg paracetamol orally by gavage + 100 mg/kg resveratrol intraperitoneally). At the end of the experiment, blood samples were obtained via cardiac puncture and tissue samples were collected at the same time. Total antioxidant status (TAS), total oxidant status (TOS) in brain tissue, and certain biochemical parameters in liver tissue were assessed. Histopathological analyses were performed on all brain tissues to determine any changes.

Results: In the paracetamol group, a significant increase was observed both in the AST and ALT enzyme activities and in the TOS and TAS levels, compared to the control group. However, the paracetamol + resveratrol group presented lower levels in AST and ALT enzyme activities and in TOS and TAS levels compared to the paracetamol group. Additionally, the paracetamol + resveratrol group presented no paracetamol-associated severe histopathological changes in brain.

Conclusion: The results of this study suggest that overdose of paracetamol leads to hepatic injury as well as oxidative stress in brain tissue, and that the administration of resveratrol alleviates paracetamol-induced tissue damage and oxidative stress.

Keywords: Paracetamol toxicity; Oxidative stress; Brain; Resveratrol; Rats

Table 1. Serum liver enzymes and brain TAS and TOS levels in the study groups (n=8).

Parameters	Control	Resveratrol	Paracetamol	Paracetamol + resveratrol	P
AST(IU/L)	228.75 ± 195.05a	130.12 ± 18.27a	3455.75 ± 993.92c	678.50 ± 624.23b	<0.001
ALT(IU/L)	79.62 ± 44.82a	50.62 ± 9.34a	3527.00 ± 919.34c	316.12 ± 337.09b	<0.001
TOS (µmol/L)	79.68 ± 92.65a	35.26 ± 12.29a	219.19 ± 166.42b	50.50 ± 46.90a	<0.01
TAS (mmol/L)	1.25 ± 0.57a	1.12 ± 0.21a	3.73 ± 0.38b	3.64 ± 0.37b	<0.001

a, b, c: The difference between the groups that show different letters on the same row is statistically significant. Results are presented as mean ± standard error.

Table 2. Numbers of degenerated neurons in the study groups (n=8)

Parameters	Control	Resveratrol	Paracetamol	Paracetamol + resveratrol	P
Degenerated neurons	19.25 ± 3.57a	21.75 ± 2.37a	54.25 ± 6.13c	40.62 ± 3.20b	0.001

a, b, c: The difference between the groups that show different letters on the same row is statistically significant. Results are presented as mean ± standard error.

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[Toksikolojik Aciller]

ACUTE INTOXICATION AFTER 1200 MG BUPROPION HYDROCHLORIDE INGESTION

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We report a case of bupropion hydrochloride intoxication in a 27 year-old patient. Bupropion hydrochloride is a new generation anti-depressant and is also used for smoking cessation. Our case presented to the ED with acute toxicity after 1200 mg ingestion. Patient was in mild distress, showed signs of akathisia, ataxia, delirium, delusions, depersonalization and derealization. Patient was admitted due to acute drug toxicity and was discharged one day later when the toxicity symptoms wore off.

Keywords: bupropion toxicity drug delirium delusion

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[Toksikolojik Aciller]

ORGANOPHOSPHATE INDUCED DELAYED POLINEUROPATHY

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Background: Organophosphates, are found in the form of organophosphorus or carbamate. They are irreversible inhibitors of acetylcholinesterase and cause accumulation of acetylcholine in cholinergic receptors. Organophosphorus poisoning could be separated in three phases: 1.Acute cholinergic effects, 2.İntermediate syndrome, 3.Organophosphate induced delayed neuropathy. Our aim is to relate a case of a patient who showed all the three stages of the intoxication.

Case: A twenty six year old man admitted to emergency department in an attempt to commit suicide, took a large amount an organophosphate insecticide. He was comatose, with bilateral miotic pupils and was unresponsive to deep pain. Sinus tachycardia, excessive sweating, urinary incontinence and twitching of the extremities were noted. He was intubated and mechanically ventilated. Gastric lavage, atropine (0.5 mg/hour IV infusion) and pralidoxime (1000 mg IV bolus and 500 mg/hour IV infusion) administration and ventilatory support were carried out initially. He was admitted to intensive care unit (ICU) with an assesment of severe OP poisoning. Atropine and pralidoxime infusions and ventilatory support were maintained for 23 days in ICU. On 29th day of ICU, he exhibited proximal muscle weakness and paresthesia. Electrophysiological studies demonstrated sensory-motor polyneuropathy.

Conclusion: Also OPIDP is an uncommon cause of polyneuropathy, during investigation of the causes of peripheral neuropathy, it is important to review the history of exposure to toxic substances. In our country based on agriculture, intoxications due to organophosphates are common. Clinical sequence and complications of organophosphate poisoning must be well known.

Keywords: Organophosphate poisoning, polyneuropathy, neuropathy target esterase

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[Toksikolojik Aciller]

SUCIDE ATTEMPT WITH PSEUDOEPHEDRINE: CASE REPORT: FULYA YILMAZ DURAN¹, ÖZGÜR DURAN², GIZEM DEMİR¹, İBRAHİM CAN AYIK²

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Introduction: Pseudoephedrine (PE), ephedrine and fenylephrine are sympathomimetic drugs widely available in nasal decongestants and cold preparations. All these agents stimulate the adrenergic system with variable effects on alpha and beta adrenergic receptors depending on the compound. PE have both direct and indirect alpha and beta activity but clinically produce more beta adrenergic stimulation. PE is less toxic, with symptoms occurring after four to five fold the usual therapeutic dose (usual adult dose 180-360 mg/day) clinical presentation by these drugs is usually brief with resolution within 4-6 hours. The major toxic effect of these drugs is hypertension, which may lead to headache, confusion, seizures and intracranial hemorrhage. Other toxic effects are bradycardia, atrioventricular block, myocardial infarction. We report a case of PE toxicity who followed in intensive care.

Case: A thirty five year old woman was admitted to emergency department approximately an hour after ingesting 1440 mg PE and 10000 mg claritromycin in a suicide attempt. She was treated with a diagnosis of depression 3 years ago. Her Glasgow Coma Scale score was E4M6V5 Physical examination revealed tachycardia. Tension arterial: 110/60 mmHg, heart rate: 77 beat/minute, fever: 37.3°C. Other systemic examinations were normal. The initial laboratory tests were within normal limits. Activated charcoal was administered. She was admitted to intensive care unit intensive monitoring of vital signs and organ functions. She was discharged from ICU after 2 days.

Conclusion: Diagnosis usually based on a history of ingestion of diet pills or decongestant medications and presence of hypertension. Treatment is maintain an open airway and assist ventilation if necessary. Treat hypertension aggressively with vasodilator such as phentolamine or nitroprusside. Do not use beta blockers to treat hypertension and atropin to treat AV block or sinus bradycardia. Administer activated charcoal if available. Dialysis and hemoperfusion are not effective.

Overmedication or overdose of PE can result in serious neurologic and cardiovascular abnormalities that occasionally can be life-threatening

Keywords: pseudoephedrine, toxicity, treatment

Usual therapeutic doses are 15-60 mg per day. The recommended maximum dose is 80 mg per day in adults; 60 mg per day in children ≥ 8 years old. Side effects of baclofen at usual doses include sedation, confusion, diarrhoea, convulsions, drowsiness, headache, dizziness and occasionally orthostatic hypotension. Overdoses are associated with tachycardia, bradycardia, hypothermia, impaired consciousness, muscle weakness, hypotonia, areflexia, myoclonus, miotic or mydriatic pupils and respiratory failure lasting up to 72 hours. We describe a patient with baclofen overdose presenting to emergency department.

Case: A 19-year-old, 50-kg female was brought to emergency department after she was found her consciousness tend to fall asleep. Her medical history was not significant. She had attempted suicide by taking 60 pills of baclofen (10 mg/tablet) and 16 pills of diclofenac potassium (50 mg/tablet). On admission her Glasgow Coma Scale score was E3M5V4 Physical examination revealed consciousness tend to fall asleep, closed eyes. Her pupils were midriatic and responsive to light, had nystagmus. Her extremities were flaccid. The deep tendon reflexes were absent. Laboratory findings were normal. She was admitted to intensive care unit. Her blood pressure was 130/90 mmHg, with regular heart rate of 104/min and respiratory rate of 25 shallow breaths/min, temperature 36.6°C and oxygen saturation 97% in room air. The results of repeat laboratory studies in intensive care unit were within the reference range. She had a single 4-hour session of hemodialysis at the intensive care unit. After 2 days she was discharged to internal medicine department.

Discussion: The pharmacokinetics of baclofen at therapeutic doses has been well studied (3). It is rapidly absorbed from the gastrointestinal tract, blood levels peak within two hours (2,3). It is 30% plasma protein-bound (3). Elimination half-life after therapeutic use follows first-order kinetics, with half-life ranging from 2 to 6 hours (2,3), means 3.5 hours(3). Eighty-five percent is excreted unchanged in the urine and the remaining 15% is deaminated to β -(p-chlorophenyl)-gamma-hydroxybutyric acid in the liver and excreted in the stool (3). Signs of toxicity have been reported after ingestion of as little as 100 mg baclofen (2,3).

Baclofen toxicity create a profound central nervous system depression. There is no clinically available antidote for baclofen intoxication although a weakly potent antagonist "Phaclofen" has been developed for experimental use (4). Management of baclofen overdose is primarily supportive. Hemodialysis provides fast and effective treatment.

Keywords: baclofen, intoxication, hemodialysis

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[Toksikolojik Aciller]

BACLOFEN INTOXICATION: CASE REPORT: FULYA YILMAZ DURAN¹, ÖZGÜR DURAN², VERMİ DEĞERLİ², İSMET PARLAK², ÖZGÜR ÖNEN², EMRE SEVİM²

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Introduction: Baclofen is a presynaptic gamma-aminobutyric acid (GABA) agonist used to treat muscle spasticity. Although its exact mechanism is not fully understood, it acts at the spinal level by reducing the tonic activity of spinal gamma motor neurons.

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[Toksikolojik Aciller]

UNTHINKABLE DIAGNOSIS IN MEGACITIES: ORGANOPHOSPHATE INTOXICATION

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Introduction: Organophosphates are connected irreversible to acetylcholinesterase enzyme in central and autonomic nervous system, neuromuscular junction and erythrocytes. They can be taken into body through skin, gastrointestinal system, inhalation and injection. Nausea-vomiting, diarrhea and stomachache are the first symptoms in intoxications. Organophosphate intoxication

can cause delays in diagnosis and treatment because of the rarity of cases in big cities.

Case: A 34 years old male patient was brought to emergency department with the claim that he drank a bottle of unknown insect drug in one hour ago. His blood pressure was 100/60 mmHg, pulse rate was 72/min and regular, respiratory rate was 18/min and body temperature was 37°C in physical examination. The patient was conscious and cooperated. Pupils were isochoric. The patient had nausea-vomiting and diarrhea with mild sweating. The bottle, that it was claimed that he drank, was brought by his relatives. Its formulation was DDVP, %1 Dichlorvos. Poison help call center (114) was called and suggestion was retrieved. Activated charcoal was given via nasogastric tube and gastric lavage was made. Antidote treatment was started. Anaesthesia clinic consultation were requested. He was hospitalised with a diagnosis of organophosphate intoxication and he was discharged after 3 days treatment.

Result: Organophosphate intoxication in a big city, such a far localization from the agriculture regions, is a rare situation. But, to reach a organophosphate compounds as pesticides are easy at present time. This is extremely important in terms of public health. The informations that given by the seller to the customers about these drugs are of vital importance.

Keywords: Megacity, organophosphate, intoxication

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[Toksikolojik Aciller]

UNINTENTIONALLY "DEADLY NIGHTSHADE" INTOXICATION

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We present a case of Atropa Belladonna (deadly nightshade) intoxication in 39 year old female who unintentionally consumed the herbals look alike olive in a forest. Atropa belladonna is one of tropane alkaloids which contain atropine, scopolamine, and hyoscyamine and cause highly anticholinergic clinical outcome.

Case: A 39 year old female patient was admitted to our emergency department with dizziness, palpitation, excitation and subsequent altered mental status which was learnt from her family members. Initial physical examination showed tachypnea, unconsciousness, difficulty of speaking, mydriasis and dry mucous membranes, hypoactive bowel sounds, GCS was 9. (E:2, V3, M4). Vital signs included blood pressure 143/81, body temperature: 37.2 °C, heart rate: 114, O₂ saturation: 98%. She had no significant medical history and was not under a medical treatment. As far as it can be assessed, there wasn't a significant motor deficit in extremities. Laboratory tests didn't show a pathology, head CT was normal. Even diffusion MRI scanning was performed and also normal. We tried to get detailed history from her family as she might have been intoxicated, then one of her relatives told us that patient was in forest close to their home that day, ate some herbals, thus she brought some of the plants to home so others could also eat. We could finally see the herbals which one of family member brought them (Figure 1). After a quick search with clinical findings added to picture of plants, we realised it is Atropa Belladonna (deadly nightshade).

Supportive treatment was initiated with IV normal saline 100 cc/h, 5% dextrose 50 cc/h. Patient was followed-up for 32 hours in emergency department with development of mental status. Her disorientation and cooperation status were totally resolved without any other medical treatment, thus she could safely be discharged from ED after 32 hours of follow-up.

Conclusion: According to the our country's situation about interest on herbal products, we should keep in mind intoxication of consumed plants. In such cases, the need of physostigmine (in respiratory depression, seizure, coma, agitation) could occur, but didn't use it due to the late arrival of plants to our ED and improved clinical status of patient after a couple of hours. Thus, patients' clinical outcome must be determined on follow-up findings and comprehensive history must be taken to decide the exact treatment.

Keywords: deadly nightshade, atropa belladonna, anticholinergic intoxication Atropa



Figure 1. Showing Atropa Belladonna plants which patient consumed

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[Toksikolojik Aciller]

ACUTE DYSTONIC REACTION DUE TO DEXKETOPROFEN TROMETAMOL

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Introduction: Dystonia refers to a syndrome originating from basal ganglionic abnormalities and dysfunctions of cortico-striato-thalamo-cortical pathways, which manifests itself with excessive, prolonged muscle contractions¹. Extrapyramidal reactions elicited by dopamin antagonists such as metoclopramide are well-known². The latter can result in neck, arm, and jaw contractions as well as difficulty speaking³. In this paper we report a case of dystonia that developed as a result of dexketoprofen trometamol therapy.

Case: A 24-year-old man presented to our emergency department with burn following hot oil spill on foot. His general appearance and consciousness were normal and his vital signs were as follows: TA: 125/75 mmHg, Pulse Rate: 76 bpm, Respiratory

Rate: 18/min, SpO₂: %98. There was a 5x5 cm second degree burn on the dorsal side of his right foot. Burn care and tetanus prophylaxis were applied. He was also given dexketoprofen trometamol via intravenous route for analgesia. However, he developed involuntary flexion in both upper extremities. Thus, Biperiden Lactat 5 mg/ml was administered intramuscularly and his symptoms abated after 30 seconds. Following resolution of symptoms the patient gave a history of the same reaction with that drug before.

Discussion: This paper reported a case of acute dystonic posture following abuse of a non-prescription, over-the-counter non-steroidal antiinflammatory drug Nalon Ace that contains the active ingredient of Bromvalerylurea. 4 To date, dexketoprofen trometamol has not been reported to cause dystonia.

Since non-steroidal antiinflammatory drugs are commonly prescribed in emergency departments, clinicians working in these settings should be aware acute dystonic reaction caused by dexketoprofen trometamol.

Keywords: Dexketoprofen trometamol, Dystonia, Emergency.

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[Toksikolojik Aciller]

THE EFFECTS OF DILTIAZEM AND METOPROLOL IN QTc PROLONGATION DUE TO AMITRIPTYLINE INTOXICATION

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Background and Objective: Amitriptyline, a frequently used tricyclic antidepressant agent, has powerful cardiotoxic effects especially in high doses. Serum and urine levels of amitriptyline dosages are not correlated with severity of toxicity; therefore, it increases importance of ECG abnormalities. The prolongation of QTc can be a predictive marker for cardiotoxicity. Hence; in the present study, it is aimed to evaluate possible effects of metoprolol and diltiazem in amitriptyline toxicity.

Material and Methods: The rats were separated into four groups. First one was control group, the second was the amitriptyline+ saline group, third one was the amitriptyline+ metoprolol group and fourth one was the amitriptyline+ diltiazem group. ECG were recorded on rats under anesthesia.

Results: In amitriptyline group, QTc duration was prolonged compared with all other groups. The prolongation of QTc was shorter in amitriptyline+ metoprolol group and amitriptyline + diltiazem group than amitriptyline group (p<0.01, p<0.01, respectively) (Table I).

Conclusion: According to the results, it is possible to report ameliorating effects of both metoprolol and diltiazem on QTc prolongation related with amitriptyline intoxication. With further studies, these agents may be used for amitriptyline toxicity and besides, they may be used for patients in cardiovascular risk groups who take amitriptyline treatment regularly.

Keywords: Amitriptyline, intoxication, poisoning, QTc, ECG, metoprolol, diltiazem

Table 1. The QTc, QT and T durations and BPM for all four groups.

	QTc (msec)	BPM (Beat per minute)	QT duration (msec)	T duration (msec)
Normal and isotonic saline	107.8 ± 3.14	258.2 ± 6.37	224.8 ± 7.23	66.6 ± 6.11
Amitriptyline and izotonik saline	150.4 ± 4.14 **	212.4 ± 8.47 #	270.8 ± 9.91 #	105.6 ± 2.98 **
Amitriptyline and metoprolol	101.6 ± 5.99 *¶	233.8 ± 8.18¶	192.2 ± 7.35 †¶	63.8 ± 3.01 †¶¶
Amitriptyline and diltiazem	119.4 ± 4.17 *	257.4 ± 5.18 †	246.4 ± 8.76	74.6 ± 3.22 ††

** p<0.000, # p<0.01 (compared with normal and isotonic saline); * p<0.001, † p<0.01, †† p<0.000 (compared with amitriptyline and izotonik saline); ¶ p<0.05 (compared with amitriptyline and diltiazem)

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[Toksikolojik Aciller]

THE NEED OF TEMPORARY PCEMAKERS IN MANAGING POISONING FROM COMBINED ANTIHYPERTENSIVE DRUGS: A CASE REPORT

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Introduction: Because of the many advantages they offer, combined therapies, instead of monotherapies, are more frequently used for the control of hypertension. One of the best known options is the combination of angiotensin converting enzyme inhibitors (ACEI) and calcium channel blockers. In case of an overdose of these drugs serious hypotension, arrhythmias and atrioventricular blocks can occur. In this report we will discuss the case of and the points one has to bear in mind when dealing with a suicide, attempted by swallowing 9 tablets of Tarka Forte® (240 mg Verapamil + 4 mg Trandolapril)

Case: A 25-year-old female patient was brought in the Emergency department with vomiting, nausea and dizziness. There was no known disease she suffered from. History taking revealed that, for suicidal purposes, she had swallowed 9 tablets of Tarka Forte® 5-6 hours prior to being admitted. During physical examination her general condition was found to be normal. She had a BP of 110/70 mmHg, a pulse of 82/min, she had no fever, her oxygen saturation levels are within normal parameters. A sinus rhythm of 80/min was observed on her ECG and her laboratory results were within normal range.

The patient was kept in observation and was monitored for the next hours. 0,9% NaCl infusion was started. In the following hours the patient showed signs of presyncope. Her cardiac sounds were rhythmic but bradycardic. The new ECG showed a total AV block and the patient was given 5 ampoules of 10% Calcium Gluconate/Levulinat (Calcium Picken 10%, 10ml®) and she was started on 5 µ/kg/min Dopamine amp® (Dopamine HCl).

With a new ECG showing the total AV block persisting, a temporary pacemaker (settings: rate ppm: 80, sensitivity mV: 4, amplitude V: 4.0) was applied and the patient was transferred to Cardiology intensive care unit. The temporary pacemaker was removed 10 hours later when the patient was back to sinus rhythm. On a daily basis the patient was given 2000ml of 0,9% NaCl and 2000ml of 5% Dextrose. On her second day of hospitalization her clinical conditions and laboratory results improved.

Conclusion: Although patients with poisoning by combined antihypertensive drugs may appear stable on their first assessment, they should be followed up in a monitored way. If the patient becomes bradycardic, insertion of a temporary pacemaker should be considered.

Keywords: combined antihypertensive drugs, emergency department, temporary pacemakers, poisoning

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[Toksikolojik Aciller]

TRAMADOL TOXICITY IN THE EMERGENCY DEPARTMENT: A CASE REPORT

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Introduction: Tramadol is effective in different types of moderate-to-severe acute and chronic pain, including neuropathic pain, low back pain, osteoarthritis pain and breakthrough pain. Overdosing tramadol will lead to the continuity of its pharmacologic effects and the addition of neurologic effects such as lethargy, agitation, dizziness, convulsion, coma and dyspnea. Herein, we present a case with tramadol overdose who was admitted because of an epileptic seizure.

Case: We describe the case of an intentional intoxication of tramadol taken orally by a 22 years-old man of foreign nationality. Upon admittance to the hospital his general condition was bad, he was unconscious and had a Glasgow Scale score of 12. His pupils were bilaterally miotic but his vital signs were normal. The patient was monitored and an infusion on 0.9% NaCl was started. His ECG was normal and blood glucose on his fingertips was 140 mg/gl. A full blood count, arterial blood gases, biochemical tests and toxicological tests for acetaminophen, phenytoin, carbamazepine and valproic acid were performed. During the follow-up the patient regained consciousness but because he could speak only farsi, the physicians had to wait for a translator. During the time the patient had a generalised tonic clonic seizure which was controlled by a slow administration of 5mg diazepam IV. There was no pathological finding on his brain CT scan. The history was taken with the help of a translator and the patient admitted taking 20 tablets of Contramal® (Tramadol 100mg) which were originally used by a relative of his. Because of consecutive seizures and finally the development of a status epilepticus the patient was started on phenytoin infusion and was intubated. A nasogastric tube was placed and his stomach was irrigated and activated coal was used. Because there was no naloxone in the hospital it couldn't be used. The patient was diagnosed with drug intoxication and was admitted to the Anesthesiology Department's ICU.

Conclusion: Apart from the diversity of cases presenting themselves at the Emergency Department, language barriers are also sometimes a problem to be faced with. Nevertheless, it is of primary importance to monitor, stabilize the vital signs and assure the medical safety of patient whose history cannot be taken for whatever the reason.

Keywords: Tramadol toxicity, seizures, emergency department:

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[Toksikolojik Aciller]

ACUTE MYOCARDIAL INFARCTION WITH NORMAL CORONARY ANGIOGRAPHY AFTER BUTANE INHALATION

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Butane gas, which is known lighter gas, is used especially among teenager and young people with the aim of getting 'high'. When these gases inhaled or sniffed for recreational purposes, they can lead to acute cardiac events such as acute myocardial infarction (MI), ventricular fibrillation, or sudden death. We report on a 19-year-old male who developed cardiopulmonary arrest after sniffing lighter gases and diagnosed high-lateral MI after successfully resuscitation with angiographically normal coronary.

Case report: A 19-years old male patient with cardiopulmonary arrested after sniffing lighter gas was brought to our emergency department by the 112 emergency ambulance services. He was immediately admitted critical care room, started cardiopulmonary resuscitation (CPR), and intubated. After fifteen minutes of cardiopulmonary resuscitation was applied to the patient, spontaneous circulation was returned. After returned spontaneous circulation, the patient's vital signs were as follows: blood pressure 70/40mmHg, heart rate 110beats/min, respiratory rate: entubated, temprature was 36.6°C, and oxygen saturation 97%. Glasgow coma score was 3. There were ST-segment elevations in leads D1-aVL and V4-V6 T on his electrocardiogram (Figure 1). In his complete blood count test, WBC value was 11.900 and in the biochemical tests following results were obtained: glucose: 219 mg/dl, creatinine: 1.52 mg/dl, ALT: 135 u/L, AST: 140 u/L, LDH: 466 u/L, CPK: 1239 u/L, Troponin: 0.007ng/ml, CK-MB: 13.8. We thought that reason of MI was coroner vasospasm; however, nitroglycerin was not infused due to refractory hypotension. Due to performing emergency cardiac catheterization and intensive care follow-up, the patient was transferred to another tertiary hospital. On coronary angiography revealed normal epicardial coronary arteries and akinetic anterior and lateral walls. On the second day, patient again cardiopulmonary arrested and then died.

Discussion: Due to the convenience and easy access, butane, found in cigarette lighters, room sprays, and deodorants, is used as a pleasure-inducing substance among 15-20 year-olds through inhalation of fuel in the cigarette lighter [1-2]. In the literature, there are reported acute cardiac events such as; cases of myocardial infarction, ventricular fibrillation and asystole upon butane inhalation [5,6]. The suggested mechanisms of myocardial infarction due to butane inhalation are coronary artery spasm and hypoxia [6]. Occurrence of ventricular fibrillation is explained by the increased sensitivity of the myocardium to catecholamines, decreased arrhythmia threshold and direct toxic effects on the myocardium [7]. Firstly El-Menyar AA et al have reported that patient who was performed coronary angiography with myocardial infarction after butane intoxication and they have found normal coronary artery. According to authors reason of MI was coroner vasospasm because ST-segments elevations were resolved after pre-angiographic treatment with nitroglycerin [6]. Similarly in our case, we thought coronary vasospasm because he

had normal coronary angiography and ST-segments elevations resolved spontaneously during angiography.

In conclusion, butane is a very vasoactive agent and because of this feature, it may cause coronary vasospasm and acute myocardial infarction. If early treatment to reverse vasospasm such as nitroglycerin, the out come of these patients may be improved.

Keywords: Butane gas, myocardial infarction, lighter gas



Figure 1. ECG of patient after returned spontaneous circulation

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[Toksikolojik Aciller]

RELATED TOXIC PRILOCAINE METHEMAGLOBINE

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At the time, born with normal birth weight of 3100 g, fed with breast milk, male patients in the perinatal and postnatal history and family history was unremarkable. While the 43-day circumcision done in the hospital with the family's request after 2 hours if the bruising around the mouth, hands and body was brought to our emergency department on development.

In physical examination fever of 36.8 ° C, blood pressure 98/49 mm Hg, heart rate of 145 / min. rhythmic murmur, respiratory rate: 40 / min. Although patients with normal respiratory sounds capillary saturation SaO₂ value: 78, respectively. By administering 100% oxygen did not decrease in cyanosis.

Blood in the white blood cell count 11,660 / mm³ (54% in peripheral lymphocytes, 35% neutrophils were detected, there was no evidence of hemolysis), hemoglobin 10.9 g / dL, hematocrit 33.1%, platelets 476,000 / mm³. Other biochemical tests in patients with normal blood gas pH 7.23, pCO₂: 44 mmHg, PO₂: 19 mmHg, methemoglobin level of 53.5% was observed.

The patient as a local anesthetic prilocaine (Priloc®) found that given the failure to find the underlying cause respiratory and cardiac and methemoglobin in blood gas values because of the high drug-induced methemoglobinemia was considered.. It was decided to be given intravenous methylene blue. The absence of methylene blue in our hospital patients on 250 mg of ascorbic acid (Vitabiol C bulb) was administered intravenously. Looking after 1 hour of methemoglobin in the blood gas levels were found to be 50.0. At follow-up of patients with methylene blue obtained 2 mg / kg of methylene blue in 5 min after intravenous administration

at 1 hour after slowly declined cyanosis control patient blood gas value 3.7% methemoglobin, respectively.

Methemoglobinemia, the hemoglobin molecule decreases the oxygen-carrying ability, which is one of the unexplained abnormal forms and cyanosis despite supplemental oxygen should be considered in the differential diagnosis of all patients do not improve. Although a rare clinical condition, if not timely and appropriate treatment can reach dangerous levels

The most common cause of methemoglobinemia, exposure to oxidizing chemicals, consumption of foods containing nitrite and nitrate, and high doses of local anesthetics are used. In addition, in infants younger than 6 months, diarrhea and dehydration induced methemoglobinemia associated with severe metabolic acidosis have been reported. Hereditary methemoglobinemia is a rare autosomal recessive inherited.

The most commonly used local anesthetics prilocaine, and therapeutic dose and high dose cause methemoglobinemia.

Depending on the tissue hypoxia symptoms develop. Central cyanosis despite oxygen supplementation did not improve, especially on the level of methemoglobin in the blood, clinical findings, individual factors and comorbidities may vary depending on. Our case developed after drug administration gave signs with central cyanosis unresponsive to oxygen.

Prilocaine, may cause methemoglobinemia in neonates and infants are among the agents. Who presented with central cyanosis and signs of circulatory and respiratory systems methemoglobinemia should be considered in all patients who had normal and not necessarily drug use or exposure to oxidizing agents should be questioned.

Keywords: Methemaglobine, Methylene blue, Prilocaine



Figure 1.



Figure 2.

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[Toksikolojik Aciller]

SUICIDE WITH GLIMEPRIDE IN ELDERLY PATIENT: CASE REPORT: FERHAT ICME¹, GULHAN KURTOGLU CELIK¹, TOLGA OZ¹, YAVUZ OTAL¹, GULLU ERCAN HAYDAR¹, SERVAN GOKHAN²

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Introduction: As age increases, the physical and psychological problems experienced by the patients has been also increasing. Risk of suicide in elderly population has been rising day by day according to recent studies. We want to present a 85 years old patient receiving drugs for suicidal attempt in this article.

Case: A 85 years old female patient was brought to the emergency department with complaints of corruption in awareness. It was learned that measured blood glucose level was 60 g / dl, and 10% dextrose was given to the patient by paramedics in ambulance. She did not have any disease other than diabetes in history. TA:140/85 mmHg, pulse:117 BPM (beats per minute), saturation: 98% was measured in admission. Glasgow Coma Score of the patient was 11 (E3M5V3). There is no other pathological sign than tachycardia and cold sweat in physical examination. Blood Glucose level was measured 120 gr/dl with stick at the time of admission. There was no obvious pathology of infection and biochemical parameters. Because of blood glucose worsen to 70 gr/dl level, %20 dextrose infusion was started through central venous catheter during follow up of the patient. Because of continuation of hypoglycemia, query of relatives was deepened. After researching home again, it was understood that two box of Glimepiride 2mg tablets were found in trash box according to information received from relatives. Patient was followed about 48 hours in the emergency department and was discharged after treatment.

Conclusion: Whatever patient age, intoxication is an important disease that should be kept in mind in the differential diagnose of impaired consciousness.

Keywords: Glimepiride;Suicide;Elderly patient

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[Toksikolojik Aciller]

DOES A POTATO THREATEN LIFE?

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Introduction: The slight green layer that occurs due to the germination of potatoes comprises a toxin named Solanine, which leads to a chemical effect similar to that of acetylcholine esterase inhibitor and causes serious health problems in human beings (Figure 1). The consumption of this toxin is likely to cause simple gastrointestinal problems such as nausea, vomiting and diarrhea as well as severe clinical problems including hallucination, stroke, high fever and loss of consciousness. This poster presentation is related to a case suffering from solanine poisoning displayed by loss of consciousness and high fever.

Case: A 28-year-old male patient presented to the emergency department, describing that he started suffering from nausea, vomiting and diarrhea after he ate the potatoes he brought from

his hometown. He was conscious, cooperative and oriented (GCS:15). The values of his vital signs were as follows: blood pressure(BP):100/70mmHg, pulse rate(PR):98/dk, respiratory rate(RR):20/min, sO₂:96% and temperature:37.1°C. In his physical examination, we noticed sensitivity in the epigastric region and increase in bowel sounds. We was administered iv fluid therapy.

In the second hour of observation, the general state of the patient worsened: He had altered state of consciousness (GCS:13), was disoriented, and started feeling cold and shivering. The values of vital signs were as follows: BP:70/40 mmHg, PR:124/min, RR:22/min, SO₂:97% and body temperature:39.8°C. We increased the iv fluid therapy. To reduce his body temperature, we administered 1 gr paracetamol iv and applied peripheral cooling at the same time.

The National Toxicology Consulting Center was called in order to ask for medical advice and have the case recorded. The Center suggested that solanine in potato might have caused the patient's complaints and advised us to observe him for minimum 24 hours. In the fourth hour of the observation, the hemodynamics of the patient became stable. No abnormality was found in laboratory test results. After an observation of 24 hours, the patient was discharged; he was asked to follow our advices and come back for the control.

Conclusion: As it was the case with our patient, the consumption of the green part of potatoes does not cause any apparent pathologies in the beginning, but is then likely to lead to severe signs of poisoning. We, emergency physicians, have to be alert about this effect of potatoes. Food poisoning should never be underestimated, and in case of any doubt, the patient should be asked to provide detailed information on the food consumed and its characteristics.

Keywords: Solanine, Emergency Medicine, Food poisoning



Figure 1.

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[Toksikolojik Aciller]

LOTUS LEAF EXTRACT: A RARE METHOD OF SUICIDE IN OUR COUNTRY

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Introduction: Herbal medications and therapies, historically employed in the Eastern Asian countries, have now been used across the world. One of the agents used in treatment is the extract of lotus leaves or flowers (Figure 1) mostly serving the purpose of weight loss. In our country, such products are sold particularly in herbalists with the permission of the Ministry of Agriculture. We are likely to encounter undesirable effects of these products, especially when they are used inappropriately, because they are easily accessible and sold without prescription. This poster presents our experience related to a case of suicide attempt made by lotus leaf extract, which have been consumed frequently in recent years.

Case: A 37-year-old patient, brought to the clinic by her relatives, was suffering from paresthesia in hands and feet. Her story provided us with the information that she took 40-45 pills of lotus leaf extract (Figure 2) for the purpose of suicide two hours ago, which she was normally using for weight loss. The patient, who was conscious, cooperative and oriented, had BP:110/80 mmHg, PR:88/minute, RR:18/minute and sO₂:97%. In her physical examination, no pathology or neuromotor deficit was found. Her electrocardiography showed normal sinus rhythm. The ingredients of the product she consumed were 200mg lotus leaf, 119mg lemongrass, 32mg red grape seeds, 23mg wheatgrass, 19mg ginger and 7mg horsetail. The national toxicology consulting center was called to get their medical advice and have the case recorded. The observation of hemodynamic state and clinical abnormality were planned for the patient. Psychological counseling was received. Since there was no laboratory and clinical abnormality at the end of 36 hours, the patient was discharged and asked to come back for control.

Conclusion: Various medications in the form of pills, produced from herbal extracts, are marketed in our country with the permission of the Ministry of Agriculture, not the Ministry of Health. Health problems caused by these products have commonly been encountered in EDs. In case of poisoning resulting from such products, it is not possible to predict the effects on body and when these effects occur. Furthermore, it is not possible to follow a standard treatment protocol since there is no valid scientific data about these products.

The purpose of this presentation is to show that, in the case of poisoning due to lotus leaf extract-which is likely to occur rarely in our country, no complication develops when the symptoms are observed carefully.

Keywords: Lotus, Emergency Medicine, toxicology



Figure 1.



Figure 2.

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[Toksikolojik Aciller]

DIAGNOSIS OF SYNTHETIC DRUG-INDUCED ACUTE LEFT VENTRICULAR FAILURE AND ACUTE PULMONARY EDEMA WITH BED-SIDE ULTRASONOGRAPHY

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Introduction: Nowadays, there is an increase in the number of use of synthetic drugs and patients presenting to the emergency department with related symptoms. As content and dose of most of are not known, the patient may present with nausea, dizziness or cardiopulmonary arrest. In this article, a case of acute pulmonary edema which was developed after taking synthetic drugs called 'head' was reported.

Case: A 22-year-old male patient was brought to our emergency department with shortness of breath. Patient stated that he had taken synthetic drugs named 'head' a few hours ago. The patient's initial vital signs were as follows; BP: 150/90 mm Hg, pulse: 130 / min, temperature: 36.2°, respiratory rate: 40 / min and O₂ saturation: 78%. On physical examination; the

patient was anxious, tachypneic and dyspneic, and there were crackles in the middle zones of the lungs. ECG was normal except for sinus tachycardia. Left ventricle was found to be hypokinetic with bed-side focused ultrasound and significant B lines (lung rockets) were found on thoracic ultrasound during differential diagnosis of dyspnea. The treatment for acute pulmonary edema was administered. The patient's laboratory results were as follows; pH: 7.29, pO₂: 46.7 mmHg, pCO₂: 32.6 mmHg, HCO₃: 16.7 mmol / L and troponin: 5.94 ng / ml. Bedside ECHO conducted by the cardiologist revealed EF as 10% (EF: ejection fraction). The patient was admitted to the coronary care unit.

Conclusion: The clinical symptoms due to the use of synthetic drugs in patients presenting to the emergency department show differences and treatment is administered according to patient's clinical symptoms. Bedside ultrasound is an important diagnostic tool in the differential diagnosis of dyspnea for appropriate diagnosis and treatment of cases of acute dyspnea following the use of synthetic drugs.

Keywords: Synthetic drug, pulmonary edema, ultrasonography

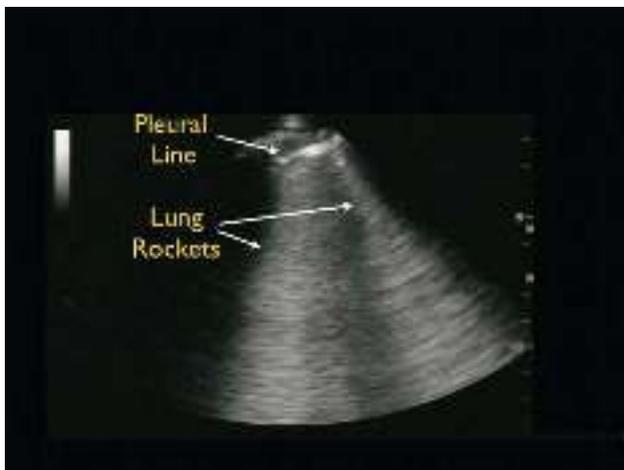


Figure 1. Pulmonary edema

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[Toksikolojik Aciller]

CHANGES IN STATE OF CONSCIOUSNESS WITH UNKNOWN CAUSE: BONSAI AS THE HEADLINER

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Introduction: Synthetic cannabinoids, the mechanism of which is through the CB1 and CB2 receptors have been popular among adolescents. These agents have marijuana-like psychoactive effects. This case is presented here since the use of these substances which are cheap and easy to reach have become widely used and the number of cases presenting to emergency services after their use is increased.

Case: An 18 year-old male patient was found unconscious and was brought to our emergency department by emergency health services. His general condition was poor; Glasgow coma scale score 8/15, blood pressure 100/70 mmHg, pulse rate 120/minute, respiratory rate 18/minute, body temperature 37 °C and pulse oximeter were 87%. Neck stiffness, neurologic deficit with lateralization and pathologic reflexes were absent. Light reflex of the pupils were present bilaterally and the pupils were isochoric.

Fingertip blood glucose was measured as 94 mg/dl. He had no known disease or prior drug use according to the past medical history of the patient obtained from his relatives. Computerized brain tomography obtained to evaluate the change in the state of consciousness was reported to be normal. His biochemistry and hemogram results were unremarkable. Arterial blood gases were, pH:6.9, pCO₂: 73 mmHg, pO₂: 52 mmHg and COHb: 6,5%. The patient was intubated. The patient was extubated at the 6th hour of his follow-up at the emergency resuscitation room. When the patient was taken into the medical observation room where he stated that he took a narcotic drug that was named bonsai and was included in a cigarette and was smoked like it. He was discharged with recommendations after his vital signs were stabilized.

Result: The use of this substance should be considered in young patients with changes in the state of consciousness since the use of synthetic cannabinoids have been increasingly and widely used among high school youth.

Keywords: Bonsai, changes in consciousness, emergency service

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[Toksikolojik Aciller]

DISULFIRAM-LIKE REACTION WITH ORNIDAZOLE

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Introduction: Disulfiram-like reaction (DLR) is a condition characterized by flushing in head, neck and chest, throbbing headache, nausea, vomiting, dizziness, anxiety, orthostatic hypotension, sweating and tachycardia. This reaction, occurs as a result use of even if a small amount of alcohol, with disulfiram or disulfiram-like agents. Here, it is presented a case about DLR developing after consuming alcohol while on ornidazole treatment.

Case Presentation: A 30-year-old male patient admitted to the ED with complaints of dizziness, sweating, palpitations, and redness in the face and neck. Patient had pilonidal sinus surgery a week ago and was on treatment with ciprofloxacin 500 mg twice daily and 500 mg of ornidazole in the last 5 days. It was learned that on the day of admission to ED, patient was drinking five glasses of red wine 3 hours after drug use. The patient's complaints started about 30 minutes after alcohol intake, had no history of any drug, substance and tobacco use. On physical examination, the patient's blood pressure was 86/54 mmHg, pulse rate of 132/min and regular, respiratory rate 25/min, and oxygen saturation 97% on room air and body temperature 36.8 °C. The patient was sweaty and anxious-looking, mood in a state of restless, and flushing in his face. Blood glucose, kidney and liver function tests, serum electrolyte levels and hemostasis levels were within normal limits. Arterial blood gas analysis were identified respiratory alkalosis. Thyroid function tests were normal. The electrocardiogram revealed sinus tachycardia. Ultrasonography for thyroid and liver revealed no abnormality. After the patient monitored in the ED he was treated with intravenous fluids. For anxiety and restlessness iv diazepam was administered to the patient. With this treatment the patient's symptoms decreased within 3 hours, tachycardia and tachypnea declined. Patient was monitored for 12 hours in the observation unit of the ED. He discharged from the ED with suggestions not to use alcohol during the time on ornidazole medication.

Discussion: Disulfiram (DSM) is the irreversible inhibitor of aldehyde dehydrogenase, and in the presence of DSM with use of alcohol, acetaldehyde levels increases in serum that resulting unwanted histamine-like reaction occur. This reaction is called DLR. The clinical symptoms of the reaction are varies from mild erythema, nausea, dizziness, and stomach complaints to angioedema, hypotension, shock, and even death. Although all imidazole should be used with the same warnings and precautions as recommended, important feature of the present case is that describing the relationship between ornidazole and DLR. Presented case is important because of patient's symptoms which occur after alcohol use are consistent with the DLR. In our case, Naranjo's adverse drug reaction causality scale score was calculated as 6 which means that causal relation between drug and adverse reaction is "probable". Standard precautions for the treatment of DLR include intravenous (IV) fluid therapy, symptomatic therapy and vasopressor therapy for the state of shock. Consequently, when ornidazole; such as metronidazole, used in combination with alcohol leads to DLR. Emergency medicine physicians should be warned patients, whom have started imidazole derivative drugs, about these reactions and DLR should keep in mind in the differential diagnosis in patients who admitted to the ED with these symptoms.

Keywords: Disulfiram, metronidazole, ornidazole

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[Toksikolojik Aciller]

ACUTE MYOCARDIAL ISCHEMIA DUE TO CARBONMONOXIDE POISONING: CASE REPORT: HÜSEYİN AVNİ DEMİR, HABİBE SELMİN SAKA, MEHMET AKİF KARAMERCAN DEPARTMENT OF EMERGENCY MEDICINE, GAZI UNIVERSITY, ANKARA, TURKEY

Introduction: Carbonmonoxide (CO) is a well-known chemical asphyxiant, which causes tissue hypoxia with prominent cardiovascular injury. Myocardial infarction (MI) is rarely reported in course of acute CO poisoning. Here, we describe a case of CO poisoning and demonstrate that acute and severe CO intoxication can cause myocardial ischemia and even acute myocardial infarction.

Case Presentation: A 49-years-old woman was found unconscious in the kitchen ground by family members for an unknown period. The family brought the female to the Emergency Department (ED). Upon the ED arrival, she appeared comatose (Glasgow Coma Scale was 3) and was intubated shortly after being admitted to the ED. Her physical examination revealed that she was slightly overweight. Her blood pressure was 120/80 mm Hg, pulse was 118 beats per minute, respiratory rate of 12 breaths per minute and breath sounds were clear bilaterally before being intubated. Serum glucose level was 115 mg/dL. The ECG revealed sinus tachycardia at 115 beats per minute and 2 mm ST-segment depressions in the inferior and lateral leads (Figure 1). Initial laboratory revealed the following data: pH 7.21; HCO₃ 12,5 mmol/L; carboxyhemoglobin (COHb), 50,3 %; troponin-I, 0,138 ng/mL; creatine kinase (CK) 133 U/L; and CK-MB 54 U/L. Transthoracic echocardiography demonstrated global hypokinesia of the cardiac ventricles and partially preserved systolic function (left ventricular ejection fraction = 50%). The patient was taken to emergency hyperbaric oxygen therapy for

3 hours instead of coronary angiography in line with cardiology department. During observation in the ED a significant increase in cardiac enzymes occurred (CK 358 U/L, CKMB 101 U/L, Troponin 2,31 ng/mL) and patient was hospitalized to coronary intensive care unit. ST wave changes were normalized and the patient hospitalization was uneventful. Patient had taken 4 session hyperbaric oxygen therapy in consecutive days. On the 7th days of admission, she was discharged with neurologically intact and in a stable condition.

Conclusion: Carbon monoxide is one of the leading causes of poisoning-related deaths in all over the world. After exposure to CO, several cardiac manifestations have been reported. As in the case, selected patients can be managed with hyperbaric oxygen therapy and without coronary angiography which should also be kept in mind. In conclusion, this case highlights that hyperbaric oxygen therapy is the most essential therapy for CO poisoning and this is even true for some selected cases with myocardial ischemic changes on ECG.

Keywords: emergency department, myocardial ischemia, carbonmonoxide



Figure 1. Patient's EKG

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[Toksikolojik Aciller]

PR PROLONGATION DUE TO ALPRAZOLAM INTOXICATION

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Introduction: Alprazolam is a triazolobenzodiazepine derivative and mainly used as an anxiolytic and antidepressant. It is prescribed for agoraphobia, panic attacks and panic disorders. Oxidation and conjugation are main pathways for drug metabolism. The principal metabolites are α -hydroxy alprazolam, 4-hydroxy alprazolam, 4-hydroxy-alprazolam and α , 4-dihydroxy alprazolam. Both metabolites are pharmacologically active with approximately 66 and 19 percent the potency of parent drug. Daily doses of 0.75 to 4 mg are effective for generalized anxiety, while higher doses like 6-9 mg/day have been used for phobic and panic disorder.

Alprazolam is a common prescribed drug and side effects include drowsiness, confusion, hypotension, tachycardia, palpitations and nightmares are seen rather frequently. Alprazolam toxicity may occur with accident or voluntarily. Like all benzodiazepines alprazolam is also used to commit suicide. In literature suicide attempts with alprazolam are reported. ECG may change with the effect of chemicals. ECG findings of the patients who committed to suicide help us to find out the type and dose of drug.

Case Report: We want to present a patient who took alprazolam to commit suicide with PR interval prolongation. 47-year-old woman admitted to our emergency department with 25 tablets of 0.25 mg alprazolam intake to commit suicide half an hour ago and weakness. Farther, no other history was available at the time of presentation. On further asking we got to know that patient has diagnosed for major depression. In addition, no history of previous major diseases, drug addiction, and alcoholism was obtained. On general examination no cyanosis and no smell of alcohol or kerosene was noted. Patient's vital data on admission were as follows: Pulse-110/minute feeble; BP - 110/90mm of Hg (both arms lying down), respiratory rate - about 28 per minute and regular, temperature 37.2 degrees. On central nervous system examination, patient was normal. On cardio vascular system examination PR interval prolongation was the positive finding ECG, pulse oximeter showing oxygen saturation 97%. Considering the evidences probability of Alprazolam over dosage was diagnosed. Gastric lavage, Foley's catheterization was done; continuous oxygen administration and parenteral fluids was started. Laboratory examination showed no abnormalities. The patient was under observation for 24 hours. No elevation of cardiac markers reported and PR interval prolongation was corrected. After 24 hours of observation patient was discharged after psychiatry consultation.

Results: ECG is a guiding noninvasive test for the patients who committed to suicide. Some drugs and chemicals have own ECG findings. A study of ECG findings of benzodiazepines showed us diazepam is the only benzodiazepine that does not cause QRS widening and oxazepam is the only one not causing PR prolongation. To know the drug groups specific ECG findings may guide us the drug (and sometimes the dose) taken by the patient.

We reported a case showed us the importance to know drug groups' specific ECG finding. Drug groups like benzodiazepines are commonly used to commit suicide and for an emergency physician it is important to know commonly abused drugs' specific ECG findings.

Keywords: PR prolongation, alprazolam, intoxication

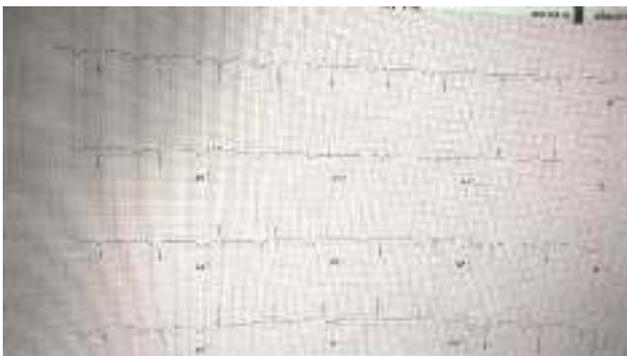


Figure 1. ECG before discharge

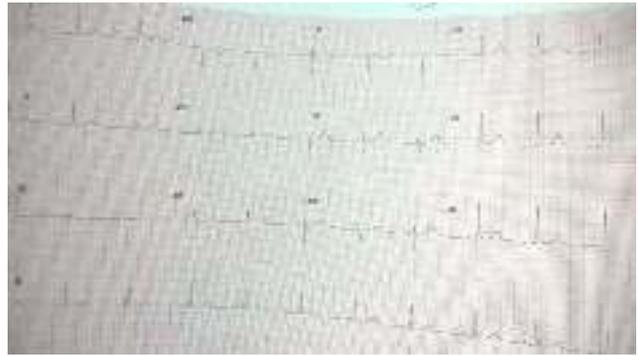


Figure 2. PR prolongation

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[Toksikolojik Aciller]

VISION OF DERMAL METHANOL EXPOSURE

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Introduction: Methanol can absorbed through the skin but rarely in this way leads to a clinical toxicity. Methanol is converted to formaldehyde by alcohol dehydrogenase and the formaldehyde is converted to formic acid by aldehyde dehydrogenase in the liver. Formic acid is responsible for toxicity and metabolic acidosis caused by the toxicity of methanol. In this case we present a 32-year-old male patient who was admitted to emergency department (ED) with weakness, vomiting and loss of vision due to wearing sweater soaked with methanol.

Case: A 32-year-old male patient came to the ED with weakness, vomiting and loss of vision. A day earlier, he wore denatured alcohol soaked sweater because of cold complaints. The patient said that this odd advice came to a close friend. After about four hours, he began to vomit. He was admitted to ED where he was given anti-emetic therapy. Then he was sent to home due to relief of symptoms. But his symptoms started again and was admitted to our ED with blurred vision. The patient's vital signs, physical examination and biochemical values was normal except arterial blood gas. An arterial blood gas showed a PaO₂ 98 mmHg, PaCO₂ 28 mm Hg, pH 7.08, HCO₃ 8.4 mmol / L, serum osmolarity 279 mmol/kg and anion gap 22.23 mEq/L. Fluid and bicarbonate therapy was started immediately after initial laboratory results. He was hospitalized to the intensive care unit. Formic acid was determined as 25.1 mg/L and the patient discharged after being treated for three days. After treatment patient's all complains, including visual impairment, disappeared.

Conclusion: Transdermal methanol poisoning might be diagnosed late because of without a history of oral intake. It must be keep in mind that methanol absorbed quickly through the skin and may increase to toxic levels in a little while.

Keywords: denatured alcohol, methanol poisoning



Figure 1. Denatured Alcohol Bottle

P-400

[Toksikolojik Aciller]

DANGER ON THE STREETS: BONSAI

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Cannabis is the most commonly used illegal substance worldwide and cannabis use appears to be increasing. In this case report we aimed to remind the effects of synthetic cannabinoids with a patient who presented to emergency service with respiratory problems after using bonsai.

Case: A 21 years old man was admitted to our hospital because of syncope and respiratory problems. There was any disease at his medical history. It was learnt that he had used bonsai and after a while his complaints was started. At first he had anxiety, palpitation and dizziness and than he fainted. When he admitted to emergency service his breathing was superficial, he was cyanotic and there was spontaneous circulation. At monitor SpO₂ %35, pulse 138 beat/minute and blood pressure was 80/60 mmHg. GCS was 7 (M3,V2, E2). Positive pressure ventilation started with BWM (ambu) and than patient intubated with benzodiazepine. Normal saline infusion started. After intubation his respiratory cardiac examination was normal except palpitation. ECG was sinus tachycardia. At laboratory analysis there wasn't metabolic disorders. Patient admitted to intensive care unit in other hospital and after one day respiratory support he was extubated and than discharged from hospital with psychiatric control after 2 day.

Conclusion: In recent years, bonsai is a serious risk for young population and refer to the emergency service with toxic effects are increasing. Emergency physicians should know bonsai's effects and should begin the supportive treatment in the emergency room.

Keywords: Bonsai, Cannabis, respiratory distress

P-401

[Toksikolojik Aciller]

RIGHT HISTORY AND RIGHT DIAGNOSE

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Pregabalin (Lyrica) is a novel gamma-aminobutyric acid (GABA) analog that is approved for the treatment of neuropathic pain and partial-onset seizures. Pregabalin selectively binds to the alpha 2 delta subunit of voltage-gated calcium channels. In so doing the release of excitory neuro-transmitters are inhibited and neuronal GABA levels are increased. The doses for pregabalin range from 50 to 300 mg. Side effects include sedation and dizziness. We aimed to draw attention to the importance of correct history.

Case: A 24 year old man admitted to the emergency department because of nausea and dizziness. At his history he had runny and mild cough for two days. He said that he take a flu drug last night and after 1 hour his complaints were started. At physical examination vital signs were normal. GCS 15. There was bilateral horizontal nystagmus and he didn't tolerate dix-hallpike test. There wasn't lateralization. Cardiac and pulmonary examination was normal. We started to patient dimenhydrinate and piracetam treatment for peripheric vertigo. After 10 minute patient was unconscious. He was unresponsive to painful stimuli. He had spontaneous circulation and breathing. His vital signs were stable. At blood gas analysis, ECG, biochemical tests and computerized brain tomography was normal. Patient followed at emergency department with initial diagnose of drug misuse. At our hospital we couldn't have toxicology panel. After 3 hour the patient has regained consciousness. History has deepened and was asked to be brought the drug. We learned later that the patient accidentally received pregabalin 300 mg. After 24 hour follow up the patient discharged from emergency department.

Conclusion: History is very important in the evaluation of patients in the emergency department. Sometimes when we are taking drug history to get the box or full name of the drug will be important.

Keywords: Pregabalin, dizziness, unconscious

P-402

[Toksikolojik Aciller]

PATIENTS CAN NOT BE AWAKENED; INTOXICATION?

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The main side effects of quetiapine are sedation, orthostatic hypotension, akathisia, dry mouth, and weight gain. Potentially life-threatening consequences from overdose include QT prolongation and respiratory depression. We report an unconscious patient associated with an overdose of quetiapine.

Case: A 21 year old man was brought to the emergency department with complaints of inability to be awakened.

His friends have found unconscious with an empty pill-box (quetiapine 3000 mg). He was breathing but unconscious. At physical examination he had spontaneous breathing and circulation and GCS was 8. At monitor SpO₂ %90, pulse 122 beat/minute and blood pressure was 100/60 mmHg. Bilateral D/I pupillary light reflex was positive and pupillary was miotic. There was any significant abnormal value at blood gas analysis and other laboratory parameters. QT interval was 0,39 msec at ECG. Intravenous saline infusion and oxygen started. With these clinical findings patient admitted to intensive care unit because of quetiapine overdose and possible narcotic intake. Toxicologic analysis was negative for narcotics. After one day ICU follow up patient transfer to psychiatric clinic and discharged with medical treatment without any complication.

Conclusion: Quetiapine overdose has resulted in QT prolongation, loss of consciousness and cardiac abnormalities. In large overdoses, patients may require intubation and ventilation for associated respiratory depression. Emergency physicians should remember these side effects and managed the patients carefully.

Keywords: Quetiapine, sedation, awakened

P-403

[Toksikolojik Aciller]

CARBON MONOXIDE POISONING AND BAROTRAUMA

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Introduction: Carbon monoxide (CO) poisoning is a life-threatening emergency situation. Tissue hypoxia develops in CO poisoning, and central nerve system and cardiovascular system are usually affected. Mostly norm baric and hyperbaric oxygen (HBO) treatments are used as treatment. HBO treatment is a treatment process that has own complications. In this presentation, we wanted to share a carbon monoxide poisoning patient who experienced some complications after HBO treatment.

Case: A 36 year old male patient admitted to ED with the complaints of vertigo, blurred vision and syncope. The vital signs of confused patient were TA: 140/95 mmHg, Pulse: 88 /min and SpO₂: 88%. The patient was monitored, opened IV line, taken blood for arterial blood gas and the other biochemical parameters. 15% O₂ treatment with mask was performed. Carboxyhemoglobin (COHb) was observed as 41.3% in the arterial blood gas. He was transferred to the HBO treatment unit due to syncope. After HBO treatment, his consciousness got well. His ECG and biochemical parameters were in normal ranges but pain in his right ear began. In his otoscope examination, right ear membrane perforation was observed. This perforation was evaluated as happened due to the barotrauma of HBO treatment after ENT consultation. Additional treatment did not needed and the patient was discharged.

Discussion & Conclusion: HBO treatment is the most important treatment choice, but it may cause some complications. Emergency physicians must be aware of especially high pressure affects such as tympanic membrane perforation, pneumothorax.

Tympanic membrane perforations are observed in 2% of HBO treatment patients and usually they recover in one week spontaneously. In complicated situations, antibiotic eardrops and painkillers shall be used. All the patients should be reevaluated after HBO treatment due to these insidious complications in EDs before discharging.

Keywords: Carbon Monoxide, Poisoning, Barotrauma

P-404

[Toksikolojik Aciller]

BETA BLOCKER AND CALCIUM CHANNEL BLOCKER INTOXICATION, THE IMPORTANCE OF INTRAVENOUS LIPID TREATMENT

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Intraduction: Intravenous lipid emulsion is a novel method for treating local anesthetic systemic toxicity that also shows promise as an effective antidote for other lipophilic drug poisonings. Intravenous lipid treatment enhanced survey on beta bloecer and calcium channel blocker intoxication.

Case: A 23 years women patient who was admitted to the emergency department for medication overdose. She taken antihypertensive drugs (30tablet 10mg perindopril arginin+5mg amlodipin and 20 tablet 40mg propranolol hydroclorur). In physical examination; general condition was bad,her orientation and cooperation was distorted, her glasgow coma scale:7(E:1M:4V:2), blood pressure:60/40mmHg, pulse:45/min, sPo₂:%90 other systems were normal. She was entubated.

Blood glucose:40mg/dl, EKG:sinus bradycardia. Dopamine infusion was started at 10mcg/kg per min. Glucose infusion was started at 0.5g/kg per hour. We gave insulin intravenous bolus at 1u/kg and we continued insulin infusion at 1u/kg per hour. We done gastric lavage and we implemented activated chorcoal at 1.0g/kg. She hospitalized in intensive care unite in 2nd hour. Her blood pressure was 75/40mmHg, pulse was 50/min. Three inotrop treatment were started (dopamine 10mcg/kg per min + norepinephrine 1mcg/kg per min +adrenaline 0.1mcg/kg per min). Edema consisted on her lung so we were started furosemide at 20mg per day. But the treatment was insufficient. In patient's 16th hour, we implemented intravenous lipid treatment. We infixed central venous catheter. In first minute, we gave %20 lipid at 1ml/kg bolus and than we started infusion at 0.5ml/kg per minute. Supply of lipid what were gave, was %20 concentration 500ml. Three days later, her fever was 38.9 degree of celcius. We got culture of blood, urine, nasal, catheter, rectal. Eight days later, adrenaline and norepinephrine were stopped. Nine days later dopamine was stopped. The patient was extubated. Her blood pressure was 115/75mmHg, pulse was 117/min. Her ekokardiography was nature, her ejection fraction was %65. Candida albicans growth on culture of blood and catheter. We implemented 50mg kaspofungin asetat intravenous per day. In21st day, the patient was discharged with healing.

Conclusion: Beta blocker and calcium channel blocker intoxication what do no get better with glucagon and insuline treatment, we should think intravenous lipid treatment.

Keywords: Beta blocker intoxication Calcium channel blocker intoxication Intravenous lipid treatment



Figure 1. Drugs that cause poisoning



Figure 2. Drugs used in treatment

this enzyme plays a key role in cell to cell communication. The resulting accumulation of acetylcholine in synapses overstimulates muscarinic and nicotinic receptors. We report 52 year-old man who suffered an inferior myocardial infarction following exposure to OPs compound.

Case: A 52- year-old farmer man who came to our emergency department with nausea, vomiting and severe chest pain, It was started half an hour after inhalation of an unknown quantity of OPs with accidentally during the course of work. Duration of chest pain was approximately 1 h prior to coming hospital. His other chief complaints were dizziness, myalgia, increased salivation and diaphoresis. He didn't have any specific neurological symptoms. His blood pressure was 130/70 mm Hg and his heart rate was 100 beats/min.

He did not describe any significant medical history and regular medications. The patient's laboratory findings, cardiac markers were elevated at time of admission (troponin: 4,39 ng/dl, CK-MB> 300 ng/dl). Serum cholinesterase level couldn't measured because of insufficient laboratory conditions. The electrocardiogram showed 1-2mm ST-segment elevation in V1-V6.(Fig. 1). The diagnosis was acute anterior myocardial infarction. Aspirin 300 mg, clopidogrel 600 mg PO, morphine 5mg IV were used prior to coronary angiography. After this treatment a coronary angiography was done immediately. Coronary angiography demonstrated total stenosis of the left coronary artery which was successfully treated concurrently with deployment of one bare metal stent.

Conclusion: Poisoning with organophosphates often causes cardiac complications. These may be often fatal, being represented by cardiac arrhythmias, electrocardiographic abnormalities and conduction defects, as well as myocardial infarction, a rarely reported complication of OPs poisoning. Present case manifested typical signs and symptoms of myocardial infarction and history of inhalation OPs together. So, it is possible to suggest that OPs intoxication may cause myocardial injury. OPs induced myocardial infarction seems to be direct toxic effect of compound in this case but further studies are needed to clarify the exact mechanism.

Keywords: Organophosphates, poisoning, myocardial infarction

P-405

[Toksikolojik Aciller]

ACUTE MYOCARDIAL INFARCTION CAUSED BY ORGANOPHOSPHATE EXPOSURE

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Aim: Organophosphates (OPs) are among the most widely used synthetic chemicals used for agricultural and domestic pest control. This easy availability of the compounds has resulted in a gradual increase in accidental and suicidal poisoning mainly in developing countries. The primary effect is irreversible inhibition of acetylcholinesterase (AChE) that hydrolyzes acetylcholine in cholinergic synapses and in neuromuscular junctions where

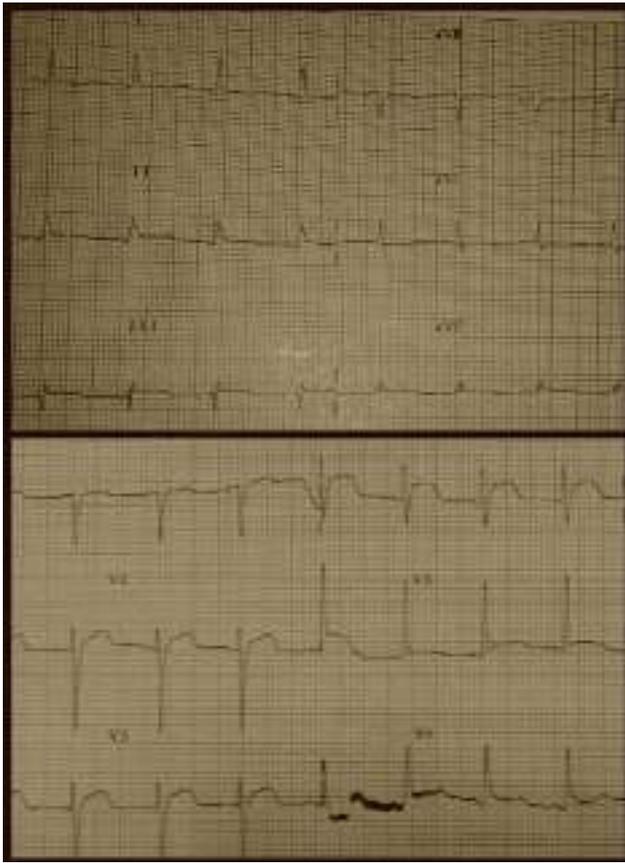


Figure 1. 1-2mm ST-segment elevation in V1-V6

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[Toksikolojik Aciller]

IS ECBALLIUM ELATERIUM SAFE TO USE IN FOLK MEDICINE? CASE REPORT

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Objective: Ecballium elaterium (‘squirting cucumber’) is a plant belonging to the Cucurbitaceae family. The plant is perennial, fleshy, rough hairy with stems 30 - 100 cm long. The fruit is ovoid, fleshy, approximately 3–4 cm in length, when unripe of a pale green color and covered with numerous hairs. (Figure 1) The fruit juice of the plant contains several bioactive ingredients such as cucurbitacins. Cucurbitacins are violent purgatives. It is used in the mediterranean as a purgative and in treating sinusitis. Intranasal use of E. Elaterium has been associated with uvular edema especially after the administration of its undiluted form. E. Elaterium’s other adverse effects are Edema of pharynx, dyspnea, Conjunctivitis, corneal edema, irritation of mucosal membranes, nasal necrosis, cardiac and renal failure.

Case: A 32-year-old man presented to the emergency department with nausea, blurred of vision and rash on upper lip. He stated that 48 hours before he dripped five drops of diluted juice of Ecballium elaterium intranasally because of chronic sinusitis. After administration he had troubled breathing and epistaxis but he did not refer to the hospital. 24 hours after

administration blurred vision and rash in the nasal mucosa started. He presented to our emergency department because his symptoms failed to improve. On physical examination he had not uvular edema, the breathing sounds were normal in both lungs. There was a maculopapular rash on his upper lip, hyperemia on nasal mucosa and pharynx. (Figure 2) In Eye examination there was no keratoconjunctivitis, hyphema periorbital and conjunctival edema or hyperemia found. Direct and indirect light reflex was normal. There were not any other pathological findings in the systemic evaluation. Vital signs presented as follows: blood pressure 140/80 mm Hg, heart rate 80 bpm, temperature 37 °C, respiration rate 15/min, and SatO₂ 98%. Patient was consulted to ophthalmologist. fundoscopic examination, visual field, eye pressure was normal reported. He was discharged after 4 hours monitorization without any complaint.

Conclusion: The juice of the fruit has been commonly used for the treatment of sinusitis in the Mediterranean region due to its anti-inflammatory effects. The Folkloric Use of the plant are liver cirrhosis, jaundice. It may cause irritation and inflammation in the mucosal membranes. In our patient had mucosal irritation evidence. But the nostril administration of EE juice, although resulted of serious adverse reactions like systemic allergic reactions, Uvular angioedema, shortness of breath. Airway management should have a priority in patients with elaterium exposure and antiallergic treatment administered in emergency department.

Keywords: Ecballium elaterium, Sinusitis, Angioedema



Figure 1. Ecballium Elaterium



Figure 2. Maculopapular rash on upper lip, hyperemia on nasal mucosa

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[Toksikolojik Aciller]

THE PROSPECTIVE ANALYSIS OF THE PATIENTS ADMITTING TO THE EMERGENCY DEPARTMENT WITH A BACKGROUND OF DRUG ABUSE

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Objective: Illicit drug abuser (IDA) cases has been ranking among the emergency department admissions with an increasing frequency. But the incidence of the IDA patients presenting to the emergency departments in Turkey is an issue of concern.

Method: In this single center study which is still ongoing prospectively, the incidence and prevalence research of emergency department applications of IDA cases based on the street drugs has been conducted.

Results: Between the January-October 2014, 246 IDA patients was admitted to the emergency department. Mean age was 25.2 ± 7.9 (range 14-61), and 6.5% of them were women. 21.5% had alcohol intake also. The illicit drugs referred with street drug names and their ratios of intake (in one or more time) were; Cocaine (2%), Deva (3.7%), Roche (6.9%), Jamaica (17.1%), ecstasy (18.7%), cannabis (21.1%) and street drugs not given name (28.0%), respectively. Judicial processing was made for the 79.3% of cases. The presenting complaint of cases in order of frequency were: acute substance toxicity 79.3%, being assaulted 4.1%, orthopedic trauma and penetrating injuries 3.7%, drug deprivation 2.8%, metabolic or internal problems 2.8%, traffic accidents 2.0% and suicide attempt 1.2%. According to general admissions to the emergency, the nine month period prevalence of the IDA patient's admission was found 0.18%.

Conclusion: Emergency departments are the first centers to refer for the illicit drug abusers (IDA) in circumstances of acute toxicity. When the IDA recover onself from emergent situation, frequently they tends to leave the clinic immediately. However, a remarkable group of IDA is brought to the emergency department by their relatives or by the 112 ambulance service in a comatose situation. Emergency physicians should be evenhanded, competent and equipped about the street drug users, as usual with other states of emergency.

Keywords: Drug abuse, street drug, emergency medicine, incidence and prevalence

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[Toksikolojik Aciller]

A RARE CASE IN EMERGENCY SERVICE: BUPROPION INTOXICATION

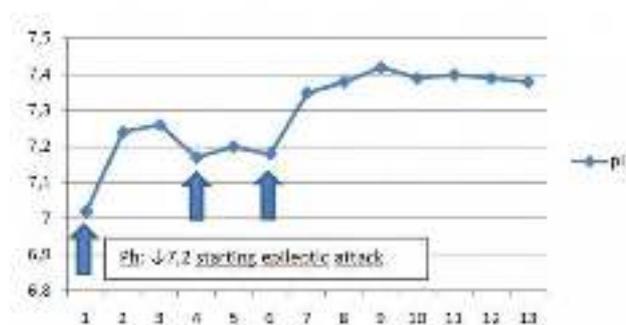
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Introduction: Nowadays, Bupropion is used to treat major depression and nicotine dependence. Toxic dose intake of bupropion in the emergency department is rarely encountered. Bupropion is a selective noradrenaline and dopamine reuptake inhibitor and inhibit the reuptake of serotonin minimally. In this presentation, we want to report a case that a patient who has severe metabolic acidosis and seizures due to bupropion intoxication.

Case: A 29-year-old female patient was brought to emergency service by 112 with a complaint of bupropion intoxication (30 pieces, 150 mg) and fluoxetine intoxication (16 pieces, 20 mg) 2 hours after intake. The vital signs of patient were TA: 100/60, pulse 143/min, temperature: 36.6°C and O₂ saturation: 99. ECG showed sinus tachycardia. Gastric lavage and administration of activated charcoal was made. In her blood gases, pH was 7.00 and HCO₃ was 10.6 therefore 10 ampoules NaHCO₃ (2meq / kg) i.v. bolus was performed and 120meq NaHCO₃ iv infusion was given for 6 hours. A total of 2000 cc 0.9% NaCl was given. In follow-up blood gas pH rose up to 7.48 from 7.17. Diazepam i.v. bolus was administered three times during follow-up because of generalized tonic-clonic seizures. In fact, seizures were detected when under blood gases, pH 7.2. Complete blood count and biochemical values were normal. Repeat dose activated charcoal was made at sixth hour and the patient was admitted to intensive care unit with GCS 15.

Result: Bupropion intoxication, although rarely seen, is a situation that can lead to severe metabolic acidosis and seizures. Although there is no specific antidote for treatment **symptomatic approach is beneficial.**

Keywords: bupropion, emergency, intoxication,

**Figure 1.** Reading Ph keep under observation

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[Toksikolojik Aciller]

IT IS A DANGEROUS TOY: CRYSTAGEL (WATER MONKEY)

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Introduction: Crystagel is a nano-gel soil in which plants can grow. It's made from polyacrylamide which is neutralized with potassium hydroxide and ammonia for plants. Upon contact with water, these gels swell quickly by absorbing water and water-soluble nutrients and reach to about 100-400 times its own sizes (Figure 1,2). It is said that there is no harmful material for nature and human healthy. However, beyond the scope, they are the most widely used as a toy by children, especially among primary school age, in the last few years in Turkey. For this reason they can be very harmful and even fatal especially for infants and children. Because they look like candy and they can be swallowed or aspirated accidentally. In this report, we wanted to talk about an adult patient who swallows a water monkey accidentally.

Case: 23 year old female patient admitted to emergency department, because she drank water which contains water monkey. She is a teacher in primary school. Her students made a joke, throwing water monkey into her drinking water about 1 hour ago. There is no self and family medical history. Her general condition is good. Her consciousness is alert, cooperative, oriented, anxious. Vital signs are stable. No pathology was detected in the system examined. Her vital signs were monitored. Intravenous fluid therapy was initiated. Literature was searched quickly for specific treatment, but we could not find any information. Gastric lavage was performed taking the patient's consent. Gel-like substance in the gastric lavage liquid were observed. Gastric lavage was continued until clean gastric lavage liquid was observed. Activated charcoal was given. She was observed for 3-4 hours, no problems were encountered. The patient was discharged with recommendations.

Conclusion: Although gastric lavage was performed and activated charcoal was given in this case, there is no information about neither early nor late treatment methods and effects of this agent. Further investigation needed about possible systemic effects of that dangerous agent which was used as a toy by children.

Keywords: crystagel, swallowing, emergency department

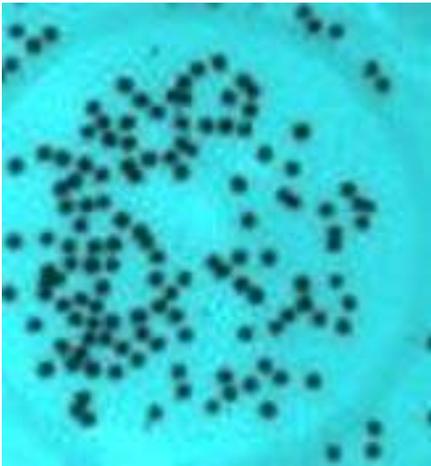


Figure 1. Crystagel (water monkey): millimeter sizes before water absorption



Figure 2. Crystagel (water monkey): 100-400 doubled sizes after water absorption

ACUTE NUTMEG POISONING

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Nutmeg Myristicaceae aromatic plants of the family is the dried seed of the evergreen tree. Traditionally, among the public, it used fever, influenza, general respiratory diseases, treatment of skin diseases such as scabies, and also orexigenic, anti-spasmodic, antiemetic and abortifacien as a medicine used. Nutmeg most widely used in homes as a sweetening agent and spices. However, due to the effects hallucinogenic recreational use are common.

Case: 22 year old male patient to the emergency department with complaints of altered consciousness and hallucinations were brought. About 8 hours ago from the patient's history of nutmeg spice mix fruit juice from crushed inside 6 leisure learned. After drinking about 6 hours later, nausea, dry mouth, facial flushing started complaining of altered consciousness that was learned later. The patient's blood pressure 140/90 mmHg during the application, pulse rate 75 beats / minute, respiratory rate 20 points / minute, fever 36.5 ° C, room air oxygen saturation was 98%. At initial examination, GCS: 13, orientation, cooperation is limited, there was agitation and pointless conversations. Mydriatic bilateral pupillary light reflex was taken to. Other system examinations were normal. ECG was normal sinus rhythm, there was no abnormality in laboratory values. Patients with a diagnosis of nutmeg intoxication was admitted to the intensive care unit. Symptomatic treatment and intravenous fluid therapy was started. During follow-up, awareness of drug intake opened 12 hours, symptoms resolved completely. Vital signs remained stable during hospitalization, deterioration in laboratory values did not happen, and was discharged after 48 hours of follow-up.

Discussion: Nutmeg are widely sold in our country as walnut or powder. Nutmeg is usually eaten as a powder. One tablespoon grated coconut contains about 7 grams of abuse at doses ranging from 5 to 30 grams is. Nutmeg oil in the pharmacological effects are thought to be responsible of myristicin and elemicin. Both of elemicin myristicin both anticholinergic and psychotropic features. Nutmeg poisoning clinical characteristics are, such as belladonna alkaloids or atropine poisoning similar anticholinergic poisoning, flushing, tachycardia, hypertension, dry mouth, blurred vision, agitation and delirium.

However, unlike other anticholinergic poisoning, although there is no conclusive evidence causes miosis, mydriasis is rare. Symptoms after ingestion starts approximately 3-6 hours and usually lasts 24-36 hours. Nutmeg poisoning, there is no clinical data to guide management. Management is generally supportive. Standard antiemetic (prochlorperazine, trimethobenzamide, ondansetron, metoclopramide) and long-term use of intravenous fluid used to treat nausea and vomiting. Diazepam and haloperidol for sedation can be used with care.

We offer patients was found that 6 to about 42 grams nutmeg. Some of anticholinergic effects have been seen in our patient, nutmeg poisoning is rare mydriasis observed in our patients.

Conclusion: Emergency physicians in patients with signs of anticholinergic toxicity, such as nutmeg poisoning in rare cases should consider.

Keywords: Nutmeg, poisoning, mydriasis

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[Toksikolojik Aciller]

MOUNTAIN TEA INDUCED HYPERSENSITIVITY VASCULITIS: A CASE REPORT

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Introduction: Mountain tea is an aromatic herbaceous plant, can be as long as 1 meter with light green leaves. They are used as appetizers and to facilitate digestion and for stimulating and antioxidant effects. We reported that the patient with the hypersensitivity vasculitis as result of drinking boiled mountain tea for 10 days.

Case: A 48 year old female patient was admitted to ED with the rash on her legs which spread to legs and arms with joint pain during the last week. (Figure 1) It was learned she drank boiled mountain tea every evening for 10 days and ceased drinking when lesions occurred. Her history was not remarkable except hypothyroidism. On physical examination, arterial blood pressure was 140/100 mm/Hg, fever: 36.8°C and pulse: 90 beats/min, respectively. There was a palpable purpura common in the arms and legs. Other physical examination findings were normal. Laboratory values was unremarkable except white blood cells: 12900. We consulted the department of dermatology, with the diagnosis of vasculitis. Treatment was ordered to the patient with the diagnosis of hypersensitivity vasculitis and outpatient control visit was recommended by department of dermatology. 7 days later after discharge, at the visit hospitalization was the patient was recommended hospitalization. It was learned that lesions disappeared after treatment.

Conclusion: Consuming random plants such as mountain tea due to benefits known or suspected, may lead to a large number of problems.

Keywords: Mountain tea; Hypersensitivity vasculitis;Diagnosis



Figure 1. Palpable purpura common in the legs

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[Toksikolojik Aciller]

WEIGHT LOSS OR LIFE LOSS? DINITROPHENOL TOXICITY

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Introduction: Dinitrophenol(DNP), is a synthetic material which has been used in insecticides, explosives, paints and wood preservatives in 1930's. But it has been forbidden in 1938 because of causing uncontrollable thermogenesis. In 1980's DNP's popularity increased in who wants to have weight loss. There are limited cases of DNP related toxicity and death in literature. This case present a patient who used DNP for lose weight.

Case: 20 years old male came to emergency department with the complaint of feeling himself bad. He had been using a drug which includes DNP for lose weight. He took the drug from internet sale. Normally he has been using DNP 2x200 mg in a day. But that day he took totally 800 mg. After he took the drug he had fever, sweating and nausea. In the physical examination TA:110/70 mmHg, HR: 115/min, RR: 20/min, sPO2:97% and T:37.8°C were detected. GCS:15, general condition were moderate and there is no pathological finding and fever focus on his other systemic evaluation. 0.09% Nacl and acetaminophen intravenous infusion has been started. In his laboratory tests WBC:8090/mm³, Hb:15.8 g/dl, Hct:48.2%, Plt:170000/mm³, ALT:24 U/L, AST:26 U/L, Na:143 mEq/L, pH:7.45, pCO2:40.4 mmHg, HCO3:26.5 mmol/L was reported. While his observation in the emergency department approximately 1 hour later he started to sweat too much and his general condition got a little bit bad. And than he admitted to reanimation intensive care unit for follow up. After 5 hour later his mental status altered(GCS:7), hypotension started and he had intubated. WBC: 14300/mm³, pH:7.07, pCO2: 63.8 mmHg, HCO3:15 mmol/L was reported

in his control tests. In spite of all resuscitative interventions, cardiac arrest had been occurred and the patient lost in 8th hour of admission.

Conclusion: The drugs which sales on the internet illegally like DNP has to be kept in mind because of their frequent usage and health care providers has to be careful of these agents potential toxicities.

Keywords: Dinitrophenol, intoxication, weight loss agents



Figure 1. Dinitrophenol

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[Toksikolojik Aciller]

AN UNCOMMON CAUSE OF SYNCOPE; BODY PACKER

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Introduction: Turkey both the destination and a transit country for drug smugglers is. A body packer is someone who carries drugs, such as heroine or cocaine, packed in rubber or plastic, in his/her body in order to smuggle them. These people can present with symptoms that vary from mild abdominal complaints to respiratory insufficiency and even death. The drug packets are inserted in the mouth, rectum, or vagina in order to get across borders without being detected.

Case: A 37 years old Pakistani male, was brought by ambulance from the İstanbul Atatürk airport due to falling down and syncope. His blood pressure was, 130/85 mmHg and his heart rate was 110 beats per minute. On physical examination, the patients Glasgow Coma Score was 14 (E3V5M6) with a preserved sensitive pupillary reflex. The complete blood count, serum glucose level were normal. Arterial blood gas values were pH: 7.18, pCO₂: 46, pO₂: 87, K: 4.71, Na: 138.8, iCa: 1.22, HCO₃: 20.7. Electrocardiogram was normal, chest film

and cranial computed tomography were negative. Abdominal CT scan showed, multiple, clear borders, hyperintense foreign bodies. CT taken 10 minutes after, patient has respiratory failure and deterioration of consciousness. The emergency surgical gastrotomy was initiated, One of 93 packages was found ruptured, and all of them were removed. Postoperative, the patient stayed for 3 days in the intensive care unit and was discharged without complications on the 4th day.

Keywords: Body Packer, Syncope



Figure 1. Abdominal CT Scan of the Packages:



Figure 2. Perioperative View of Package:



Figure 3. Postoperative View of Packages:

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[Toksikolojik Aciller]

AN INTRA VENOUS LIPID THERAPY IN MANY CASES OF THE DRUG INTOXICATION

Ayhan Aköz, Serhat Örün, Aslı Yelgin, Ömer Yüceer

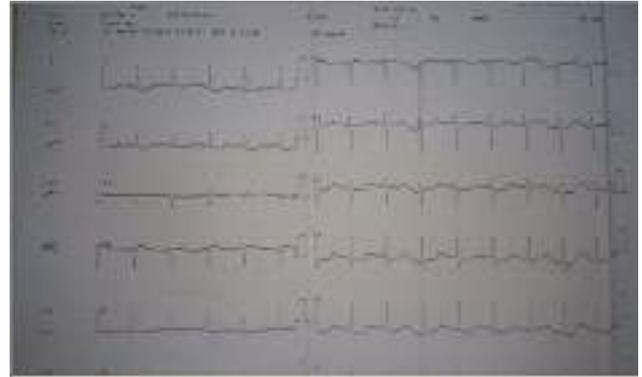
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Access: Drug intoxication is a condition frequently encountered in the emergency department. iv lipid therapy and plasmapheresis in recent years, especially with the lipid solubility of the drug in the treatment of poisoning is the method used with success in this case a large number of interacting with of patient who I IV lipid and about methods of plasmapheresis will share our experiences with.

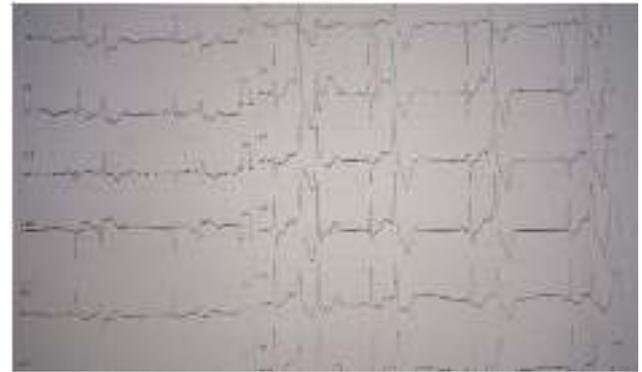
Cases: 41-year-old male patient with schizophrenia followed due to citol 28 pieces 21 mg tb, 100 tb akineton 2mg, 40 mg anofranil 10tb and 50 tb of 40 mg dideral suicidal attempts. Patient drug was brought to the emergency department 1 hour after purchase. Were taken to resuscitation room to room quickly here orogastric probe and gastric lavage was performed and activated charcoal was given. The patient's vital signs, Blood Pressure 140/90, pulse 95 beats/minute, Respiratory rate 18/min, fever of 37,8 degrees. The oxygen saturation %92 Physical examination; patient's awareness confused, prone to sleep. Patients were being hospitalized in ICV. By the recommendation of the national poison center hemodialysis was performed. The ECG developed hypotension during follow up and QT prolongation in patients with detected NaHCO₃ and dopamine infusion was started. Consultation to the Cardiology department was asked to. By the department of cardiology patients continued infusion of NaHCO₃ and has recommended discontinuation of inotropic agents. On the third day of treatment in intensive care unit pulse 38 beats/min in patients with pacemaker implantation cardiology department of preparation of iv lipid therapy was applied. Decreased patient's bradycardia. Level of consciousness began to open up occasionally, it was postponed on pacemaker application. iv lipid infusion administered to the patient continued to be. In follow-up the patient's ECG findings fell. Follow the pacemaker was discontinued. Patient's consciousness in intensive care unit patients with good general condition were taken to follow. General condition improves, patients with stable vital signs with the recommendations of the Department of Psychiatry investment in intensive care and was discharged on the sixth of day.

Results: Such as antipsychotics tricyclic antidepressants, beta-blockers local anesthetics lipophilic properties of the drug overdose on purchases of iv lipid therapy has been used with success. We both beta-blockers and antipsychotics overdose in our patient, this treatment we applied field and the success we have achieved. Lipophilic drugs, especially early in the poisoning and over the iv lipid therapy believe that to be considered if necessary

Keywords: Emergency, Iv lipid, Toxicology



ECG1



ECG2



ECG3

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[Toksikolojik Aciller]

TOXIC HEPATITIS THAT PRESENTS WITH NAUSEA

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Fatih Sultam Mehmet Eğitim Araştırma Hastanesi

Introduction: Nausea is a common complaint of emergency patients. It has a large perspective of etiology from minor gastroenterologic problems to severe cardiac or neurologic disorders. In this case we try to point out that emergency physicians should not underestimate the complaint and detailed anamnesis should be taken for the etiology in all cases.

Case: 32 year old foreign female patient presented to emergency room with complaint of nausea, vomiting and minor epigastric pain. She told that her complaints began just after taking two pills of 15 mg sibutramine for flu. On physical examination the vital signs were normal and she had mild epigastric discomfort. Blood tests revealed ALT: 275, AST: 176, Amylase: 396, INR: 1.35, aPTT: 16.9, PT: 64%, WBC: 19.2. Abdominal CT was reported by the radiologists as suspected pancreatitis which has to be confirmed with clinical symptoms and laboratory parameters. Markers for viral hepatitis were negative. The patient was admitted for observation. On follow up the liver function test tripled in 24 hours. The day after admission she confessed that she had taken almost 50 tablets of 500mg acetaminophen. The final diagnosis was toxic hepatitis due to acetaminophen overdose.

Discussion: A toxic agent to the liver may lead to acute hepatitis and/or liver failure. Acetaminophen is the most commonly encountered agent which ends with 28% of liver failure in case of overdose. Patients almost always present with nausea, vomiting and abdominal pain. The risk of liver failure is due to the time between drug intake and beginning of the treatment, the amount of drug and the underlying diseases of the patient. Emergency physicians should be suspicious and a detailed anamnesis should be taken in every patient with nausea to define the etiologic reason.

Keywords: toxic hepatitis, acetaminophen, nausea

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[Toksikolojik Aciller]

CYANIDE POISONING: A REAL RAPIDITY CHALLENGE

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Introduction: Rare but deadly, cyanide poisoning is, by inhalation or oral intake, one of the conditions, which the time is essential and the emergency physician must react rapidly and manage accurately. Therefore, we want to present our case of cyanide poisoning via ingestion.

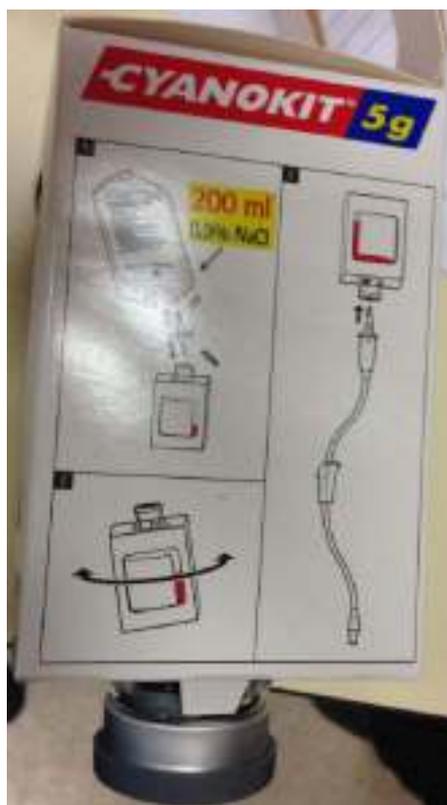
Case: A 25-year-old male presented with oral intake of an unknown amount of cyanide compound dissolved in the water for suicidal aims half an hour before the admission. He had access to cyanide because of his job so he was familiar with the effects. He was awake, cooperating and oriented with a Glasgow Coma Score of 15 but agitated and had cherry-red skin. He was tachycardic, mildly hypertensive and had a saturation of 90% in the room air. His blood gases showed compensated wide anion gap metabolic acidosis, lactate level was 1.7 mmol/L and FMetHb level was 0.2% at admission. He was started on IV hydration and supportive

treatment and 50 grams of activated charcoal. Meanwhile, the antidote "Cyanokit" which was not present in the stocks of our hospital was found and brought from the antidote center of our city. A vial of 5 grams of Cyanokit® was administered in 15 minutes at the third hour of intake. The agitation, the vitals and acidosis improved. The only adverse effects of the Cyanokit® were the reddish skin and urine color, which were minor. The psychiatric evaluation was made. After approximately 32 hours of asymptomatic and stable observation, the patient was discharged with a recommendation of control for the next day.

Discussion and Conclusion: Cyanide poisoning is relatively common by inhalation secondary to fires but it is also reported as homicidal or suicidal attempts by oral intake as in our patient, subcutaneous or intravenous injections. Iatrogenic intoxications, poisonings by foods containing cyanide compounds and its usage as weapon of mass destruction are other potential ways. The route, onset and severity of intoxication, the time to initiate therapy, presence and type of antidote are especially determinative factors for prognosis. The symptoms start with transient hyperpnea and hypertension 15 seconds after exposure and convulsions, loss of consciousness, respiratory and cardiac arrest following bradycardia and hypotension progresses respectively 8-10 minutes after highly dosed inhalation. Symptoms may spread from minutes to hours in ingestions as in our patient. In any case; hypertension, hyperpnea and convulsions should alarm the emergency physician as they precede the disastrous outcome. The vital signs and consciousness must be monitored, arterial and venous blood gases tends to show decreased arteriovenous oxygen difference and a high-anion-gap metabolic acidosis. Increased blood lactate and decreased methemoglobin levels are also suggestive of cyanide poisoning. Administration of either antidotes, preferably Cyanokit® or Nithiodote®, which contain hydroxocobalamin or sodium thiosulfate and sodium nitrite respectively is the keystone of the management apart from the supportive care and general intoxication management. In our patient, because the way of intoxication being oral gave us time to intervene and our center is close to the antidote center, we managed to give the antidote to our patient in time during the hypertension phase before the patient deteriorated. Recognizing the alarming symptoms, close monitoring and accurate management as well as the rapid availability of the antidote are mainstay of the cyanide poisoning.

Keywords: Cyanide Poisoning, Toxicology, Cyanokit, Emergency Medicine

Cyanokit**Cyanokit**



P-417

[Toksikolojik Aciller]

A CASE REPORT: ACUTE LITHIUM INTOXICATION

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Introduction: Presently, lithium is commonly used as maintenance treatment of bipolar disorder. Lithium has a narrow therapeutic range and toxicity of lithium may be life threatening or can result in permanent cognitive and neurological impairment. Neurologic effects of lithium toxicity include tremors, lethargy, confusion, seizures, and coma. Most cases of lithium poisoning result in a favorable outcome; however, some of individuals with severe lithium toxicity develop chronic neurologic sequelae. We want to present a patient admitted to emergency service with high dose suicidal lithium intake and fully recovered after dialysis.

Case: A 35-year-old man was admitted to our hospital after taking an intentional overdose of 25 sustained-release lithium tablets (300 mg each). The patient had been transferred from a nearby facility after receiving activated charcoal and gastric lavage. According to the family, He had no history of any psychiatric disorders and had been drinking lithium tablets belonging to his brother. He denied ingestion of any other drugs with the lithium except alcohol. He had no other medical problems.

On admission, the patient's blood pressure was 90/50 mm Hg. Pulse rate 100 beats/minute and respiratory rate 18 breaths/minute. In blood gases, there was no metabolic acidosis. The blood Ph was 7.36, HCO₃: 20, PCO₂: 32. On Physical examination, there was no cooperation and orientation with him. The patient had confusional state and his Glasgow coma scale (GCS) was 12 (E4M5V3). Other systemic examinations were normal. Intravenous fluids (dextrose 5% and normal saline)

were started at 250 ml/hour. He received 40 mg of furosemide to maintain urine output. The patient's renal function tests were normal. His lithium level was obtained 2.12 mmol/L (0.8-1.2 mmol/L) and ethanol level was 188. Narcotic drug screening was normal. The patient was admitted to the medical intensive care unit (MICU), after 12 hours of rehydration and volume expansion he underwent hemodialysis due to lack of full recovery at the level of consciousness. His lithium level decreased to 1.59 mmol/L after the first dialysis session. He received dialysis one more the next day; his lithium level decreased to 0.8 mmol/L after the second dialysis session. The patient was transferred out of the MICU, hemodynamically stable, on hospital day 3.

Result: In the treatment of acute lithium intoxication, The primary modality for removing lithium is hemodialysis. Hemodialysis should be performed in any patient with lithium intoxication who presents with coma, convulsions, respiratory failure, deteriorating mental status, or renal failure. Physicians should be determined treatment approach according to not only serum lithium levels but also the patient's clinical severity of the intoxication.

Keywords: Lithium, intoxication, Hemodialysis, Emergency medicine

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[Toksikolojik Aciller]

COLLECTIVE USE OF BONSAI WITH NARCOTIC DRUGS

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Introduction: Our possibility of encountering such incidents is increasing with the use of synthetic cannabinoids (SC), due to their easy accessibility; and causing us to see very different and wide range of clinical pictures through the collective use of Bonsai with a broad range of different narcotic drugs. In this phenomenon presentation, we have aimed to present the clinical picture that emerges following the use of Bonsai together with heroine.

Phenomenon: A 22 years' old adult male has been brought to our clinic, as suspected of substance use. The patient's relatives expressed that he had used Bonsai together with a substance that was claimed to be heroine. The patient's GKS: 10 and the pupils were bilaterally myopic. The vital signs were as follows – blood pressure: 100/60 mmHg, pulse: 68/min, respiratory rate: 22/min and sO₂: %100 (O₂ with mask, at 6L/min) body temperature: 36.6 °C. In his neurological examination, lateralization motor was deficit and there was no pathological reflex. In the blood gas that was taken, pH: 7.301, pCO₂: 67.4, pO₂: 95, HCO₃: 32.5 and he had decompensated respiratory acidosis and hypercarbia. The patient was taken into the observation room, the IV vascular access was established, and fluid treatment at 6 L/min O₂ treatment has been started. In response to the applied symptomatic treatment, the hypercarbia has receded (pH: 7.377, pCO₂: 51.4, pO₂: 127.7, HCO₃: 29) and by the end of the observations the GKS has increased to 15, and the pupils have become isochoric. The patient, whose laboratory values improved upon the 24th hour of the observations and did not have any active complaints, was discharged with recommendations.

Conclusion: It should be kept in mind that SC's may be involved in any phenomena brought to the emergency service as suspected of substance use, due to the rapidly expanding SC use over the recent years. As the SC's are easily accessed and are quite cheap, their use with the other narcotic drugs is frequently encountered. We believe it would be a good approach to consider the intake of more than one substance in patients who are unconscious and have low GKS.

Keywords: bonsai, hypercarbia, narcotic drugs.

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[Toksikolojik Aciller]

DEODORANT OR PEPPER SPRAY?

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Introduction: One of the most frequent intervention tools used for social events or personal safety measures is the OC spray (oleoresin capcicum (Figure 1)) or the component called pepper spray. Capsaisin which is the active substance of cayenne pepper or chili pepper is has an irritating effect on eyes and leads to mucosal damage, respiratory troubles, irritation in skin. Even the safety measures are written on the spray, the inappropriate use may also be encountered. In this presentation, we aimed to present the case of a female patient who used pepper spray kept for personal safety in her bag on her armpit instead of deodorant.

Case: The 40 year-old female patient has been taken to our emergency clinic with an irritation on her armpit. In her history, it has been determined that she used the pepper spray present in her bag instead of deodorant (Figure 2) on her left armpit and that she has felt a burning sensation. She said that she has washed her armpit with soap. In her clinic observation, the skin color was normal, and no visual pathology has been observed. However, an antihistaminic agent under gel form has been prescribed to the patient who has been discharged.

Results: Although pepper sprays are kept for personal safety, their inappropriate use as well as the inconformity to safety measures, or inattention of the patient as in our case may lead to damages in people.

Keywords: irritation,pepper,skin

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[Toksikolojik Aciller]

HALLUCINATION DUE TO NON-RECREATIONAL DATURA STRAMONIUM USE

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Introduction: Herbal remedies are used for various medical reasons. Datura Stramonium (Jimson weed) is a member of the Solanaceae (nightshade) family and is used for upper respiratory system symptoms, asthma, motion sickness and analgesia as well as its recreational implications. All parts of Datura plants contain high levels of the atropine, hyoscyamine and scopolamine causing all these effects. Here we present a case of D. Stramonium seed ingestion presenting to our emergency department (ED) with hallucinogenic symptoms.

Case Report: A 57 year old male patient was brought to the ED by relatives. The complaints at presentation were confusion and hallucinations. The patient was confused but cooperative, his blood pressure was 124/88 mmHg, pulse rate was 110 bpm, body temperature was 37.8 C and SPO2 was 98 in room air. The patient's daughter revealed that they found him alone in the room sitting in the armchair talking to himself. He claimed he was talking to his brother. The family then discovered the body of the fruit and seeds of a plant they named as "Tatula" in the kitchen (Figure 1) and decided to seek medical care. Physical examination, including detailed neurological evaluation, revealed no pathologic findings. Patient's laboratory tests including complete blood count, electrolytes, renal and liver function tests, and coagulation panel was ordered and normal for all but WBC of 14000. The patient's confusion resolved within 30 minutes of follow up in the ED, and explained that he ingested the seed with a piece of bread to relieve his shortness of breath and denied any recreational purposes. He also revealed that he had no memory of talking to himself or his brother at the time period defined by his family. He was discharged after two hours of follow up in a totally lucid state and with no complaints, and was called back for control blood tests within 24 hours. Control tests were also normal for all but a WBC of 15500.

Discussion: Datura has long been used as an effective treatment for asthma symptoms. The active anti-asthmatic agent is atropine, eliminating the spasms that cause the asthma attacks via paralyzing the pulmonary branches of the lungs. On the other hand, intoxication by Datura spp. typically produces delirium (not hallucination), hyperthermia, tachycardia, and severe mydriasis with resultant painful photophobia that can last several days. Pronounced amnesia is another commonly reported effect. Our patient had no physical findings of severe anticholinergic poisoning and no delirium, but had documented Datura seed ingestion and showed only hallucinogenic findings with confusion and memory loss for a limited time period.

Keywords: Hallucination, Datura Stramonium, Jimson weed, Emergency department



Figure 1. Fruit and the seeds of "Tatula" given by the patient's family

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[Toksikolojik Aciller]

A CASE OF ACUTE CARBON MONOXIDE POISONING RESULTING IN AN ST ELEVATION MYOCARDIAL INFARCTION

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Introduction: Carbon monoxide binds to hemoglobin with greater affinity than oxygen and forms COHb, which leads to impaired oxygen transport and subsequent tissue hypoxia.

Inhaling even relatively small amounts of CO can lead to hypoxic injury, neurological damage, and possibly death. Additionally, even if the initial COHb level is not very high, acute CO poisoning can still lead to severe cardiovascular complications in high cardiovascular risk cases.

Myocardial ischemic changes often reveal T-wave inversion or ST depression in patients with CO poisoning. However, an ST segment elevation is a rare presentation during CO poisoning. Some cases reported with an ST elevation had normal coronary arteries while undergoing coronary angiography.

Case: A 67-year-old male presented to the emergency department with syncope. He was found lying on the bathroom floor. In his physical examination, his blood pressure 100/65 mmHg, pulse rate 75 beats per minute, respiratory rate 30 per minute and peripheral capillary oxygen saturation was 90%. He was confused and agitated. Remaining physical examination was normal. Electrocardiography (ECG) revealed an ST segment elevation in leads I and aVL (Figure 1). Initial laboratory data revealed the following: carboxyhemoglobin (COHb), 41,3%; troponin-I, 0.05 ng/mL; and creatine kinase (CK)-MB, 27 ng/mL.

With a high level of COHb the patient diagnosed with acute carbon monoxide poisoning resulting in an STEMI and 100% high-flow oxygen with a reservoir bag was started. 5000 units of heparine iv and Coraspin 300 mg sublingual were administered and the patient was consulted to Cardiology Department. An intracranial pathology was excluded with computed tomography scan of the brain. Then the patient was send to the hyperbaric oxygen therapy. After the hyperbaric oxygen therapy the ECG showed normalization of the ST segment elevation, 7 hours after admission to hospital but the control of cardiac enzymes were elevated, with a CK-MB of 312 U/L and troponin I of 38.95 ng/mL. Then the patient transferred to the Coronary Intensive Care Unit and coronary angiography was done. Coronary angiography revealed 80% occlusion of the LMCA, 80% occlusion on the level of LAD D1, 60% stent restenosis of CX OM1, 30% occlusion on the proximal of RCA. CABG was recommended for the patient as soon as possible.

Keywords: Carbonmonoxide poisoning STEMI

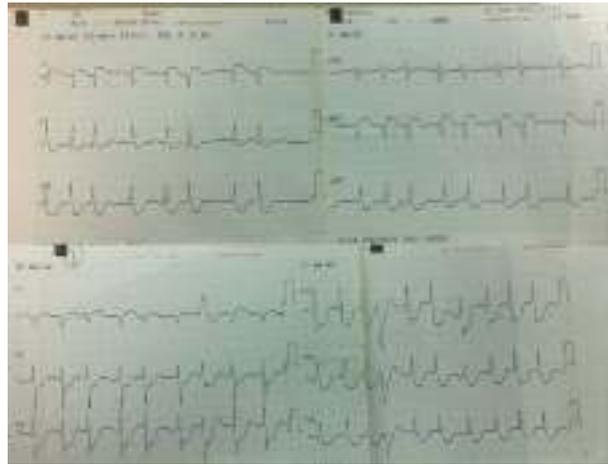


Figure 1. ST segment elevation in leads I and aVL

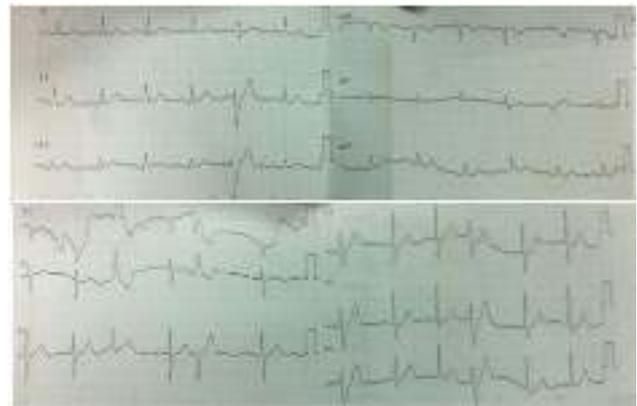


Figure 2. After coronary angiography

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[Toksikolojik Aciller]

LATE EPILEPTIC SEIZURES WHICH WAS TRIGGERED AFTER BONSAI USE

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Synthetic cannabinoids (Bonsai or Jamaican Gold) use are becoming increasingly popular as an abused substance. Acute use of these drugs can cause adverse effects including altered mental status, cognitive dysfunction, tachycardia, myocardial infarction, and psychiatric symptoms such as anxiety, panic attack, hallucination or delirium. But this substance late effects does not known yet. In this case we described a man who 15 days after took bonsai admitted to emergency department with epileptic seizure. A 27 year old male patient was admitted to the emergency department with epileptic seizure. In his history, he had no illness. He had no history of seizure and also no predisposition illness history for seizure. On his admission physical examination, he was cooperative and cognitive ability intact. Glasgow coma scale was 15. His vital signs were normal. His Electrocardiogram was showed that normal sinus rhythm. Also his physical examination was normal. There was no neurological deficit. His laboratory exams were normal except lactate (7,88 mg/dl). In the emergency department follow, he had jeneralize tonic clonic seizure again which was stopped after diazepam 5mg. His brain computed tomography taken after his first stabilization was normal. He

consulted by neurology and took his electroencephalogram which was normal. He hospitalised to neurology department for seizure follow by diagnosis of substant triggered to late epileptic seizure. Although synthetic cannabinoids are illegal in Turkey, people can reach this easily. We emphasize that emergency physicians should be familiar with the clinical manifestations of acute intoxication and late effects due to synthetic cannabinoids.

Keywords: epileptic seizures, Bonsai, emergency department

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[Toksikolojik Aciller]

CASE SERIES OF HEROIN INDUCED NON-CARDIAC PULMONARY EDEMA

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Introduction: Heroin remains one of the large portion of abused drugs with increasing trends. Previous studies pointed out that the respiratory manifestations of heroin use were not only respiratory depression but also asthma exacerbation, pulmonary edema and some level of respiratory distress. In this paper we reported our experiences with eleven patients who were admitted with respiratory alterations and imagining studies were performed after heroin insufflations.

Method: Subjects were identified retrospectively via hospital records of all patients admitted to our emergency department with acute dyspnea who use heroin and imagining studies were obtained between July 2013 and April 2014.

Results: Eleven patients were identified. The baseline characteristics were as follows: median age was 27 years (range, 21 to 70) and ten were male. 8 of 11 patients had respiratory distress on admission. Three patients had respiratory depression and marked alteration in their consciousness so naloxone was administered to them.

10 of 11 patients had chest x ray and the findings were as follows: peribronchial thickening was present in 8 patients, consolidation in 6; 5 patients had both peribronchial thickening and consolidation and one of them had fluid in right fissure. Chest CT was obtained from 10 of 11 patients. Marked pulmonary edema was present in 7 patients whereas peribronchial thickening and ground glass densities (GGD) were also observed.

Discussion: In this study we detected some degree of tachypnea in patients who did not have mental alteration although suggested finding of heroin use was respiratory depression. The absence of fever and rapid resolution of symptoms in all patients with only supportive therapy and rapid improve in one patient's imagining findings made us to diagnose pneumonia less likely and heroin induced non-cardiogenic pulmonary edema (HI-NCPE) more acceptable.

Although it was described more than 13 decades ago the pathophysiology of HI-NCPE has not been well understood yet and seems to be more complex than suggested. Damage to alveolo-capillary membrane and increased permeability of vascular endothelium had been supposed to be the final pathway of this edema. Damage to alveolar integrity should occur as a result of hypoxia, direct effects of snorted particles and additives in less pure forms.

The purity of the heroin should be kept in mind as another contributing factor in developing pulmonary edema. The street heroin have different purities so variations should be seen on its effects. Beside this, the additives of less pure heroin may play a role in developing or preventing pulmonary edema. Most of our patients had also marked pulmonary edema and mild peribronchial thickening and GGD that may reflect interstitial pneumonitis.

Conclusion: Heroin addiction does not only cause respiratory depression but also cause marked pulmonary edema at early phase. Patients with pulmonary edema due to heroin use may respond well to supportive therapy including oxygenation via face mask or mechanical ventilation however it should be considered as an alarming finding of upcoming fatalities in heroin users.

Keywords: Heroin, heroin lung, non-cardiac, pulmonary edema

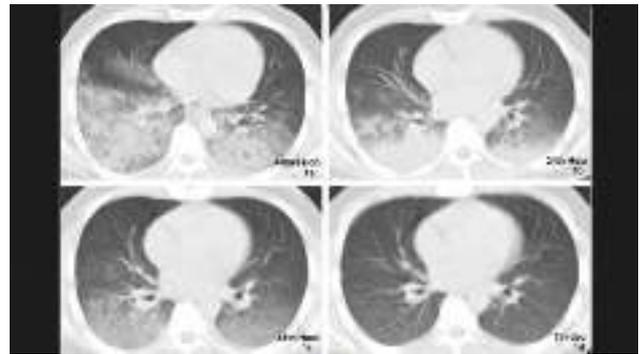


Figure 1. CT of the first patient on admission (a); at 24th hour (b); at 48th hour (c) and control at 7th day (d)

Table 1. Demographic and laboratory results of the patients

	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5	Patient 6	Patient 7	Patient 8	Patient 9	Patient 10	Patient 11
Age	24	28	60	27	36	21	32	23	24	23	27
Gender	Male	Male	Male	Female	Male						
WBC	21300	29700	13500	21300	20700	37300	13100	28800	11400	14400	10000
Neu %	77,2	76,6	83,2	53,1	77,0	92,7	37,2	92,1	67,8	77,9	65,8
Lym %	8,1	17,6	11,2	11,5	16,7	3,0	50,6	3,1	21,6	7,3	15,4
Mono %	1,0	4,2	2,4	34,6	5,7	3,9	7,2	4,6	6,5	4,4	8,8
Eos %	0,3	0,5	0,1	0,3	0,1	0,0	2,4	0,0	2,4	9,9	9,6
Baso %	13,4	1,4	0,1	0,5	0,5	0,4	2,6	0,2	1,7	0,5	0,4
pH	7,12	7,25	7,54	7,37	7,46	7,46	7,15	7,01	7,45	7,39	7,37
pCO2	49,50	66,20	30,50	46,30	36,00	35,90	76,50	110,90	33,70	37,00	46,20
HCO3	29,40	28,80	25,60	26,70	25,30	25,40	26,40	27,60	23,10	21,90	26,30

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[Toksikolojik Aciller]

TREATMENT OF FUNGAL POISONING WITH SILYBININ: A CASE REPORT

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Introduction: Silybinin may be effective as an antidote together with high-dose penicillin in the treatment of mushroom poisoning containing cyclopeptide. It protects liver by blocking

entry of amatoxin in the enterohepatic circulation into liver cells in amanita phalloides poisoning.

Case: A 28-year-old woman was brought to the emergency department with complaints of malaise, nausea, vomiting, and diarrhea lasting for 2 days. In the anamnesis it was learned that she ate mushrooms which she collected from the mountains 2 days ago. The patient's admission heart rate was 120 / min and TA: 110/80 mmHg on admission. In physical examination, the sclera were sub icteric. There were no pathological findings in other systemic examinations. In the laboratory tests; AST: 5996 U / l, ALT: 8887 U / l ALP: 136 U / l, GGT 85 U / L, total bilirubin 6.09 mg / dL, direct bilirubin 3.83 mg / dL, INR: 5, amylase 133 U / l lipase 131 U / l, LDH: 3113 U / l, respectively. There was no impairment in renal function tests. The patient was diagnosed with fulminant hepatitis due to mushroom poisoning depending on current condition. Treatment started with penicillin G 15000000 U and silybinin 350 mg dissolved in 35 ml of 5% glucose in infusion fluids for 2 hours. This dose of silybinin was prepared for administration 4 times a day. Meanwhile, the patient was transferred to outer center for liver transplantation.

Conclusion: Silybinin should be used as an antidote even in the early stages of suspected mushroom poisoning. This antidote is available from the national poison center in our country.

Keywords: fungal poisoning, silybinin, antidote

P-425

[Toksikolojik Aciller]

A CASE WITH THROMBOCYTOPENIA ASSOCIATED WITH VALPROIC ACID TREATMENT

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Introduction: Thrombocytopenia can occur when the bone marrow fails to produce the normal levels of platelets in conditions such as certain cancers that affect stem cells, aplastic anemia, exposure to toxic chemicals, viruses, and excessive consumption of alcohol. Thrombocytopenia can also occur when the body destroys its own platelets after the bone marrow makes enough platelets, eg, in conditions such as thrombotic thrombocytopenic purpura, idiopathic thrombocytopenic purpura, and drug-induced thrombocytopenia. Drug-induced thrombocytopenia can be caused by certain drugs such as vancomycin, phenytoin, sulfa-containing antibiotics, quinine, and rifampin.

Case: 20 years old female, admitted to emergency department with nausea, abdominal pain and weakness. Her symptoms had started one week ago and progressively growing. She had epilepsy previously and she was on valproic acid 1000 mg /day and lamotrigine 50 mg /day treatment. She had mandibula fracture after an epileptic attack and operated six weeks ago. Her daily oral food and water intake declined following six weeks but she had used her medication regularly. She had tachycardia and other vital signs were normal. She had somnolence but verbal response was normal. There was no motor asymmetry or meningeal irritation and other neurological and systemic examination was normal. Cranial computed tomography revealed no acute pathology and laboratory studies as follows; hemoglobin 9,1 thrombocytes 11,000/ μ L WBC 5,09 CRP:2,02, β hcg: (-), ammonia <17 μ g/dL and other liver and kidney function test were in normal range. Blood smear showed thrombocytopenia and serum valproic

acid level was >150 mg/L (N:50-125). There was no lactic or metabolic acidosis in blood gas work up. 1 unit thrombocyte aphaeresis transfused to patient. The reason of thrombocytopenia was thought to be adverse effect of valproic acid use, so the valproic acid medication stopped following days.

After cessation of valproic acid treatment, blood thrombocytes counts increased dramatically.

Discussion and Conclusion: This case, shows that valproic acid treatment is associated with thrombocytopenia. The case demonstrates that thrombocytopenia was induced by treatment with valproic acid in a relatively young patient. According to literature, the risk of thrombocytopenia related to valproic acid is 5%, and the risk increases with the age of the patient and with the level of valproic acid in the blood.

In our case, we think valproic acid intoxication was caused by decreased oral intake and weight loss related to recent mandibular fracture and following serum drug concentration increase. Some intoxication cases with thrombocytopenia related to new prescription of valproic acid or high dose intake are reported in the literature. However, thrombocytopenia accompanying chronic usage of valproic acid in therapeutic dosage is rarely seen. In our case, no other cause for thrombocytopenia other than VPA, increased serum level of VPA, normal thrombocytes counts after cessation of VPA supported "VPA related thrombocytopenia" diagnosis.

In conclusion, medication history of patients with thrombocytopenia are important for differential diagnosis in ED. After ruling out other reasons for thrombocytopenia, VPA treatment must be replaced with another antiepileptic drug. Patient must be admitted to hospital for supportive treatment and blood thrombocyte levels must be checked following days.

Keywords: Thrombocytopenia, Valproic Acid Treatment, chronic overdose

Table 1. serum valproic acid level and blood thrombocytes counts for one week.

	Day 1	Day 2	Day 3	Day 7
Valproic acid mg/L	>150	110.98	105.02	< 3
Thrombocytes $10^3/\mu$ L	11	26	53	235

Following table shows serum valproic acid level and blood thrombocytes counts for one week

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[Toksikolojik Aciller]

DOES NEONICOTINOID PESTICIDES HARMLESS?

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Introduction: Since their discovery in the late 1980s, neonicotinoid pesticides have become the most widely used class of insecticides worldwide, with large-scale applications ranging from plant protection (crops, vegetables, fruits), veterinary products, and biocides to invertebrate pest control in fish farming. Neonicotinoids and fipronil currently account for approximately one third of the world insecticide market; the annual world production of the archetype neonicotinoid, imidacloprid, was estimated to be ca. 20,000 tonnes active substance in 2010. There were several reasons for the initial success of neonicotinoids and fipronil: there was no known pesticide resistance in target pests,

mainly because of their recent development, their physicochemical properties included many advantages over previous generations of insecticides (i.e., organophosphates, carbamates, pyrethroids, etc.), and they shared an assumed reduced operator and consumer risk. (1)

Case: 63 years old woman. She referred to our emergency department (ED) to drink to Cossaplan (acetamprid) for suicide. She had diabetes, hypertension, asthma. Her vital parameters were normal, except her glucose level of blood was 250 mg/dL. On physical examination; her Glasgow Coma Scale (GCS) was 15, her cardiac, neurological and other systems examination were normal. She had sinus tachycardia on her electrocardiography (ECG). And also she was vomiting, which had blue content. We started to follow in our ED; and monitored to her. After three hours; Atrial fibrillation (AF) with rapid ventricular response occurs on ECG, than her blood pressure became lower than 90/60 mmHg; she started to lose her consciousness, her GCS:13(E3M6V4). Electrical and chemical cardioversion was applied for the patient's unstable AF. And her speed control was provided. Her blood gases had metabolic acidosis, she got hemodialysis treatment for once. We transferred her to intensive care unit and her treatment continued for nineteen days.

Conclusion: Neonicotinoids are a relatively new class of insecticides. They exhibit agonistic effects at postsynaptic nicotinic receptors in insects and are believed to have low toxicity in humans. Significant toxicity of neonicotinoids can occur following large amount of oral ingestion.(5) In most patients, headache, general malaise, finger tremor and short memory disorder, fever (> 37.0 degrees C), cough, palpitations, chest pain, abdominal pain, muscle pain / muscle spasm / muscle weakness, heart rate abnormalities (sinus tachycardia, sinus bradycardia or intermittent WPW syndrome), hypotension, hypoxia, nausea, vomiting, hyperglycemia, change in consciousness monitored. Symptomatic treatment, especially ventilator support, remains most important in clinical management.(2),(3),(4) However, as in our patient with cardiac arrhythmias, respiratory failure, renal failure and metabolic acidosis may develop should not be ignored. In the literature, cases of acute multiple organ failure and death have been reported.(6)

In our patient; cardiac arrhythmia, respiratory and renal failure, metabolic acidosis developed within hours. Early recognition and treatment of the complication is important for the neonicotinoid pesticides intoxication.

Keywords: Pesticides, acetamprid, emergency management

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[Toksikolojik Aciller]

FIRST, DO NO HARM!

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Introduction: Favism; is a disease that mostly seen at Mediterranean countries and black people, may lead to haemolytic anemia with deficiency of Glucose-6 Phosphate dehydrogenase enzyme.

Case: 24-year-old male patient, he has got known G6PHD. As a result of sore throat complaint; Novalgin injection is injected to the patient, in the emergency department that he has gone 2 days ago. Patient refers back to the same emergency department

within 2 days with the complaints of nausea, vomiting and jaundice. At the hospital's biochemistry results were; Hgb: 5.8. Totally; 3 units erythrocyte suspension replacement have done to the patient within one day but; have not seen a rise at the checked hemogram controls, and bilirubin values rose to 13 by demolishment of replaced erythrocytes. Support treatment was continued for 24 hours to the patient who has admitted into the internal medicine intensive care unit. Patient's fever and blood pressure were brought to the normal values and patient was discharged on regulating antibiotherapy.

Discussion: Sometimes, treatments that we do as a doctor may be threaten patient's health. It is very important to know proper detailed story of the patient in order to establish the benefit-risk balance. The attentive story of the patient should be listened according to patient's complaint without discriminating in the emergency department to well know indications and contraindication of treatment.

Keywords: Favism, glucose-6 Phosphate dehydrogenase enzyme deficiency, novalgin

P-428

[Toksikolojik Aciller]

PANTHERINA SYNDROME: A RARE CASE OF MUSHROOM INGESTION

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Introduction: Pantherina Syndrome is a mushroom toxicodrome caused by ibutonic acid and musimol as toxin and leading to neurological symptoms ranging from lethargy to hyperkinetic behavior.

Case: A 59 year old male patient was referred to our emergency service from a county state hospital with the presumable diagnosis of cerebrovascular event. It was learned that he had history of diabetes mellitus and hypertension. At presentation, consciousness was not open with no cooperation and orientation. His pupillae were mydriatic and to painful stimulus, all extremities responded by pulling back. There was no lateralizing neurological findings and Babinski reflex was bilaterally positive. Admission vital findings were as follows: blood pressure: 232/113 mmHg, heart rate: 90 beats/min., body temperature: 36.6 °C, finger tip blood sugar 422 mg/dl. Treatment was initiated for hyperglycemia. Then, brain CT was taken with no abnormal findings. In laboratory investigations, white cell count was 13,9 K/uL, blood glucose level 344 mg/dl and there was no positive finding except for urine ketone +1. Immediately after admission, myoclonic jerks occurred and these seizures were stopped with 5 mg diazepam intravenously. Meanwhile, the relatives of the patient were questioned and it was learned that he called them before losing consciousness and said that there was loss of sensation in his hands and ate the mushrooms he collected from nature thirty minutes before complaints started. In view of this information, it was thought that he might have mushroom poisoning exhibiting early neurological findings and nasogastric lavage was performed and activated coal was administered. Following treatment, blood sugar level fell to 201mg/dl within four hours. However, there was no change in his state of consciousness. Activated coal was

administered again. During follow up in emergency service, consciousness was opened, but agitation started. 5 mg iv diazepam was administered again. Although he started to talk two hours later, he has auditory hallucinations and agitations recurred. Intervention was made again with 5 mg diazepam intravenously. 14 hours after the intake of mushrooms, consciousness was completely opened and the patient stated that after he ate the mushrooms he collected in nature, numbness started in his hands to be followed visual hallucinations half an hour later. He did not remember the rest. Patient recognized amanita pantherina in the pictures shown to him. Following evaluation of liver function test, kidney function test and coagulation parameters, patient was discharged from emergency service. During discharge, patients said that the mushrooms he ate were common in the region where he lives and he can bring some samples to us. The Picture of the mushrooms he collected can be seen below. Hence, it was definitively established that he ate Amanita Pantherina and was poisoned with it and he was considered to have pantherina syndrome.

Conclusion: In our country, mushrooms become a popular food with the increase in rains in spring and autumn months. However, those who are not experienced in collecting mushrooms may easily confuse non poisonous mushrooms with poisonous ones.

Keywords: Amanita Pantherina, Mushroom, seizure, toxicology



Figure 1.



Figure 2.

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[Toksikolojik Aciller]

METHEMOGLOBINEMIA DEVELOPING AFTER LOCAL ANESTHESIA WITH PRILOCAINE

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Introduction: Methemoglobinemia is a clinical condition caused by both congenital or acquired, mostly drugs induced. Dapsone and local anesthetic agents such as benzocaine appear to be the most commonly reported causes of acquired methemoglobinemia. In our case, the development of bluish discoloration of the skin 1-2 hours after the circumcision in a 3 month-old boy and treatment of this condition are described.

Case: 3 month-old boy was brought to the emergency department by his family because of the bluish color of the skin when sleeping. There was no history of the disease in the patient's medical history. In the detailed history taken 2 hours before it was learned that circumcision under local anesthesia. It was learned from hospital records that the local anesthesia in circumcision have been made with prilocaine. When the patient arrived, his general condition was good and he was aware. Skin color was slightly cyanotic. His family told that the blueness of the skin color decreased until reaching the hospital. On physical examination, vital signs were consistent with age, respiratory rate was normal by age, oxygen saturation was > 90%. The patient's laboratory tests were identified as hemoglobin 11,3 g / dL, leukocyte 15000 K / L, platelets 411000 K / L, ALT (alanine transaminase) 54, AST (aspartate transaminase) 74, sodium 136, potassium 5,1, calcium 10,0. Venous blood gas result was detected as pH 7.37, PCO₂ 35mmHg, PO₂ 40mmHg and MetHb 22,0%. Based on these results, methemoglobinemia was diagnosed. In the emergency department, 1mg / kg dose of methylene blue was given intravenously 5-10 min, then 15cc saline was given. O₂ support was allowed. Cyanosis disappeared within 15-20 minutes. At post-treatment control blood gases MetHb were measured 3,6 %. The patient was admitted to the pediatric service. At following there was no problem and the patient was discharged 2 days later.

Conclusion: In such cases admitted to the emergency services a thorough history should be taken, especially regarding exposure to substances known to cause methemoglobinemia. In the presence of an oxygen resistant cyanosis and no history of cardiopulmonary disease, methemoglobinemia should be strongly considered.

Keywords: Methemoglobinemia, methylene blue, prilocaine

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[Toksikolojik Aciller]

WILD CHERRY

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Objective: Accidental and intentional poisonings or drug overdoses constitute a significant source of aggregate morbidity, mortality, and health care expenditure. An estimated 2 to 5

million poisonings and drug overdoses occur annually in the United States, although the true incidence is unknown due to under diagnosis and underreporting. The most commonly implicated poisoning exposures were due to analgesics (10.6 %), cleaning substances (9.5 %), cosmetics (9.2 %), foreign bodies (5.1 %), plants (4.7 %), sedative-hypnotics and antipsychotics (4.4 %), and cough and cold preparations (4.3 %). Wild cherry (*Prunus avium*) is a poisonous plants (Figure 1,2,3). The pits and leaves of wild cherry contain hydrocyanic acid—which metabolizes to cyanide, causing incoordination, imbalance, possibly death. We aimed to discuss effects of wild cherry with patient who brought to emergency department after cherry intake.

Case: A 67 years old man was brought by the family from the state hospital after one day follow up. He admitted to emergency department because of sudden change in consciousness. He had any chronic disease and there was no medication. At history one day ago he had eaten cherry in the forest. At state hospital laboratory analysis, brain imaging, lumbar puncture was made and there was no significant abnormalities which was explain the changes in consciousness. His vital signs were as follows: blood pressure, 152/73 mm Hg; pulse rate, 73 beats/min (irregular); temperature, 36.0°C, and SpO₂ 94 %. The patient was lethargic, and there was no lateralization findings. Laboratory analysis was normal and arterial blood gas values, showed a pH of 7.36, PCO₂ of 45.6 mmHg, and PO₂ of 41.6 mmHg. We learned that cyanide poisoning occurred with wild cherry and contact the poison control center. Poison control center advised to start hydroxycobalamin. Hydroxycobalamin was given intravenously (IV) 70 mg/kg (typical adult dose is 5 g). Than clinical findings continue and a second half-dose given. After hydroxycobalamin clinical findings disappeared. After 3 day follow up patients discharged from emergency department without complication.

Conclusion: In patients presenting to the emergency department with sudden change of consciousness, poisoning should be kept in mind. These patients should be questioned in terms of poisoning food and the effects of these foods should be known.

Keywords: Wild cherry poisoning, hydroxycobalamin, *Prunus avium*



Figure 1. Wild cherry



Figure 2. Wild cherry



Figure 3. Wild cherry

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[Toksikolojik Aciller]

WHILE PREGNANT ARE'NT STRONG AS IRON; BABIES HAVE A PLASENTA TO KEEP THEMSELVES

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Introduction: Acute iron poisoning causes GI, cardiovascular, metabolic, hepatic and central nervous system toxicity. Treatment of acute iron poisoning includes early decontamination of the intestine, chelation with parenteral deferoxamine and intensive supportive therapy. The authors suggest such antidote therapy in pregnancy as a similar. However, no major adverse fetal effects have been associated with deferoxamine treatment in pregnancy. This report is about deferoxamine treatment of our pregnant patient who has ingested iron tablets with suicidal intent.

Case: 18 year old pregnant woman in the 16st week of pregnancy allegedly consumed 20 tablets ferrous sulfat 3 hours

ago. She was initially taken to a local hospital and gastric lavage given. She was referred to our hospital in an hour. At presentation; she had abdominal pain, vomiting. Her vitals was, BP:90/50 mmHg, HR:75/min, RR:20/min, SaO₂:98. Her rutin blood test were found to be as normal. Serum iron level as measured by spectrophotometric analysis was 390 µg/dl (normal range 40-170 µg/dL), total iron binding capacity was 400 g/dl (normal range 228-428 µg/dl) and the ferritin level 39.71 (normal range 13 - 150 ng/mL). Liver function tests showed in normal range. Chelation therapy with deferoxamine was started as an intravenous infusion of 15 mg/kg/h. After 4 hours infusion; control serum iron level as measured 232 µg/dl and at the end of the 8 hours measured 113 µg/dl. Then infusion was stopped. While the therapy, she had no symptoms, and she was hemodynamically stable with a normal pulse rate and blood pressure. She discharged after 12 hours without symptoms.

Conclusion: The toxic effects of iron are well-described, in four progressive stages. Stage I poisoning manifests as nausea, vomiting, or abdominal pain within 6 h of ingestion, resulting from gastrointestinal irritation. The hallmarks of stage II toxicity are metabolic acidosis and increased capillary permeability causing hypotension. These changes are typically noted 6–24 h after an overdose. Stage III poisoning results from iron's direct cytotoxicity, manifesting as hepatic, renal, and, less commonly, cardiac failure stage IV disease, weeks after resolution of the acute illness. The most useful laboratory value to follow in acute iron toxicity is the serum level. Peak serum iron levels usually correlate with toxicity (Peak serum iron µg/dL /Toxicity; 50-150 none, 150-300 mild, 300-500 moderate, >500 severe, >1000 significant morbidity and mortality), the important point of this; iron is rapidly cleared from the serum and enters tissues, so concentrations measured more than 8 hours past ingestion may be deceptively low. Treatment of acute iron poisoning includes early decontamination of the intestine, chelation with parenteral desferrioxamine and intensive supportive therapy. Deferoxamine can remove iron from mitochondria and prevent iron-induced damage. The current recommended dose of deferoxamine is 15 mg/kg per hour.

Iron is one of the most common substances ingested by pregnant women attempting suicide. Maternal toxicity is generally greater than fetal toxicity. Although the placenta transport iron to the fetus efficiently, it blocks the transfer of large quantities of iron (8) In clinical case reports of deferoxamine therapy have been no adverse effects on the fetus, although most have been 2nd or 3rd trimester poisonings. The authors suggest such antidote therapy in pregnancy as a similar.

Keywords: Toxicity, iron, pregnancy, treatment

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[Toksikolojik Aciller]

BULLOUS SKIN REACTIONS: THE UNKNOWN SIDE EFFECTS OF BONZAI IN THE EMERGENCY DEPARTMENT

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Introduction: The ever-increasing use of synthetic cannabinoids has so far affected and continues to affect many people. Synthetic cannabinoids such as bonzai are available easily and inexpensively not only through the internet but also in streets. Since the compounds of these substances are unknown, the cases presenting to hospitals show a wide range of clinical signs. The aim of this case study is to present and discuss findings related to effects on skin, one of the unusual side effects of bonzai.

Case: A 36-year-old male patient was brought by family members to the emergency department for suspected Bonzai use 1.5-2 hours before he presented. The patient had complaints of paresthesia and asthenia. He was conscious, cooperative and oriented with stable vital signs. In the eye examination, his bilateral pupils were mydriatic. His physical examination showed extensive bullous skin lesions in both lower extremities (Figures 1-2-3). In his story, the patient declared that he took only Bonzai; he took or contacted no other drugs or substances. Required dressing and treatment were applied on bullous lesions according to the suggestions of the dermatology department. Hyperpotassemia treatment was administered to the patient, whose creatine kinase value was 6000 and blood potassium level was 6.2. The patient was hospitalized in the department of internal diseases for further examination and treatment. On the second day of presentation to the hospital, the patient was discharged and asked to continue the dressing, since his laboratory test results became normal and he had no active complaints.

Conclusion: Synthetic cannabinoids present a wide range of clinical signs, an extreme example of which is reported in this study. This should incite emergency physicians to adopt a skeptical approach with respect to the consequences of Bonzai use.

Keywords: bonzai, Emergency department, Bullous skin reaction



Figure 1.



Figure 2.



Figure 3.

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[Toksikolojik Aciller]

NEUROLEPTIC MALIGNANT SYNDROME DUE TO QUETIAPINE

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Introduction: Antipsychotics are frequently used pharmacological agents currently. Quetiapine is also an atypical antipsychotic drug of which efficacy is proven in the treatment of schizophrenia, bipolar disorder and related conditions. In addition to adverse effects such as abuse and tachycardia, regardless of the drug's usage time, quetiapine may also lead to fatal side effects such as neuroleptic malignant syndrome (NMS).

Case: A 64 years old female patient was brought to our emergency department by family members with bad general condition and high fever, loss of consciousness for several days. The limited history obtained from his relatives revealed that she had a diagnosis of DM, HT and using Levodopa and Quetiapine. Physical examination on admission: general status was bad, unconsciousness, there was no response to the painful stimulus, there was left foot involuntary contractions. Heart beats were tachycardic. There were not any additional heart sounds and murmurs. Respiratory system and abdominal examination were normal.

Patient's vital signs: blood pressure was 186/100 mm Hg, heart rate: 150 beats / minute, body temperature: 39,1 °C.

The results of laboratory tests were as follows; WBC: 7,8x10³ /mL, Hb: 12,7 g/dL, PLT: 224x10³/mL, glucose:195 mg/dl, Urea:98 mg/dl, creatinine:1,64 mg/dl, Na:151 mmol/l, K: 4,36 mmol/l, CK: 2770U/L, pH:7,51. No pathology has been observed in brain tomography. Lumbar puncture was performed and there was no pathological findings. Neuroleptic malignant syndrome was diagnosed and she was admitted to intensive care unit.

Conclusion: Neuroleptic malignant syndrome is associated with the use of antipsychotic medications, a rare and potentially fatal condition. The most common findings in NMS patients are altered consciousness, autonomic dysfunction, muscle rigidity and hyperthermia. Usage of dopaminergic agents such as bromocriptine and amantadine in the treatment of NMS helps to decrease mortality rates.

Keywords: Neuroleptic Malignant Syndrome, Quetiapine, Emergency department

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[Toksikolojik Aciller]

PLANT OF DELIRIUM: DATURA

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Introduction: The patients often come to emergency department to find answers of their health problems. Emergency Medicine is a challenging interest of the clinical state which the etiology is unknown in a bundle of symptoms and diagnosis as well as treatment to perform.

Datura stramonium is a common wild plant also grown as ornamental plants in our country. This herbaceous annual is an erect plant, with dark green leaves, white flowers and spiny capsules, which are filled with numerous black, kidney-shaped seeds. Datura, tatal, pig pitir, thorny weed, devil's apple, and pipe the flower names are known (Figure 1). Cigarettes made from leaves used for asthma and bronchitis. The seeds of Datura are swallowed acne, eczema, hemorrhoids treatment and use for antispasmodic. Also the ointment is made against regional pain. It has an important place in the pharmaceutical industry due to the active ingredients of the plant and drug production. In this case our aim is presenting a patient who ate this plant accidentally and applied our department with anticholinergic symptoms.

Case: A twenty years old woman presented to emergency department with dizziness and palpitation starting about 4 hours ago. The patient was complained about blurred vision especially in view of the close and having strangeness in her behavior. The patient didn't have any disease or regular drug use. When the anamnesis deepened, patient's mother stated that the patient's complaints started after the meal including wild purslane which gathered from the garden. When patient's mom observed strangeness in patient's behavior, she returned the garden and noticed the different plant with purslane and investigated the plant from the internet that plant was pipe flower. Then she took the patient to nearest hospital.

The first center who referred the patient to our hospital started saline infusion, the patient's general condition was good, she was awake but slightly lethargic consciousness, blood pressure 110/60mmHg, pulse 110/min, temperature 37,5°C. Patient's

ECG was compatible with sinus tachycardia. There was no significant pathology except mydriatic pupil with a hot dry skin on physical examination.

Patient was diagnosed as *Datura stramonium* poisoning. Management started at in the monitored area and activated charcoal was administered at a dose of 1 mg / kg. Saline infusion was continued. Arterial blood gases and laboratory findings were showed no pathological results. Cultured and careful patient's mom makes things easier to diagnose. We told the patient that these symptoms are temporary.

Because of general stable condition, the treatment of sedation or physostigmine was not planned. We approximately observed patient 16 hours and tachycardia was regressed. Vision problems and dizziness disappeared completely. The patient was discharged with heal.

Conclusion: Our case with anticholinergic symptoms and we should consider other diagnoses that may cause these statements. An emergency physician kept in mind that these findings may happen due to a plant. If Emergency Medicine physicians know well about the toxidroms, it will be so easy to diagnose and able to treat effectively the patients

Keywords: *Datura stramonium*



Figure 1. *Datura stramonium*

ingestion, and as well as iron poisoning approach according to the literature.

Case: Twenty-five years old woman presented to emergency department with multiple drug ingestion containing 36 tablets of beta glucan, 30 tablets of dexketoprofen and 20 tablets of iron sulfate +2 (1600 mg of elemental iron) about 2 hours ago. The patient has previously attempted suicide and diagnosed as depression before without treatment.

The patient's general condition was good, her consciousness level was alert. Vital signs were blood pressure 120/75mmHg, pulse 75/min, pulse oximetry %98, body temperature 36,4C. Patient's ECG was normal sinus rhythm. There was no pathological findings on physical examination except for a slight tenderness in the epigastric region.

Due to the toxin intake over the past 2 hours, we did not consider gastric lavage. Activated charcoal was administered at a dose of 1 mg / kg. Saline infusion was continued. Arterial blood gases and Laboratory findings were showed no pathological results. The first reference to the iron level was measured as 278 µg/dL. Patient's abdominal X-ray showed a large number of radiopaque tablets in about 0.5 x0.5 cm (Figure 1). So that, chelation therapy was started. Deferoxamine was added to treatment at a dose of 1 g IM. We applied enema for gastrointestinal decontamination.

After the patient was treated with a single dose of deferoxamine, saline infusion was continued and blood iron levels was measured as 227 µg/dL, after 24 hours of application levels was measured as 147 µg/dL. Liver function tests and bleeding profile tests were in normal range. The general condition of the patient was stable and there were not any active complaints so deferoxamine infusion was not started. After 30hours of apply, the patient was discharged with psychiatric outpatient clinic control proposals.

Conclusion: There are rare case reports in the literature about adult iron intoxication that we think is valuable to suggests some therapeutic indications could be questioned. Mild intoxication as our case we have started to chelation therapy due to the x-ray opacities. In fact, we believe that only the radioopacities may not be useful decision tool for chelation treatment but need more studies and case reports.

Keywords: iron toxicity, deferoxamine, abdominal plain graphy

P-435

[Toksikolojik Aciller]

HOW LITTLE RAYOOPACITIES COULD AFFECT THE MANAGMENT?

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Introduction: Iron overdose has been one of the leading causes of poisoning deaths in children younger than 6 years. Iron is used as a pediatric or prenatal vitamin supplement and for treatment of anemia. Iron tablets are particularly tempting to young children because they look like candy. Although it is common in the pediatric age group, mortal adult poisoning cases are also in the literature. Recommended treatment is supportive care. However, the indications for chelation therapy are depend to serious toxicity, serum iron level, and the radioopacities in x-ray. Our goal is to share patient's direct radiography visually who was admitted to the emergency department because of suicidal iron



Figure 1. Little radyoacities in X-ray

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[Toksikolojik Aciller]

PRESENTATION OF ACUTE RENAL FAILURE AFTER BONZAI USAGE

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Bonzai and Jamaica are known as highly addictive substances and they are synthetic cannabinoids. Even they are submitted as marijuana or herbal products; substantially they are chemicals which are sprayed on plants. The most powerful cannabinoid, tetrahydrocannabinol was isolated in 1960. After about 3 years, in the early 1990s, specific cannabinoid receptors have been found, CB1 and CB2. Synthetic cannabinoids show their effects through CB1 and CB2 receptors. CB1 receptors are primarily located in the brain and they are not only involved in glutamate and GABA neurotransmission, they are also active in the emergence of anxiety, psychoactive reactions, analgesia, audio-visual perception changes and motor function disabilities. The affinity for the CB1 receptors of synthetic cannabinoids is more than tetrahydrocannabinols affinity. The exposure time is often less than 8 hours, 24 hours time has also been reported. Toxicity with these agents may lead to serious cardiovascular, neurological complications and death. The most frequent symptoms are tachycardia, agitation, vomiting, lethargy, confusion, nausea, hallucinations, hypertension, dizziness and chest pain. There are also some cases, which reported about the opposite of these symptoms like sedation, hypotension, bradycardia and respiratory depression. Symptoms of exposures mostly go with non-life-threatening clinical course but differences in formulation and dosage of chemical compounds could be change the current situation. Seizure is most commonly observed among serious clinical consequences. Acute coronary syndrome even in young

adults is an other serious statement. It is also important to be alert to the possible development of rhabdomyolysis. Because of not knowing what type of compound there is in the Bonzai, it can be unable to get predictable in the patient's clinical condition. Emergency assessment basis consists of symptomatic approach. For this purpose, intravenous hydration and benzodiazepine applications are frequently used.

We will mention a patient who was admitted to our emergency department with complaints of nausea and vomiting, who got hemodialysis with the diagnose of acute renal failure. 26-year-old male patient, telling about using Bonzai for 2 months was admitted to the emergency department with complaints of increasing nausea and vomiting. The patient did not have any chronic diseases. Physical examination findings; consciousness open, cooperative, oriented, blood pressure: 110/80, heart rate: 72/min, ECG: normal sinus rhythm, pupils isochoric, conjunctiva pale, sclera natural, abdomen relaxed, no pathological reflexes. The results of the laboratory tests indicated increasing urea (104 mg/dl) and creatinine (11.4 mg/dl). The patient was consulted to nephrology. With the diagnosis of acute renal failure he was interned to the internal medicine service and had emergency dialysis. On the third day of his hospitalization he refused the treatment and left the hospital.

In the last years the usage of this synthetic substances, which have deadly side effects, is increased. It is necessary to treat these patients multidisciplinary. Poisoning due to the use of Bonzai can have serious neurological and cardiac side effects and can also cause acute renal failure. As a result, the patients at the emergency department with atypical complaints and laboratory tests should be questioned precisely about using drugs, so that they can get an early and right medical treatment.

Keywords: Acute renal failure, Bonzai, Drug

P-437

[Toksikolojik Aciller]

REBOUND LITHIUM ELEVATION AFTER DIALYSIS IN A LITHIUM INTOXICATION CASE

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Introduction: Lithium is used for treatment of bipolar disorder. It has a relatively narrow therapeutic index (0,6-1,2 mEq/L). Clearance of lithium is mostly through kidneys. Acute lithium poisoning symptoms are nausea, vomiting, cramping and diarrhea. Neuromuscular signs can also be seen (tremors, confusion, stupor, seizures) depending on severity of intoxication. We present a case of lithium intoxication that required dialysis.

Case: 38 year old male patient was brought to the ER 9 hours after ingesting multiple pills in an attempt to commit suicide. He had nausea and was vomiting. According to his medical background, he was on lithium due to bipolar affective disorder, was homeless and living in the bus terminal. He claimed to have taken over 100 pills of lithium 300 mg capsules. His overall condition was stable when he was admitted into the ER. He was fully conscious, cooperative and oriented. His Glasgow Coma Scale score was 15. Nothing pathological was found in system examinations. Laboratory test results were Wbc: 7×10³/

uL (4×10^3 - 11×10^3), Hb: 16,6 g/dL (12-16), Plt: 220×10^3 /uL (150×10^3 - 450×10^3), urea: 24 mg/dL (10-48,5), creatinine 0,8 mg/dL (0,5-1,2), potassium: 4,2mmol/L (3,5-5,1), Na: 136 mmol/L (136-145), serum lithium level: 2.1mEq/L (0.6-1). Since the time period between the patient's consumption of the tablets and his admittance to the hospital was 9 hours, gastric lavage was not done. The patient was put on normal saline therapy. He developed delirium in the emergency department and hemodialysis was done. Following dialysis, his serum lithium levels were 2.4 mEq/L. After being observed for 24 hours in the emergency room, he was referred to the ICU for control and treatment.

Discussion: Supportive therapy is the main treatment of lithium toxicity. Gastric lavage can be done if patient presents in one hour after ingestion. Lithium does not bind to charcoal. To enhance its elimination from kidneys fluid therapy is used. Hemodialysis is indicated in patients with impaired renal function, patients who cannot tolerate hydration as in congestive heart failure or develop severe neurotoxicity. Hemodialysis decision should not be based solely on serum lithium levels. Postdialysis rebound elevations can be seen.

Keywords: dialysis, lithium, suicide

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[Toksikolojik Aciller]

HYPERNATREMIA AFTER MASSIVE NAPROXEN SODIUM OVERDOSE

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Introduction: Suicidal attempts with NSAIDs are frequent and may cause life threatening conditions. In this case report we present a naproxen sodium overdose with hypernatremia.

Case: 26 year-old man was admitted to our ED with a complaint of suicidal attempt. His vital signs were stable and he denied any complaints. It was learned that he took 28 naproxen sodium (a total dose of 15400 milligrams) and 24 thiocolchicoside (a total dose of 96 milligrams) tablets two hours earlier from admission. He had not any chronic illness and/or drug addiction. His ECG was normal sinus rhythm. Laboratory results were in normal ranges except sodium levels. His serum sodium level was 156 mmol/L (ref: 136-148 mmol/L), and urine sodium level was 267 mmol/l (ref.: 40-220mmol/L/day) Gastric lavage and activated charcoal administered to the patient and referred to tertiary setting for further evaluation. Laboratory studies were affirmed here and serum sodium levels were in normal ranges. Patient did not receive any additional therapy meanwhile. He hospitalized in critical care and discharged without any complication in two days. He was not required any renal replacement therapy. Blood naproxen sodium levels could not be obtained.

Discussion: NSAIDs have been used in many clinical conditions and they are associated with sodium imbalance as a consequence of acute ischemic renal insufficiency. Transient decreases in sodium excretion was reported after initiating naproxen therapy in elderly. In literature any clinical study

directed to the hypernatremia and naproxen relationship was not observed. This transient hypernatremia can be a result of transient decreases in sodium excretion.

Conclusion: Naproxen sodium is a widely used drug in many clinical conditions. Hypernatremia must be considered in the evaluation of naproxen sodium overdose.

Keywords: Naproxen sodium, hypernatremia, overdose

P-439

[Toksikolojik Aciller]

CRONIC THINNER TOXICITY WITH NEUROPATHY AND CONVULZION: AUTO PAINTING

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Introduction: Organic solvents are chemically relatively stable, low molecular weighted, lipophilic, volatile compounds or mixtures that are liquid at room temperature. They are grouped as aliphatic hydrocarbons, aromatic hydrocarbons and halogenated hydrocarbons. Alcohols, ketones, glycols, esters, ethers, aldehydes and pyridines are compounds formed by replacing hydrogen groups. 1 Organic solvents are frequently used in industry due to their solving abilities of oils, resins, rubber and plastics. They are used in production of paints, adhesives, printing inks, rubber, polymer and pharmaceutical, industrial cleaning, dry cleaning, degreasing, painting and coating works. Risky professions are painters, illustrators, writers, paint and ink manufacturing workers, workers of polyester, flooring fitters and greasers. 2 They have acute and chronic effects on different organs and tissues. Symptoms vary depending on the solvent in the acute effects, but there are common symptoms; disorientation, drowsiness, dizziness, euphoria, confusion, and loss of consciousness, stroke, convulsions and may progress to death from respiratory or cardiac arrest as a result. Late of emergence of symptoms is an indicator of metabolites. In most patients, symptoms improve at end of exposure. Symptoms begin slowly in chronic effects; it may be difficult to establish relationships with agents. Headaches, fatigue, sleep disorders, akinesia, numbness, tingling, mood changes and other general symptoms are seen. Generally, there is not a clear relationship. A careful occupational history should be taken. 1,2

Case: A 36-year-old male patient admitted to our emergency department with complaints of numbness and weakness in all 4 extremities. The patient had generalized tonic-clonic seizure during examination. Patient's CT scan was normal and his serum calcium was 4.9, albumin was 4.5 and ionized calcium in blood gases was 0.63. Patient had no thyroid surgery, his profession was learned to be auto painting for 14 years. The patient was using a lot of paint thinner used in the industry, and he was accepted as solvent toxicity. Treatment was started and he was discharged uneventfully.

Discussion: Acute symptoms recover shortly after moving away from agent. Improvement of chronic symptoms takes a long time. Sometimes it may be permanent. Those with underlying neurological and psychiatric disorders are more sensitive. 1 Selection of less harmful ones, use of closed systems, preference of water-based paint over solvent-based ones, adequate ventilation, personal protection, prohibition of use for dry cleaning and metal

surface cleaning purposes, warning signs, training, workplace surveillance, monitoring workplace air organic solvents levels (Ambient measurements), initial and periodic examinations are possible precautions.²

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Keywords: Chronic Thinner Toxicity, Convulsion

P-440

[Toksikolojik Aciller]

EFFECT OF SYNTHETIC CANNABINOID ON OXIDATIVE STRESS INDEX

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After the isolation of 1964 Δ9-tetrahidrokannabinol pyrimidine (Δ9-THC) and discovery of cannabinoid receptors (CB1 and CB2) in 1980s, a lot of cannabinoid receptor agonists are manufactured for therapeutic purposes. On the other hand cannabis has become the most widely produced and consumed illegal drug in the world. In this study we aimed to determine the levels of TAS TOS OSI of the patients who admitted to the emergency department after the using synthetic cannabinoids.

Introduction: Synthetic cannabinoid (SC) containing materials are called in general, "Spice" in Europe, "K2" in the US, and " Bonzai" or "Jamaica " in Turkey. They typically contain a number of different synthetic cannabinoid content which sprayed onto the herbal ingredient and smoked by the users in like manner to blends of herbal smoking.

So far, two cannabinoid receptors are defined as CB1 and CB2. CB1 and CB2 suppress the adenylyl cyclase activity and coupled to the G protein. The activation of G protein coupled receptors cause of the calcium influx and potassium output, presynaptic hyperpolarization and so reduce neurotransmitter release.

CB1 receptors are one of the most abundant receptors among the G-protein coupled receptors in the brain and play an important role in the regulation of glutamate and GABA neurotransmission.

CB2 receptors are predominantly located in the marginal zone of the spleen, tonsils, immune cells, particularly macrophages, B cells, natural killer cells, monocytes, T-lymphocytes, polymorphonuclear neutrophils and astrocytes.

Material Methods: Thirty-two patients who were admitted to our emergency department between 02.09.2014-25.10.2014 enrolled in the study. Patients who has history of using synthetic cannabinoids less than 8 hours before the admission were included in the study. As a control group 32 smoker people and as a third group 32 healthy non-smoker volunteers were included in the study.

Results: The mean age of 8 female and 24 male patients' was $28.81 \pm 8:55$. While the average systolic blood pressure was 124.28 ± 28.56 mmHg, the average diastolic blood pressure was $80.62 \pm 16:05$ mmHg. When we analyzed the patients in terms of complaints to admitting to the emergency department; 18

patients with nausea and vomiting, 9 patients with palpitations. While 17 patients had normal sinus rhythm in ECG, 14 had sinus tachycardia, 5 had chest pain and 1 had acute ST elevation.

TAS, TOS and OSI values of healthy volunteers and control group were 1.11 ± 0.76 , 1.04 ± 0.10 , 12.09 ± 0.51 and 13.50 ± 1.13 , 1.22 ± 0.7 , 1.30 ± 0.15 respectively (Figure 1,2 and 3). There were significant difference between the TAS, TOS and OSI values of healthy volunteers and control group and the values of p were 0.002, 0,000 and 0,014 respectively.

The values of TAS, TOS, OSI of control group and bonzai user group were 1.04 ± 0.10 ve 1.36 ± 0.11 , 13.50 ± 1.13 ve 16.73 ± 1.71 , 1.30 ± 0.15 ve 1.22 ± 0 respectively. There were significant difference between the TAS, TOS and OSI values of control group and bonzai user group and the values of p were 0,000, 0,000 and 0,025 respectively.

Conclusion: The level of TAS and TOS were found higher in the bonzai user group, but oxidative stress index were found decreased compared to the control group. Rise in TAS TOS levels and decrease in OSI was interpreted as an indicator of continued answer of the organism against the stress.

Keywords: Emergency Service, Oxidative Stress Index, Synthetic Cannabinoid

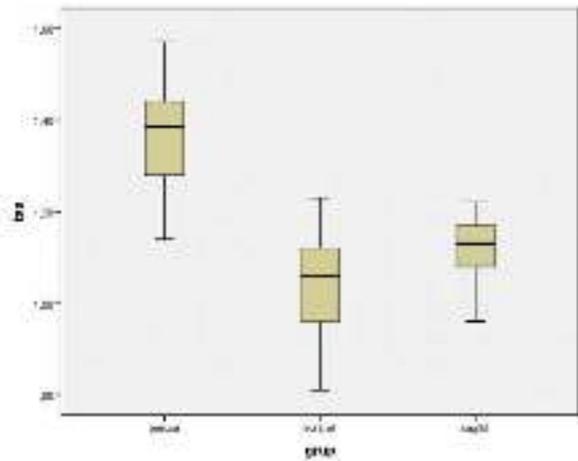


Figure 1. Comparison of TAS levels (median (interquartile range)) among the three groups.

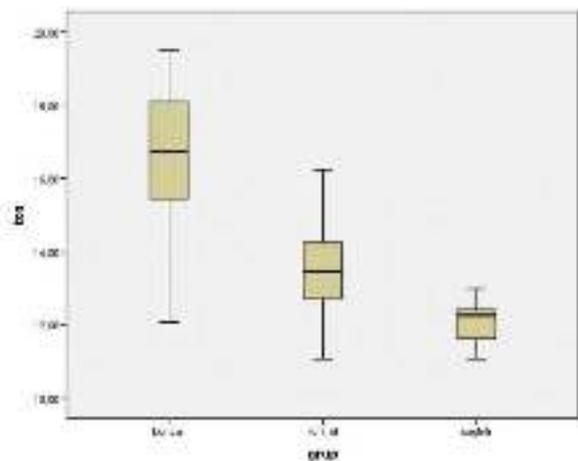


Figure 2. Comparison of TOS levels (median (interquartile range)) among the three groups.

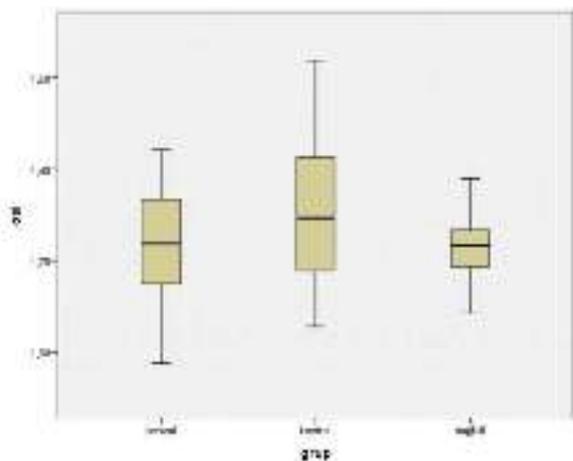


Figure 3. Comparison of OSI levels (median (interquartile range)) among the three groups.

P-441

[Trauma]

FIRST RIB FRACTURE AFTER HEAVY LIFTING

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Rib fractures are usually the result of strong blunt trauma to the rib cage. The most common causes of fractures are interior or exterior traffic accidents, falls, assault, accidents at work and domestic fall accidents. The absence of any trauma, tumoral involvement comes to mind. Isolated 1st rib fractures are rare and may occur by different mechanisms.

18 year old male patient was admitted to our emergency department with complaints of shoulder pain. It was learned that after the heavy lifting, shoulder pain began. The patient's vital signs were normal. On physical examination, there was tenderness on the right shoulder and under the right clavicle. The patient's respiratory sounds were normal. The patient was scheduled for x-ray of right shoulder and chest. The patient's radiographs showed right first rib fracture. Then, the patient was requested for thoracic surgery consultation. The patient did not require immediate surgery. He was called for control examination with analgesics and rest recommendations.

Isolated first rib fractures should be distinguished from first rib fractures involving other ribs. The mechanism of isolated first rib fracture is often trauma to the upper torso, and multisystem injuries are less frequent. Vascular injuries are rare; hence, arteriograms should be obtained for specific indications. In patients who have an isolated first rib fracture, the clinical focus should be on possible associated maxillofacial and neurological injuries, which are the major causes of morbidity and death.

First rib fractures after the heavy lifting is rare and in our case we talked about a young patient presenting to our emergency department with first rib fracture.

Keywords: first rib, fracture, heavy lifting



Figure 1. First Rib Fracture

P-442

[Trauma]

ACUTE RENAL FAILURE AFTER BEATING AND ASSAULT

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Rhabdomyolysis is clinical and biochemical state resulting from muscle injury and the consequent release of muscle cell constituents into circulation. It is also a severe and life-threatening condition. Acute renal failure due to rhabdomyolysis has been widely described and its main pathophysiological mechanisms are renal vasoconstriction, intraluminal cast formation and direct myoglobin toxicity. Its major causes include muscle compression or overexertion; ischemia; toxins; metabolic disorders; cocaine, alcohol, and drug use; infections. However, assault-induced rhabdomyolysis occurs rarely. We report a 24-year-old female patient without any known prior renal disease who presented with acute renal failure that developed after assault and beating.

A woman of 24 year-old was admitted emergency department with beaten with a stick, punched and kicked for several hours by her husband and relatives. She admitted to our hospital after 24 hours of beaten. Most of her body surface was covered with stick marks, contusions and lacerations. On admission she was alert, with a pulse of 98, blood pressure of 160/90 mmHg and a respiratory rate of 20 breaths per minute. On admission arterial blood pH was 7.2 with a base excess of -14 and bicarbonate 11 mmol/L. On physical examination there was widespread tenderness in your body, There was no obvious pathology in cranial CT and X-ray. A urinary catheter was inserted and dark coloured urine was obtained, which tested positive for myoglobin. The diagnosis of rhabdomyolysis was made through clinical and laboratory findings. Treatment consisted of aggressive volume loading with monitoring of central venous pressure. Despite treatment, the patient developed acute renal failure (ARF) requiring haemodialysis. She slowly improved and at two-month follow-up his renal function had returned to normal.

As a result acute renal failure secondary to beating-induced rhabdomyolysis is a rare clinical condition, and there are only a few cases associated with assault and beat related acute renal failure. We should be kept in mind that acute renal failure can develop in patients admitted after severe beating

Keywords: acute renal failure, rhabdomyolysis, assault

P-443

[Trauma]

FACTORS PREDICTING HOSPITAL MORTALITY OF PATIENTS WITH CORROSIVE GASTROINTESTINAL INJURIES RECEIVING ESOPHAGOGASTRECTOMY IN THE ACUTE STAGE

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Objective: The postoperative survival of patients undergoing esophagogastrectomy for corrosive gastrointestinal (GI) injuries is difficult to anticipate. The aim of this study was to identify the preoperative factors using analysis of their physiological condition, associated diseases, physical examinations, and laboratory data for prediction of their mortality.

Methods: Between March 1996 and February 2006, 78 consecutive patients who underwent esophagogastrectomy for corrosive GI injuries were retrospectively reviewed. Of them, 46 survived and 32 (41%) died during the peri-operative period. Logistic regression analyses were used to model markers for postoperative mortality, including descriptive and laboratory data, and clinical symptoms/signs.

Results: Thirty-seven males and 41 females were included in the study, with an average regression model, age of 55.3 ± 13.7 years. After adjustments in the logistic regression model, age over 65 years ($p=0.025$), presence of gross hematuria ($p=0.018$), twofold level of serum AST ($p=0.015$), blood pH level below 7.2 ($p=0.013$), and deficit of blood base over 16 ($p=0.005$) were found to be independent risk factors of mortality.

Conclusion: We consider twofold level of serum AST, base deficit >16 , preoperative $pH < 7.2$, age over 65 years, and presence of gross hematuria to be the significant factors predicting postoperative hospital mortality in patients with caustic gastrointestinal injuries who received emergency esophagogastrectomy.

Keywords: Corrosive gastrointestinal injury

P-444

[Trauma]

L2 BURST FRACTURE: HOW TO SUCCEED BROKEN

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Introduction: Trauma is one of the most common complaints in the emergency department and is the primary cause of death in young adults. Trauma patients can be brought to the emergency room in very severe clinical conditions as they for some minor trauma victims, as in our case, can apply to the hospital with complaints clinically mild and relatively unimportant. The pathologies seen in trauma patients are not associated with trauma severity and the patient's general condition.

Case: 31-year-old female patient while travelling in the seated position at body of a vehicle has been exposed to trauma depending on jumping up and down direction of movement speed. Patient

was admitted to our emergency department herself by walking due to back pain, hadn't been persist despite 2 hours resting. At admission patient's TA: 120/80 mm/Hg, pulse: 90 atm/min, fever: 36.7°C , at the physical examination of consciousness oriented and cooperated, GCS was 15, respiratory system examination normal, cardiovascular system examination normal, extremities senses and motor function is normal, peripheral pulses were palpable and only pathological finding was tenderness on palpation in the lumbar region. Patient's abdominal, cranial and thoracic imaging for trauma has no pathology. at lumber direct graphy, taken from patient, has loss of height at second lumbar vertebral body. Because of suspected fracture at second lumbar vertebral body, lumbar spine MRI was performed to the patient. MRI was detected loss of height, 3.5 mm angulation posteriorly into the spinal canal and slightly increased signal in the conus medullaris. Patient was consulted to neurosurgery department and was operated by neurosurgery.

Conclusion: Especially young adults suffering from minor trauma, can apply to the hospital with complaints clinically mild and relatively unimportant. However the emergency physicians should be aware that these pathologies seen in trauma patients are not associated with trauma severity and the patient's general condition.

Keywords: burst fracture, trauma, vertebral fracture



Figure 1. Patient's lumbar radiographs



Figure 2. View of patient's lumbar MR

P-445

[Trauma]

SIGMOID PERFORATION AFTER FOOTBALL MATCH

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Introduction: In emergency department, trauma is one of the most common complication, that the leading cause of death among young patient population. Colonic perforation is rare due to blunt abdominal trauma. In this case, we talk about sigmoid colonic perforation due to blunt trauma.

Case: A 43 years old male was admitted to our emergency department with abdominal pain. It had started 2 days ago after a blunt abdominal trauma occurred during a football game. At admission patient's blood pressure was 110/70 mmHg, his fever was 36°C, his pulse rate was 119 bpm, his oxygen saturation was %98. In the physical examination; general condition were normal, oriented and cooperated, Glasgow Coma Score was 15. His respiratory system examination was normal. There was no function loss at the extremities. Peripheral pulses were palpable and equal. A physical examination revealed tenderness, muscular rigidity and rebound tenderness in both lower quadrants and bowel sounds were normocinetic in all quadrants. Laboratory findings were normal apart from urea(104 mg/dl), creatinine(1.38 mg/dl), total bilirubine(1.4 mg/dl) and LDH(339 U/lt). His white blood count was 12100/mclt. His hemoglobin was 16.9 g/dl. In full urinary analysis microscopy there was 28 erythrocyte & 14 leukocyte. An upright plain abdominal X-ray revealed multiple air-fluid levels (Figure 1) but there was no free air on the chest X-ray. There was a collection area detected similar to suspicious free fluid near the left side of the bladder at the FAST US examination. There was a collection area detected similar to hematoma sized 7x2.5 cm under the umbilicus at the mid-line between intestines (Figure 2). And there was minimal fluid detected near the left superior side of the bladder at the USI which performed by a radiologist. Later it was figured out that, it was not

hematoma, it was a dilated intestinal part at the abdominal CT with IV contrast (Figure 3) and there was dilatation and herniation at the colonic loops. The patient consulted to General Surgery for abdominal trauma, to Urology for bladder trauma. Urology had not suggest an urgent urologic operation for suspicious bladder trauma due to good mision and no hematury. Urology only suggested observation. General Surgery suggested hospitalization for observation, because of intraabdominal free fluid. General surgery planned an urgent operation due to physical examination signs not getting well. The patient explored. In the exploration there was a full lane perforated field at the sigmoid colon over the pelvic reflexion, 40th cm of the anal canal, sized about 2 cm. and it was see that intraabdomen was mashed with colonic ingredients. The operation was ended with colostomy.

Discussion: Colonic perforation was rare in blunt trauma. But this is an important cause of death in the late phase is due to give evidence. Therefore colonic perforation should not be forgotten in the late phase of blunt trauma.

Keywords: Abdominal trauma, Perforation, Sigmoid colon.



Figure 1. Patient's upright plain abdominal X-ray



Figure 2. Patient's Abdominal USG

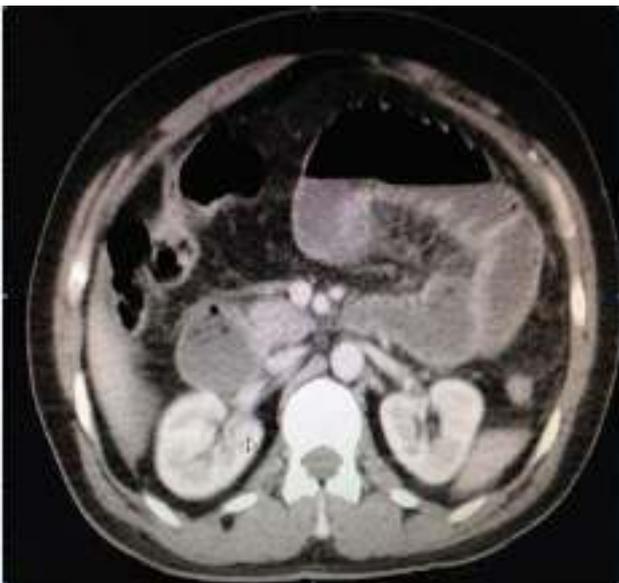


Figure 3. Patient's Abdominal Ct with iv contrast

P-446

[Trauma]

THE RELATION BETWEEN PLASMA COPEPTIN LEVELS AND TRAUMA SCORES IN PATIENTS WITH MULTIPLE TRAUMA ON ADMISSION TO EMERGENCY

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Objectives: Higher plasma copeptin level has been associated with poor outcomes of critical illness and head trauma. The present study was undertaken to investigate the plasma copeptin

concentrations in patients with multiple trauma and to analyze the correlation of copeptin levels with trauma scores.

Material and Methods: The study was performed after the faculty ethics committee approval. Multiple trauma patients were enrolled to the study between the ages of 0-80 on admission to emergency. The patients history with diabetes mellitus, heart failue, renal failure, ischemic coronary disease, stroke, active infection were excluded from study. The control group were selected from healty volunteers in same age range. Trauma Score (TS), Injury Severity Score (ISS), Abreviated Injury Scale (AIS), Revised Trauma Score (RTS), Glasgow Coma Score (GCS) scores were calculated for all trauma patients on admission. The venous blood samples were taken from trauma and control groups to evaluate copeptin levels. The patients in multiple trauma group were divided into exitus and surviving groups. The plasma copeptin levels of multiple trauma patients control groups were compared with each others. The plasma copeptin levels of multiple trauma patients were compared with trauma scores and GCS scores. Student's t test was used to evaluate the data.

Results: The mean age of multiple trauma group was 41.69±18.5 (n=83, 24 female, 59 male). The mean age of control group was 42.92±18.7 (n=74, 24 female, 50 male). The mean plasma copeptin level of trauma group (11.08±8.04 pmol/L) was significantly higher than control grop (6.70 ±4.28 pmol/L) (p<0.01). The plasma copeptin level of surviving patients (3±0.85 pmol/L) was significantly lower than patients who died (7.60±5.2 pmol/L) (p<0.01). It was determined a significantly negative correlation between GCS scores and plasma copeptin levels of patients with multiple trauma (p<0.05). There were a significantly correlation between RTS and plasma copeptin levels (p<0.05). It was not determined a significantly correlation for RIS, ISS and TS compared with copeptin levels of multiple trauma patients.

Conclusion: There is a relationship between the higher plasma copeptin levels of multiple trauma patients and lower GCS and RTS scores. The higher plasma copeptin levels of multiple trauma patients may indicate poor prognosis and higher mortality rate on admission to emergency.

Keywords: Copeptin, multiple trauma, trauma scoring systems, prognosis

P-447

[Trauma]

HIGH NT-PRO BNP LEVELS IN PATIENTS WITH MULTIPLE TRAUMA MAY BE AN INDICATOR OF POOR PROGNOSIS?

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Objectives: The aim of this study was to investigate the relation between the plasma levels of Nt-pro BNP and trauma scores, and to examine the relation between the plasma levels of Nt-pro BNP and mortality in patients with multiple trauma.

Material and Methods: The study was performed after the faculty ethics committee approval. Multiple trauma patients were included to the study between the age range of 0-80 on admission to emergency. The patients history with heart failure, renal failure, ischemic coronary disease, stroke, active infection were excluded from study. The control group were selected from healty

volunteers in same age range. Trauma Score (TS), Injury Severity Score (ISS), Abreviated Injury Scale (AIS), Revised Trauma Score (RTS), Glasgow Coma Score (GCS) scores were calculated for all trauma patients on admission. The venous blood samples were taken from trauma and control groups to evaluate Nt-pro BNP levels. The patients in multiple trauma group were divided into exitus and surviving groups. The plasma Nt-pro BNP levels of multiple trauma patients control groups were compared with each others. The plasma Nt-pro BNP levels of multiple trauma patients were compared with trauma scores and GCS scores. Student's t test was used to evaluate the data.

Results: The mean age of multiple trauma group was 41.69 ± 18.5 (n=83, 24 female, 59 male). The mean age of control group was 42.92 ± 18.7 (n=74, 24 female, 50 male). The mean plasma Nt-pro BNP level of trauma group (277.75 ± 92 pg/ml) was significantly higher than control group (64.85 ± 28 pg/ml) ($p < 0.01$). The plasma Nt-pro BNP level of surviving patients (58.05 ± 35 pg/ml) was significantly lower than patients who died (290.24 ± 62 pg/ml) ($p < 0.01$). It was not determined a significantly correlation between GCS, TS, RTS, ISS, RIS scores and the plasma Nt-pro BNP levels of patients with multiple trauma ($p > 0.05$).

Conclusion: There is no relationship between GCS, TS, RTS, ISS, RIS scores and the plasma levels of Nt-pro BNP in patients with multiple trauma. The higher plasma Nt-pro BNP levels of multiple trauma patients may indicate poor prognosis and higher mortality rate on admission to emergency.

Keywords: Multiple trauma, Nt-pro BNP, trauma scores, prognosis

P-448

[Trauma]

PNEUMORRHACHIS: A POOR PROGNOSTIC SIGN IN TWO TRAUMA PATIENTS

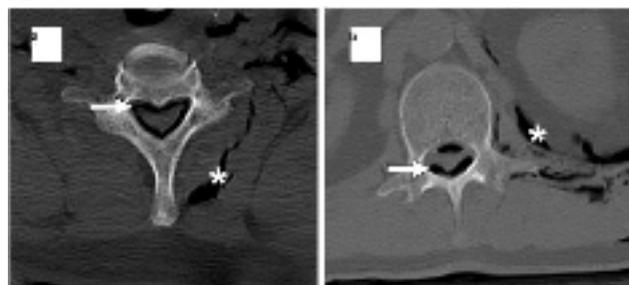
Zeynep Temizyürek¹, Ersin Aksay², Murat Yeşilaras¹, Mustafa Sever¹, Feride Çalışkan Tür¹, Turgay Yılmaz Kılıç¹, İbrahim Toker¹, Orkun Ünek¹, Özge Duman Atilla¹

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Pneumorrhachis is the presence of air in the spinal canal. Traumatic pneumorrhachis is a rare entity, which is often associated with poor prognosis. It is commonly associated with severe intrathoracic or intracranial injury in multiple trauma patients. We report two cases of traumatic pneumorrhachis with intradural and extradural locations.

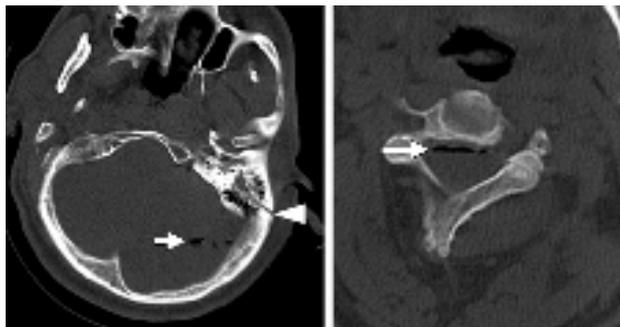
Keywords: Pneumorrhachis, emergency department, prognosis

Case 1



CT scan showing the epidural pneumorrhachis (arrow) in the cervical (a) and lumbar (b) vertebra levels and air in the surrounding tissues [asterixes].

Case 2



CT scan showing the mastoid bone fracture (arrowhead) and the pneumocephalus (small arrowhead) and intradural pneumorrhachis (arrow)

P-449

[Trauma]

RUPTURED SUPERIOR GLUTEAL ARTERY PSEUDOANEURYSM WITH HEMORRHAGIC SHOCK: CASE REPORT AND REVIEW OF LITERATURE

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Pseudo-aneurysm (PSA) of superior gluteal artery (SGA) is very rare and most causes are blunt or penetrating pelvic traumas. Although PSA can be asymptomatic at time of initial trauma, it can be symptomatic weeks, months, even years after initial trauma. We present a case of a ruptured superior gluteal artery pseudoaneurysm with hemorrhagic shock 20 days after a bomb injury in Syria civil war. In addition, we review anatomy of SGA, clinical presentation and pitfalls of PSA, and imaging and treatment options.

Keywords: Pseudoaneurysm; superior gluteal artery; pitfall; angiography.



Figure 1. 17-year-old male with buttock injury by bomb. Contrast-enhanced CT and angiography of pelvis show pseudoaneurysm of right superior gluteal artery.

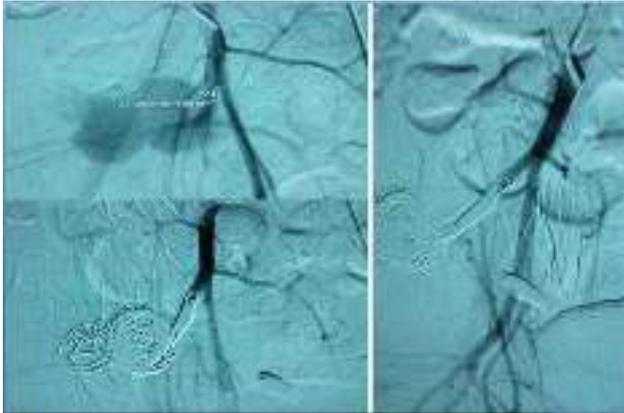


Figure 2. 17-year-old male with buttock injury by bomb. DSA selective angiography of superior gluteal artery shows the pseudoaneurysm. After successful coil embolization the pseudoaneurysm has disappeared.

P-450

[Trauma]

RARE AND SEVERE MAXILLOFACIAL INJURY DUE TO TEAR GAS CAPSULES: REPORT OF THREE CASES

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Tear gases are used by police or armed forces for riot or social events control or by people for private self-defense. Although these agents are used widely in the world, some harmful effects have reported in the literature. Despite well-defined chemical side effects in the literature, there are insufficient data about tear gas capsules induced mechanical injury. We reported three cases with severe maxillofacial injury due to tear gas capsules.

Keywords: Tear gases, Pepper gases, Head trauma, gunshot



Figure 1. CT views of Patient-1

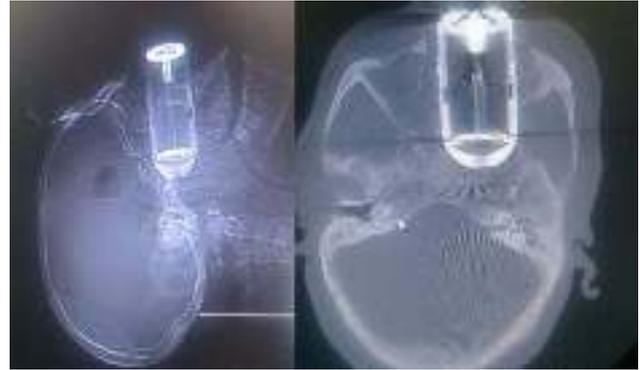


Figure 2. CT views of Patient-2



Figure 3. CT views of Patient-3

P-451

[Trauma]

ACUTE TRAUMATIC POSTERIOR SHOULDER DISLOCATION

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Introduction: Posterior shoulder dislocations(PSD) make up a small minority of total shoulder dislocation cases, accounting for 2-4% of presentations(1). However because of a low level of clinical suspicion and insufficient imaging,they are often missed.Approximately half of PSD go undiagnosed on initial presentation.We report a case of PSD in a patient post motor vehicle accident falling on left shoulder.

Case Report: A 40 year old man presented to the department of emergency medicine with a history of motorcycle accident. He complained that his left shoulder hurt and that he could not move it.Examination of the extremities revealed that the left shoulder was deformed with empty glenoid fossae and loss of the normal superior contour.The humeral head was

palpable posteriorly on the left side. The patient was unable to lift or externally rotate his left arm. Neurovascular status of the upper extremities was intact. AP radiographs of the shoulder (figure 1) appeared normal. Obtained trans-scapular Y views showed PSD (figure 2). To diagnose whether a proximal humeral fractures or glenoid fractures, computerized tomography (CT) was planned and reverse Hill-Sachs lesion was detected (figure 3). An orthopaedist consulted the patient for closed reduction techniques. Procedural sedation was performed. When the patient was sufficiently sedated, the left shoulder was reduced. The neurovascular examination was normal after the reduction. Repeat radiographs showed successful reduction of the shoulder and no associated fractures.

Discussion: Traditionally PSD have been associated with epileptic seizures, high energy trauma, electrocution and electroconvulsive therapy (1,2). Typically the arm is held in internal rotation and adduction. The most significant finding on examination is a limited range of active and passive external rotation of the effected arm as the head of the humerus is caught to the glenoid rim. Palpation of the humeral head in a posterior position is the only clear diagnostic feature on examination. PSD may be missed initially on frontal radiographs in 50% of cases, as the humeral head appears to be almost normally aligned with the glenoid. Cross-sectional imaging (CT) is often used to assess for the presence and extent of articular surface injury (reverse Hill-Sachs lesion), glenoid injury (reverse Bankart lesion) or ligamentous injury. The absence of external rotation on images in a standard shoulder series is a clue to PSD. An anteroposterior film alone is not adequate to rule out a posterior dislocation, as the film is often normal or near normal but PSD should be easily identified on trans-scapular Y views. When a PSD presents to the emergency department, unlike anterior shoulder dislocations which are relatively easily reduced, PSD are more problematic and attempts at closed reduction should only be performed in consultation with a treating orthopaedic surgeon (2). Closed reduction is indicated. If closed reduction is not successful, open reduction may be performed. If the shoulder has been dislocated for 3 or more weeks (particularly common in elderly debilitated patients) or if the anterior humeral articular injury (reverse Hill-Sachs lesion) involves more than 20% of the articular surface, then closed reduction is contraindicated.

References

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Keywords: posterior shoulder dislocation, reverse Hill-Sachs lesion, closed reduction



Figure 1. Anteroposterior left shoulder graphy appeared normal



Figure 2. Trans-scapular Y views showed posterior shoulder dislocation.

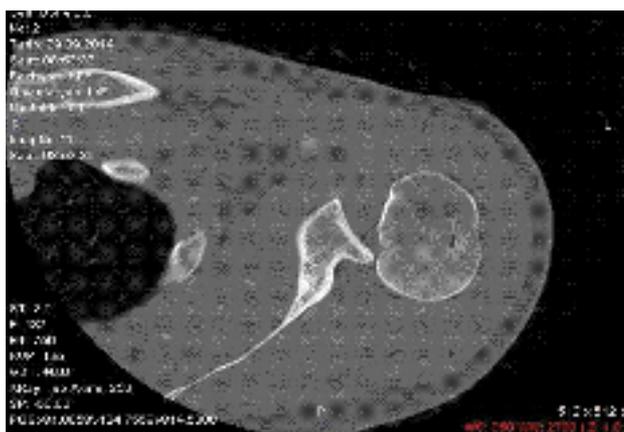


Figure 3. Computarize tomography revealed reverse Hill-Sachs lesion

P-452

[Trauma]

A CASE OF INTRACRANIAL MIGRATION AND RAPID SPONTANEOUS RESOLUTION OF TRAUMATIC ACUTE SUBDURAL HEMATOMA

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Traumatic acute subdural hematoma (ASDH) is a frequently seen life-threatening condition requiring emergency intervention. Spontaneous resolution and migration of ASDH are both rare entities, the causes of which are still not fully understood. We encountered no previous reports of intracranial migration of ASDH accompanied by rapid spontaneous resolution. This report describes a case of intracranial migration and spontaneous resolution within 24 h in a 61-year-old male patient with traumatic ASDH, together with a discussion of the relevant mechanisms.

Keywords: Intracranial subdural hematoma, migration subdural hematoma, spontaneous resolution

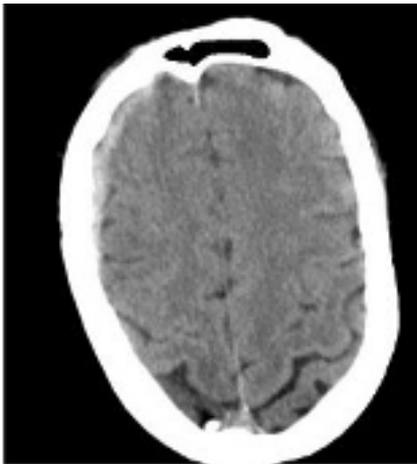


Figure 1.



Figure 2.

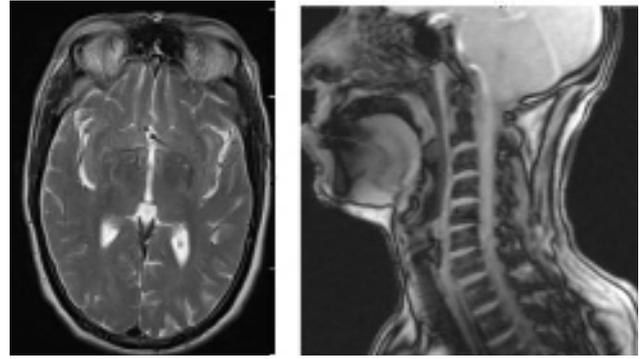


Figure 3 a,b

P-453

[Trauma]

ACUTE TRAUMATIC COAGULOPATHY AFTER LOW ENERGY TRAUMA: DOES COAGULATION PROFILE REQUIRE EVERY PATIENTS WITH BLEEDING

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Introduction: Acute traumatic coagulopathy (ATC) occurs after severe injury and shock and is associated with increased bleeding, morbidity and mortality. ATC is associated with factor reduction and reduced fibrinogen levels. We reported a case of a patient with ATC after incision of antecubital region.

Case: Twenty-five-years old male was admitted to the emergency department with of glass incision due to falling. The patient had no history of gastrointestinal or intracranial bleeding, epistaxis, hemarthrosis or any bleeding. The patient's vital signs were normal. Patient's incision was starting on the left arm antecubital medial side and extending approximately 10 cm through the humerus shaft. Muscle flap incision was present. There were no neural, osseous and movement disorder on the left hand (Figure-1). Due to first hemogram value reduced 14 to 10 mg/dl in one hour without fluid replacement, patient was consulted with cardiovascular surgery and preoperative blood values were sent to the laboratory. The patient's blood international normalized ratio (INR) value was determined 3,4. Patient's vascular doppler ultrasound examination revealed normal and primary suturation was recommended by cardiovascular surgery. For differential diagnosis of INR prolongation patient's platelet count, bleeding time, venous blood gases, liver function tests and toxicology panel were sent too. No pathology was found in these values. Four unite fresh frozen plasma and intravenous 10 mg vitamin K were given to patient. Control blood count and INR values reached the normal values within two hours. Suturation, sterile dressing, tetanus vaccine and intravenous antibiotic was administered and patient was discharged with cardiovascular surgery clinical control.

Conclusion: This case presentation may be important because it reminded the question of every patients presenting to ED with bleeding routinely needs of coagulation profile for definition of ATC possibility.

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Keywords: acute traumatic coagulopathy, bleeding, coagulation profile



Figure 1. Anterior-posterior X-ray of the patient's forearm

P-454

[Trauma]

CHARACTERISTICS AND BRAIN TOMOGRAPHY FINDINGS AMONG PATIENTS IN EMERGENCY DEPARTMENT SETTINGS

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Introduction: Penetrating gunshot head injury (PGHI) is a major cause of death in military attacks. Visible wounds or obvious penetration of the skull may indicate conventional or penetrating traumatic brain injuries, which are easily diagnosed. Lethal PGHI is caused often by primary blast effect, not the secondary and tertiary effects. The authors aimed to investigate the PGHI demographic characteristics and brain computed tomography findings.

Material-Method: The study was designed as data collection from medical records. Patients who were admitted to the Emergency Department between January 01, 2014 and June 07, 2014 with gunshot head injury constituted the study group.

Results: The study population included 92 patients. In the study 86 (98%) of the patients were male and 6 (2%) patients were female. The mean age of those 92 people was 25 ± 11,0.

Intracranial pathology types were found as pneumocephalus 89 (%96.7), intracranial hemorrhage (ICH) 88 (%95.7), subarachnoid hemorrhage (SAH) 19 (%20.7), epidural 13 (%14,1) and subdural 13 (%14.1). While a total of 35 (38%) patients died, 57 of the patients (62%) survived. The skull bone lesions were listed as 59 (64,1%) parietal, 57 (62%) temporal, 42 (54,3%) frontal and 32 (34%) occipital.

Conclusion: It is important that emergency department providers understand the nature of the gunshot weapons that are causing death and serious injuries with increasing frequency today, recognize the physiologic consequences of these weapons of war and terror, and are prepared to provide care that will save lives and reduce morbidity.

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Keywords: gunshot head injuries, emergency department, brain tomography

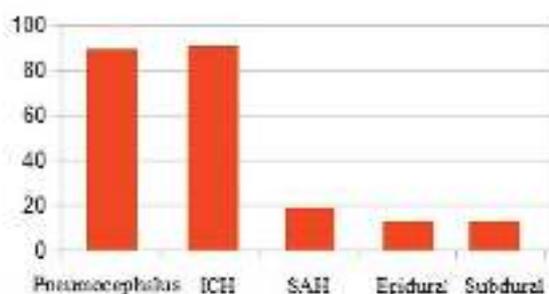


Figure 1. The Distribution of the Lesions in the Brain

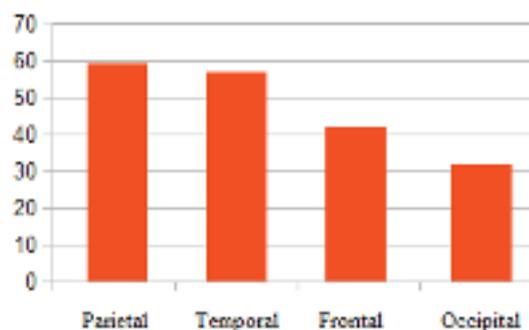


Figure 2. The Distribution of the Skull Bones Injuries

CASE REPORT: “TRAUMATIC CAROTID ARTERY DISSECTION”

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Introduction: Traumatic carotid artery dissection that is mostly seen in young patients and really rare because the intracranial carotid artery is less mobile and the skull absorbs most of the force of trauma. Delayed diagnosis can cause long term morbidity and even death. Here, we report a case of traumatic carotid artery dissection.

Case: 67 years old male patient was brought at the emergency department (ED) by ambulance after car accident. His vital signs were: GCS:13, disoriented, noncooperated, blood pressure:100/80 mmHg, pulse rate: 98/min, respiration rate:20/min. At physical examination; there was 2 cm laceration at his chin and 10x10 cm ecchymosis at left thigh, other examinations were normal. Non-contrast cranial CT and cervical CT were evaluated normal. At contrast thoracic CT, there were mild displaced fractures at left 9.-12. ribs and right 10.-11. ribs, displaced spinose process fracture at T10-11-12 vertebrae and there were minimally hemothorax and atelectasia at both lungs. At abdominal CT there was 22x18 mm adrenal hemorrhagia at right adrena gland. We couldn't explain of patients mental status with these findings. So we ordered diffusion weighted MRI and there was diffusion limitation at right parietal, occipital and temporale lobes. At right ICA's cervical, petrosal and cavernosal segments, there was signal loss that evidence of trombosis or dissection. That's why we ordered carotid DSA angiography and there was a dissection at right ICA. Patient was admitted to ICU and died at sixth day of admission.

Conclusion: Patients with carotid artery dissection can present with nonspecific complaints and in all settings. Maintaining a high index of suspicion for carotid dissection is critical whenever a patient presents with unusual focal neurologic complaints. In cases of high-impact trauma, a history of cervical hyperextension, flexion, or rotation should alert the physician to the possibility of dissection.

Keywords: Trauma, Carotid artery dissection, Emergency department.

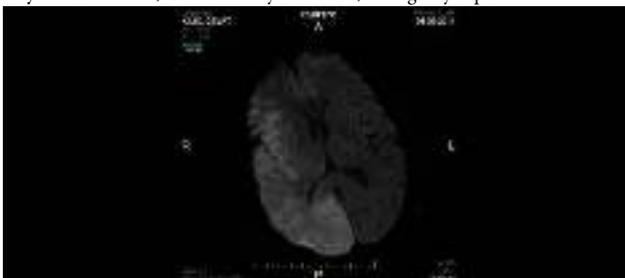


Figure 1. Diffusion weighted MRI
There was diffusion limitation at right parietal, occipital and temporale lobes.

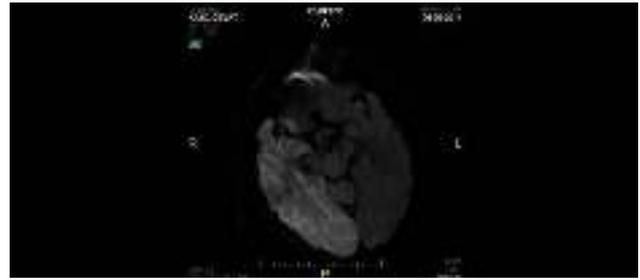


Figure 2. Diffusion weighted MRI-2
There was diffusion limitation at right parietal, occipital and temporale lobes.



Figure 3. DSA-1
There was a dissection at right ICA

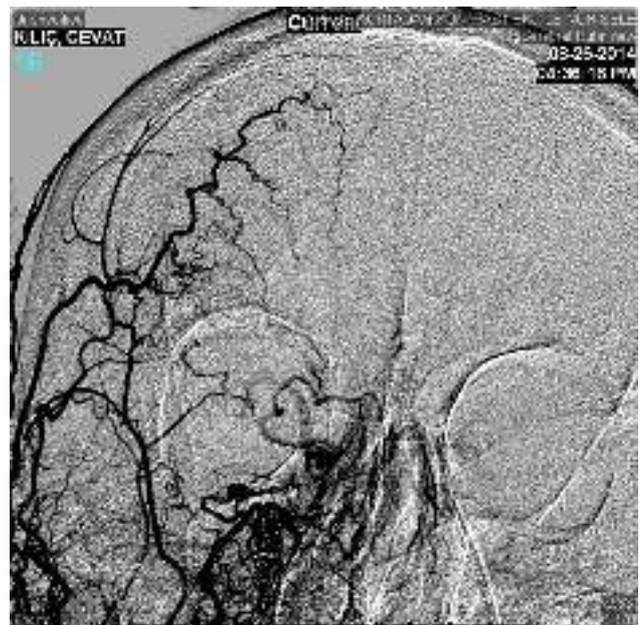


Figure 4. DSA-2
There was a dissection at right ICA.

P-456

[Trauma]

HEMATOLOGICAL MARKERS CAN DETECT INTRACRANIAL PATHOLOGY IN MINOR HEAD TRAUMASI

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Introduction: Head trauma is one of the most common causes of emergency department presentations. The patients with head trauma were classified at presentation according to GCS score, while those with GCS score<15 underwent CT scan. Although there are data to identify patients in whom a CT scan will be obtained, there are some difficulties either due to abundant data, busy emergency department, legal requirements or inability of patients or relatives to express the complaints.

Here, we aimed to investigate whether inflammatory markers such as neutrophil: lymphocyte ratio (NLR), platelet: lymphocyte ratio (PLR) and Red Cell Distribution Width (RDW) could be used as an objective data for CT indication in patients presented to emergency department with isolated minor head trauma.

Method: The study included 138 patients who presented with isolated minor head trauma. The case group was consisted of 38 patients with abnormal finding in CT scan, while the control group was consisted of 100 patients with normal CT scan. Patients with Glasgow Coma Scale score<15, those with multi-trauma, those with active infection, those with chest pain and those declined to participate were excluded.

Laboratory Methods: Blood samples were drawn into tubes with sodium citrate, which were evaluated at room temperature by using Penta DF Nexus analyzer (Hariba Medical) in biochemistry laboratory of Muğla University, Medicine School)

Statistical Analysis: All data obtained were recorded into SPSS Version 20.0 software. Data with normal distribution was compared with a parametric test, while data with skewed distribution was compared with a non-parametric test between groups. $p<0.05$ was considered as statistically significant.

Findings: The study included 138 patients (age range: 1-81 years) with minor isolated head trauma. It was seen that admission was required in 38 patients (27.5%) while surgery was needed in 14 patients (10.1%). When outcomes were assessed, it was seen that 129 patients were discharged to home, while 5 patients (3.6%) were referred to another facility due to several reasons and 4 patients (2.9%) died during follow-up. When cases were stratified into 2 groups as those with and without abnormal finding in CT scan, it was seen that there were significant differences in WBC, Hb, RDW, MPV, neutrophil, Troponin and NLR between groups.

When cases were stratified into groups according to treatment, it was seen that there were significant differences in WBC and troponin between patients underwent surgery or not.

Conclusion: There were significant differences in WBC, Hb, RDW, MPV, neutrophil, Troponin and NLR between patients with or without abnormal finding in CT scan.

Keywords: Minor Head Trauma, Intracranial Pathology, Hematological Markers

P-457

[Trauma]

OUT-OF-VEHICLE TRAFFIC ACCIDENT: A TRAUMATIC ASPHYXIA CASE

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Introduction: Traumatic asphyxia is a clinical syndrome that occurs due to excessive increase in venous pressure resulting from severe blunt thorax trauma. Characteristics findings include petechia at face and upper thoracic areas, subconjunctival hemorrhage, cervical cyanosis and temporary loss of vision due to retinal edema and varying degrees of neurological symptoms. Profound cyanosis may develop which may be accompanied by petechia and subcutaneous hemorrhage. Cyanosis is observed at head, neck and upper thoracic areas. Clinical presentations varying from mild symptoms to coma may develop due to hemorrhage and edema at brain.

Case: An 18-months old boy referred to our emergency department with out-of-vehicle traffic accident by his parents (Figure 1-2). On the triage assessment, there was decreased level of conscious (tended to sleep), prominent petechia and cyanosis particularly at neck and facial area with oxygen saturation of 65%, blood pressure of 100/60 mmHg and tachycardia (heart rate: 120 bpm). No evidence of fracture that may explain petechia and cyanosis at neck and facial area was observed on chest radiography, brain CT scan and maxillofacial CT scan. The patient was diagnosed as traumatic asphyxia secondary to chest trauma and admitted to hospital. After 3-days follow-up, the patient was discharged to home.

Conclusion: Traumatic asphyxia causes cyanosis observed at neck and face resulting from increased venous pressure. Particularly, care should be taken in blunt thorax traumas.

Keywords: Out-of-Vehicle Traffic Accident, Traumatic Asphyxia, Emergency Medicine



Figure 1.



Figure 2.

P-458

[Trauma]

TESTICULAR TORSION AFTER MOTORCYCLE ACCIDENT

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Introduction: Testicular torsion occurs when a testicle rotates, twisting the spermatic cord that brings blood to the scrotum. The reduced blood flow causes sudden and often severe pain and swelling. Trauma induced testicular torsion is a well recognised entity, the incidence being 4-8% in most studies reporting on testicular torsion. Testicular torsion usually requires emergency surgery. If treated within a few hours, the testicle can usually be saved. But waiting longer can cause permanent damage and may affect the ability to father children. We presented a case report of traumatic dislocation of left testicle after a motorcycle accident. This type of testicular injury should be included in the whole evaluation of every multitrauma patient at the emergency department and usually requires a surgical treatment.

Case: A 27-year-old man was admitted to our Emergency Department after motorcycle accident. His vital signs are all normal. GKS was 15. There was not any history of undescended or retractile testis and no pain at the left groin region in the past. On physical examination, there was not any abrasion or hematoma on the perineum or scrotum, but he has pain on the left sided of scrotum. The testis was palpable in the left inguinal region. A color Doppler U/S revealed that the left testis was located in the inguinal canal, with normal size, and adequate blood supply of the testis. Although doppler us was normal, patient clinic was most valuable. Urology consultant decided to operate. Patient was got ready rapidly for operation.

Conclusion: Although rare, testicular dislocation may be a serious result of abdominopelvic trauma, esp motorcycle accidents. In case of delayed diagnosis and treatment, testicular rupture causes testicular atrophy, infertility and usually results with the loss of that testicle.

Keywords: testicular torsion, motorcycle accident, emergency department



Figure 1. Testicular torsion

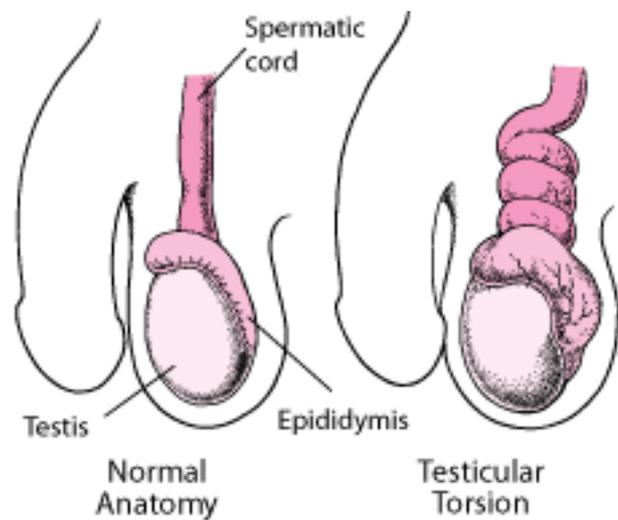


Figure 1. Testicular torsion.

P-459

[Trauma]

IDENTIFICATION OF PRESCHOOL (0-6 YEARS) CHILD TRAUMA RESEARCH

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Introduction and aim: Traumatic injuries are the first cause of childhood deaths under the age of 14. In developing countries, it is the second major cause of the children, aged 1-4. The injuries of pre-school age usually occur because of the "avoidable" accidents. Although there are simple injuries in many times, the extent of death and disability cannot be underestimated. The goal of our study was describing the demographics of the children who were 0-6 years of age and were admitted to the emergency for trauma between 1 January 2013 and 31 December 2013.

Results: We had 2403 patients who admitted during the study period, 1700 of them were given forms in the triage area, the forms of 1038 patients which were fully completed, enrolled in this study. In our study the average age was 34.57 ±0.63 months old and the ratio was 1.35 between boys (n=598) and girls (n=440). Injuries occurred most commonly at home and around the home. Falling at the same level-beating was the

most common trauma mechanism. Head and neck injuries and upper extremity injuries were in the first two cases of the list and most of these injuries were minor injuries. We have seen that the average pediatric trauma score was 10. Our findings about social-economic status and education of families were contrasts with the findings of existing literature. Children often middle-good-looking, and have educated parents.

Conclusion: The injuries of pre-school age usually result with minor injuries of upper extremity and head. These simple injuries can be prevented by watching children closely while they are playing.

Keywords: Preschool, children, trauma, emergency department.

Table 1.

Gender	Accuracy	Percentage
Female	410	42.40
Male	590	57.60
Total	1000	100

Table 2.

Type of injury	Accuracy	Percentage
Fracture	950	95.0
Dislocation	50	5.0
Open wound	310	29.90
Contusion	360	34.70
Deam	70	6.90
Blow	20	0.20
Other	190	18.60

Table 3.

Type of accidents	Accuracy	Percentage
Car accidents	120	12.0
Profession accidents	120	12.0
Fall	365	35.20
Fall from high	300	29.40
Crush injury	210	20.10
Drowning	10	0.10
Burn	70	6.80
Wounds	25	2.50
Electrical injury	2	0.20
Shooting Gun Injury	10	0.60
Other	135	13.40
Total	1000	100

Table 4.

Injury localization	Accuracy	Percentage
Head, neck	600	57.80
Torso	160	14.0
Upper extremity	230	22.60
Lower extremity	140	14.40
Crural area	60	9.60
Multiple area	30	3.20
Normal	10	0.20
Total	1000	100

Table 5.

Place of accident	Accuracy	Percentage
Home	680	66.10
Around of home	180	18.20
Children Park	40	7.40
Day care center	20	3.50
School	20	3.80
Road	40	4.40
Other	40	6.80
Total	1000	100

Table 6.

Result	Accuracy	Percentage
Discharge	900	90
Hospitalization	70	6.90
Toxology	10	0.10
Total	1000	100

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[Trauma]

A CASE OF INTERESTING FIREARM INJURY

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Objective: Firearm injuries create serious damage to many organs and cause severe neurological and orthopedic sequels. Thus, its mortality and morbidity are very high. While in direct injuries the bullet itself generates the damage, the main cause of damage in indirect injuries is the pressure caused by the shock wave the created by the bullet when it hits the target or is the compartment syndrome caused by the cavitation process.

Case: In this case, we wanted to present a male patient aged 15 years that has an entry wound in 1/3 middle medial area of the left thigh, without exit wound, caused by firearm injury. According to a series of physical examinations and imaging studies, it was determined that the bullet was in 1/3 middle anterolateral area of the left cruris. The patient has a fracture only in the proximal of tibia, with no neurovascular injury, was operated by the orthopedic department.

Conclusion: In this case report, we aimed to discuss the emergency management of a patient that suffered from firearm injury.

Keywords: emergency department, firearm injury, tibia fracture



Figure 1.



Figure 2.



Figure 3.

P-461

[Trauma]

HEADS UP! STRETCHING TOO MUCH SPONTANEOUSLY FRACTURES CLAVICULA

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Spontaneous clavicle fracture is an uncommon presentation type in emergency departments. Clavicle fractures may occur direct or indirect trauma, but indirect trauma to the lateral shoulder frequently creates etiology of most of the cases. Frequency of clavicle fractures decreases by age, thus it is the most fractured bone in the childhood. We want to present a case who spontaneously fractured his left clavicle while stretching his arms toward his back.

Case: 72 year old male with sudden onset of pain on his left clavicle occurred after stretching his arms toward his back,

was referred to our emergency department. He had no serious medical history except hypertension. He describes pain on his left clavicle while moving his left shoulder and denies any trauma which might be associated with his pain. Physical examination showed tenderness and palpable crepitation on the middle of left clavicle. A PA Chest and left shoulder was obtained to patient. Nondisplaced fracture in the middle of clavicle was detected (Figure 1). So velpau bandage was performed to patient and discharged from emergency department.

Conclusion: Bone fractures are mostly associated with trauma and common cases in emergency departments. Spontaneous bone fractures can also occur, especially in patients with comorbid diseases such as malignancy, hyperparathyroidism, senile osteoporosis etc. Our patient had no direct trauma on his shoulder and this fracture was only associated with movements of the arms which people frequently do during daily life, and it makes the case interesting. The etiology of patient could only be osteoporosis and not diagnosed before with specialists. Our patient's fracture can be complicated with nonunion -failure of healing after 4-6 months- due to advanced age and he has to be clinically followed-up. Sudden onset of pains in elderly patients and in patients with comorbidity must warn emergency physicians about spontaneous bone fractures.

Keywords: spontaneous fracture, trauma, clavicle, geriatric emergency

Fracture

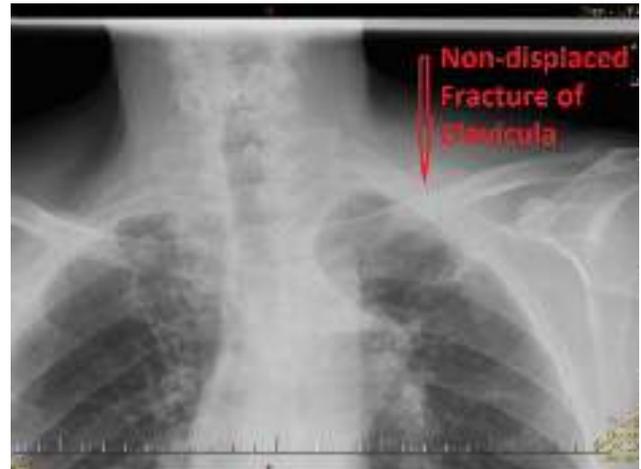


Figure 1. Arrow showing the non-displaced fracture of clavicle

P-462

[Trauma]

HYOID BONE FRACTURE DUE TO FALLING DOWN: A CASE REPORT

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Aim: Fractures of hyoid bone are rare and most of the injuries cause by strangulation. Hyoid bone fractures are usually the result of direct trauma to the neck through falling down, and occur more frequently in young individuals, and in men more than in

women. Hyoid fracture is frequently masked by the associated soft tissue injuries of the neck. On the other hand, the fracture may be misdiagnosed in the case of slight soft tissue injury. The management of this injury has special considerations.

Case: A 49 year-old man who came to our emergency department with neck bleeding and neck pain after falling from about 1m while he was chopping wood. Physical examination revealed mild swelling of the middle left side of the neck, with a 3 cm superficial laceration at zone II on the left side of the neck; there was no limited range of the motion of the neck. Subcutaneous emphysema or expanding hematoma was not found during physical examination. The patient complained of mild soreness, odynophagia, hoarseness and dysphonia, but neither respiratory distress nor focal neurological deficits were found. Soft tissue USG and soft tissue view radiography was normal. Neck computed tomography (CT) was done because of persisting neck pain and it revealed a bony fracture involving the left side of the hyoid bone with adjacent soft tissue swelling (Fig. 1). This patient was hospitalized Department of Otolaryngology.

Conclusion: Neck injury can manifest with various symptoms and signs; sometimes, no specified physical findings are noted in a stable patient, which makes diagnostic strategies difficult. We described a case of middle left-side comminuted fracture of the hyoid bone because of direct contusion after a fall. Direct nasolaryngoscopy was performed to ensure safety of the airway. Moreover, CT was performed to confirm the findings of lateral radiography of the neck as well as to exclude the possibility of associated injuries. The great majority of uncomplicated cases of hyoid fracture, as shown in the literature, can be treated conservatively.

Keywords: hyoid, neck, fracture

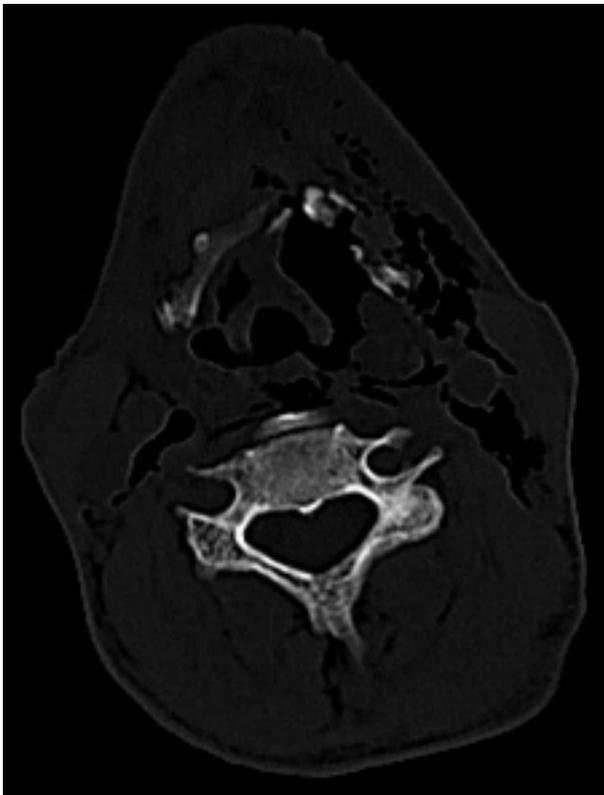


Figure 1. Hyoid fracture

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[Trauma]

A NEW MEDICAL DEVICE: MAGNET

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Introduction: At times, history is not revealed, magnet was invented. Its use was limited in industrial areas. Industry produced man-machine. Such people, due to their work-related injuries, form as well as flesh and iron. In this case, the authors document a patient with ferromagnetic foreign bodies impaction in the neck soft tissue and removal with magnet in emergency department (ED) settings.

Case: A 25-year-old male was admitted to ED with piece of metal stuck on the neck soft tissue. Foreign body can be palpated and also magnet moved towards the skin over the foreign body. No injury was observed in the other parts of the body. Carotid artery was determined 2 cm in front of the foreign body. The region, where most of the magnet power sense, was sterilized and anesthetized. The wound was extended 4 mm with forceps. After incision of 2 mm, metallic object was leaving the wound spontaneously and it was stuck to the magnet (Figure-1,2). This process was completed only in 3 minutes.

Conclusion: Magnet can be easily determinate and remove the metallic foreign bodies. It is practical to use and cost effective. Magnet can be substituted for x-ray because of easy and cheap method.

Keywords: Magnet, foreign bodies, medical device



Figure 1. Foreign Body Removal by Magnet



Figure 2. Foreign Body and Magnetic Property Reinforced Industrial Magnets

P-464

[Trauma]

PING – PONG FRACTURE

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Introduction: Children frequently experience head injuries because of several factors. A child's head accounts for a relatively larger proportion of body mass and area. The bones of the neck are not fully developed, so the head is attached with largely ligamentous connections. The incompletely myelinated brain is more susceptible to shear forces during trauma. Because of cartilage in the skull and the presence of open sutures, young children are better able to tolerate increased intracranial pressure than are adolescents and adults. Parietal bone fractures account for 60% to 70% of skull fractures in children. These are followed by occipital bone fractures, frontal bone fractures, and temporal bone fractures in decreasing order of frequency.

The ping-pong skull fracture is akin to a greenstick fracture of the long bones in children. It occurs in the first few months of life and is usually caused by a fall when the skull hits the edge of a hard blunt object, such as a table. The skull appears deformed, with a shallow trench on the surface of the skull. The ping-pong skull fracture was first described in a newborn whose head was impinging against the mother's sacral promontory during uterine contractions. The use of forceps also may cause this injury to the skull, but this mechanism is rare.

Case: Six month infant presents to emergency department fall related head trauma

The patient was alert, and didn't syncope, convulsion or vomiting after trauma. On examination there was a closed depressed fracture at right occipito – parietal region. Ct scan showed that depressed ping-pong fracture on the right occipito - parietal region of skull (fig. 1). There was no contusion, midline shift or hemorrhage sign on ct. The patient was admitted to

neurosurgery department and followed 36 hours along then discharged without neurological deficit.

Conclusion: Depressed skull fractures, result from a high-energy direct blow to a small surface area of the skull with a blunt object. Comminution of fragments starts from the point of maximum impact and spreads centrifugally. Most of the depressed fractures are over the frontoparietal region because the bone is thin and the specific location is prone to an assailant's attack. A free piece of bone should be depressed greater than the adjacent inner table of the skull to be of clinical significance and requiring elevation.

Keywords: Trauma, Ping - Pong Fracture, Neurosurgery

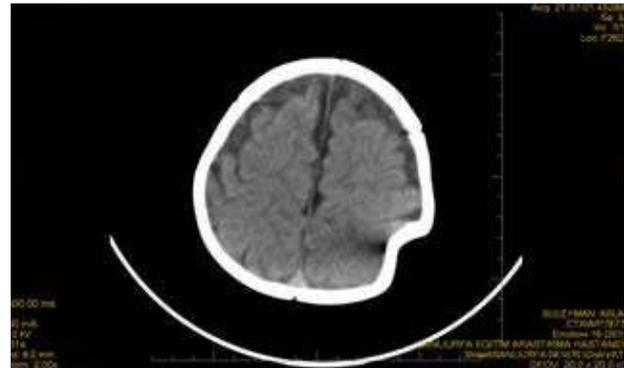


Figure 1. Depressed ping-pong fracture on the right occipito - parietal region of skull. There was no contusion, midline shift or hemorrhage sign on ct.

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[Trauma]

PATIENT WITH A TRAUMATIC BRAIN INJURY DUE TO BARREL BOMB TERTIARY BLAST EFFECT

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Introduction: Preparing to manage a weapons of mass destruction event challenges emergency services systems every day. Understanding injury from explosives is essential for all providers of emergency care in both civilian and military settings. In this case report, the authors reported a twenty-two years old head trauma patient who presented to emergency department with displaced skull fracture, epidural hemorrhage and cerebral contusion due to barrel bomb tertiary blast effect.

Case: Twenty-two years old man complained of pain in the right temporal head region after barrel bomb explosion. The patient did not remember the explosion and found himself on the floor. In his medical history there wasn't any known disease, operation or trauma. He had no drug allergies, did not drink alcohol or smoke. He was not taking any drug. On emergency department admission the patients vital signs were normal. His neurologic and other systems examination was normal except traumatic amnesia. His medical history was unremarkable. Examination of the head revealed scalp hematoma and slump in the skull on the right temporal region. Patients computed tomography was request. Computed tomography (CT) scan showed a displaced skull fracture, epidural hematoma and cerebral contusion (Figure-1,2).

Conclusion: Blast injuries result from explosions occur as a direct result of blast wave-induced changes in atmospheric pressure (primary blast injury), from objects put in motion by the blast hitting people (secondary blast injury) and by people being forcefully put in motion by the blast (tertiary blast injury). This patient was driven away about four meters and harshly hit his head on the ground with blast effect of the explosion.

It is important that emergency care providers understand the nature of the explosive weapons that are causing death and serious injuries with various mechanisms.

Keywords: barrel bomb, blast effect, head trauma

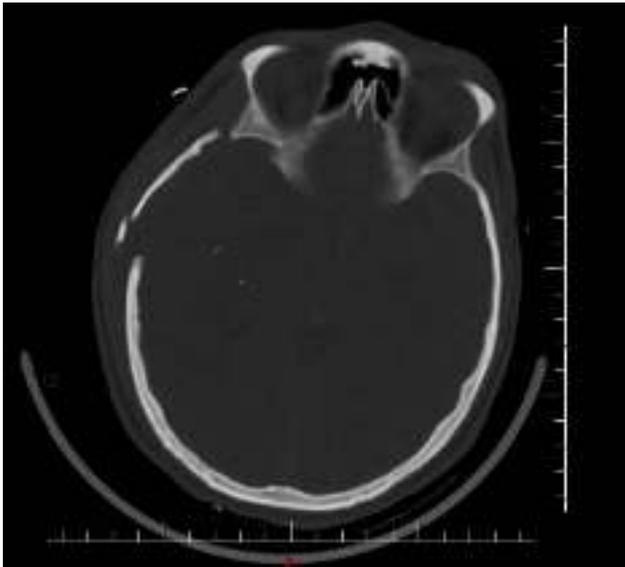


Figure 1. Displaced Skull Fracture

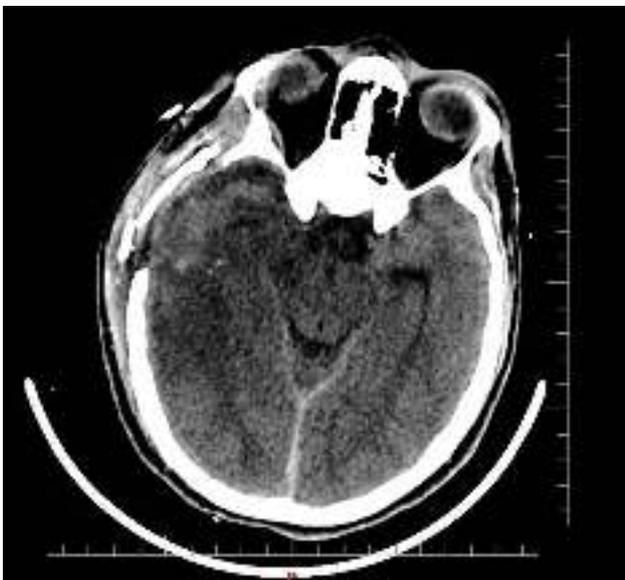


Figure 2. Epidural Hematoma and Cerebral Contusion

P-466

[Trauma]

ACHILLES TENDON INJURY AS A RESULT OF KICKING IN A GLASS DOOR

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Introduction: Achilles tendon pathologies include rupture and tendonitis. Achilles tendon rupture, a complete disruption of the tendon, is observed most commonly in patients aged 30-50 years who have had no previous injury or problem in the affected leg and are typically “weekend warriors” who are active intermittently. Patients with an Achilles tendon rupture frequently present with complaints of a sudden snap in the lower calf associated with acute, severe pain. The patient reports feeling like he or she has been shot, kicked, or cut in the back of the leg, which may result in an inability to ambulate further. A patient with Achilles tendon rupture will be unable to stand on his or her toes on the affected side. We present a case with achilles tendon injury and rupture caused by kicking in a glass door.

Case: 21 year-old woman was admitted to the emergency department due to the incision in the back of the left ankle. She had no medical history of a diseases or drug use. On examination, he was conscious, oriented and hemodynamically stable; Her initial vital signs were; blood pressures 126/68, pulse rates was 86/min, temperature was 36.9 C, respiratory rate was 18 breaths/min. She was afebrile and had an oxygen saturation of 90% on room air. There were skin, subcutaneous tissue and achilles tendon injury with inspection (FIGURE 1). In history patients kicked the glass after a social stressor and this cut has occurred. There were no large blood vessels or nerve injury. The patient was unable to plantar flexion on examination. System examination was normal in other systems. She was consulted to orthopedics department. Patients were hospitalized to be operated. The patient was discharged on sixth day after successful operation.

Conclusion: Medical therapy for a patient with an achilles tendon rupture consists of rest, pain control, serial casting, and rehabilitation to maximize function. Ongoing debate surrounds the issue of whether medical or surgical therapy is more appropriate for this injury. Achilles tendon injury has an excellent prognosis, allowing for some degree of morbidity through reduced range of motion. With proper treatment (conservative or surgical) and rehabilitation, most patient with achilles tendon rupture are able to return to their previous activity levels.

Keywords: Achilles Tendon Injury, kicking, plantar flexion



Figure 1. Achilles Tendon Injury After Kicking In A Glass Door

P-467

[Trauma]

THE ATYPICAL COURSE THAT A BULLET FOLLOWS IN GUNSHOT INJURY OF THORAX

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Introduction: Firearms have always drawn the attention of human beings throughout the history. As it has become easier to access firearms, the frequency of injuries and deaths due to firearms has increased. Particularly after hitting the bone tissue, bullets may change direction in the body and get stuck into unexpected body parts. This, in most cases, causes us to encounter undesirable results. This poster present a case where a bullet targeted at the heart and lungs follows an extraordinary way in the body and penetrates into the abdomen after hitting the ribs.

Case: A 29-year-old male patient was brought to the emergency department(ED) due to firearm injury(Fai), resulting from a bullet that hit him in the chest half an hour ago. The patient was conscious, cooperative and oriented. The values vital signs, BP:100/70 mmHg, PR:90/min, RR:20/min. On the left hemithorax, at the level of the sixth intercostal artery, neighboring the sternum, there was a bullet entrance hole of 0.5x0.5 cm. The exit hole of the bullet could not be found. Fluid replacement was administered the patient, who had stable hemodynamics. Abdominal and cardiac ultrasonography, performed under emergency conditions, didn't show pericardial fluid and free abdominal fluid. Thorax tomography performed on the patient with stable hemodynamics didn't show any injury or bullet fragments in thoracic organs (Figure 1). Then, abdominal tomography was performed with the supposition that the bullet might have hit the ribs and changed direction. The abdominal tomography showed that the bullet got stuck next to the 3rd lumbar corpus vertebrae (Figure 2-3). The examination of lower extremities didn't show any neurovascular deficit. Antibiotherapy, tetanus prophylaxis and iv fluid treatment were administered to the patient. Laboratory tests were requested, and three units of erythrocyte suspension were prepared. The patient was operated after being observed in ED.

In the surgical operation, it was found that the patient had injuries in diaphragm and small intestines, and the injuries were fixed. The bullet wasn't removed from where it was stuck.

Conclusion: In Fai, a bullet entering from a body part which is normally not likely to cause a mortal wound may have mortal effects if the bullet changes direction, or a seemingly mortal wound may become unthreatening because of the changed direction.

In Fai where the exit hole of bullet cannot be found, emergency physicians are required to carry out a detailed physical examination and use imaging techniques to discover any undesirable injuries.

Keywords: Emergency Medicine, thorax, gunshot injury

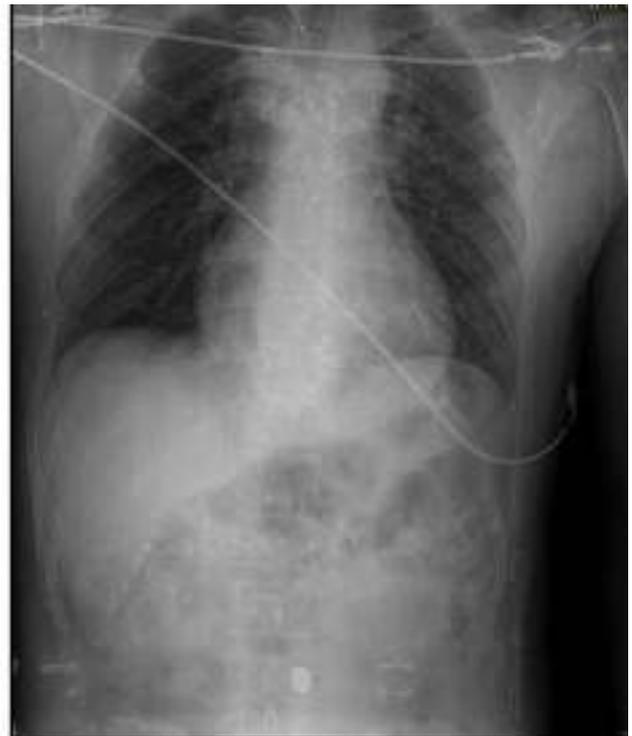


Figure 1.

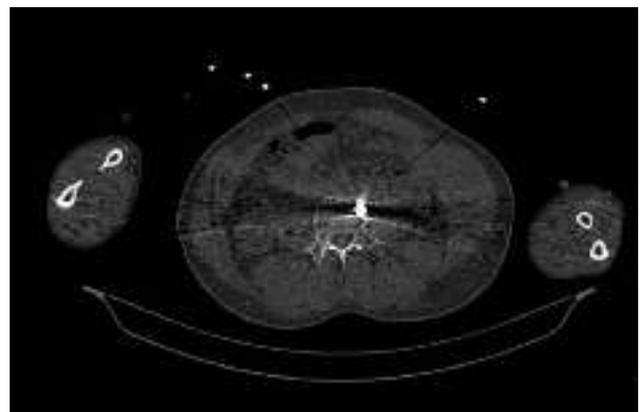


Figure 2.



Figure 3.

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[Trauma]

GUNSHOT INJURY FROM RIGHT BUTTOCK TO LEFT KNEE AND NO COMPLICATION

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Gunshot wounds have the greatest potential for buttock injury because the thick musculature and fat over the buttocks normally protects the GI, GU, and neurologic systems from injury in all except the deepest penetrating trauma from stab wounds. With gunshot wounds, the risk of intraperitoneal injury is much higher and may necessitate immediate exploratory celiotomy. Approximately 30% of patients who present with gunshot wounds to the buttock require surgery. After the initial trauma resuscitation and primary and secondary surveys are complete, determine preexisting vascular and neuromuscular deficits, and the events surrounding the injury, such as the type of gun and number of shots. Perform a careful and thorough physical examination to identify significant injuries rapidly to determine whether immediate surgical intervention is necessary and which diagnostic studies are indicated.

Emergency management of penetrating extremity injuries and advances in surgical technique enable arterial repair with an extremely low rate of postoperative thrombosis, making the recognition and rapid treatment of arterial injury important. Associated injury to soft tissue, nerve, and bone is now the primary determinant of limb salvage. Emergency physicians play a crucial role in the management of penetrating extremity injuries by identifying injuries early and promptly initiating care crucial

to limb rescue. Unnecessary delays (>6 to 12 hours) in treatment can lead to irreversible limb ischemia and subsequent limb loss.

Our case study is 2 years old female patient presents to emergency department with gunshot injury from right sacroiliac region to left knee (Fig. 1). The patient first evaluation GKS was E4 M6 V5:15 and vital signs were stable. There was no any rebound and defance in the abdominal examination. In rectal examination there was no blood. In neurologic examination of lower extremities was normal and peripheral pulses were open. Ct scan showed there was no any fracture of bones and free fluid in abdomen (Fig. 2-3). We administered antibiotic and followed observation unit in emergency department for one day and discharged without neurologic and vascular deficit.

For gunshot wounds, obtain details of the weapon, and determine the potential bullet track. Perform a careful abdominal and rectal examination. Assess the peripheral pulses in the lower extremities for decreased pulses or pallor as evidence of a more proximal injury. Perform a neurologic examination of the lower extremities searching for any injury to the sciatic or femoral nerve. Buttock wounds rarely cause direct damage to the sciatic plexus or femoral plexus. Injury could include transection, partial transection, or stretch injury secondary to the trauma. Multiple antibiotic regimens are available, but coverage for gram-negative aerobic and anaerobic organisms is required. Most injuries of this nature (other than the very superficial) will require admission to the hospital for observation because of the risk of missed injuries.

Keywords: Gunshot, Trauma, Pediatric



Figure 1. Gunshot injury from right sacroiliac region to left knee



Figure 2. Ct Scan Image In Sagittal Plane



Figure 3. Ct Scan Image Upper Side Of Knee

types of it considered preventable. Mortality and morbidity rates could be decreased with some screen tests especially on people with higher risk. We will present you a long time smoker with metastatic lung cancer who became paraplegic after trauma.

Case: 70 year old male patient admitted to emergency department with paraplegia after falling down at his bathroom and hit his back to the edge of the sink. He had chest pain for one week and no previously know disease at his medical history. His vital sign was stable, he was conscious, cooperative and oriented. There was no pathological findings at cardiology, kardiovascular surgery and general surgery consultations. Bilateral lower extremity motor and sensory loss observed at the patient with mass lesion at the left lung at plain chest radiogram and multiple fractures at magnetic resonance imaging. Stage 4 lung cancer with generalized vertebral metastasis and multiple vertebral fractures after trauma caused by metastatic vertebrae and paraplegia due to medulla spinalis transection determined after pulmonology and neurosurgery consultations. The patient was discharged with the request of himself and his relatives whom diagnosed with inoperable lung cancer.

Conclusion: Community health screens at population with higher risk for malignancy or geriatric patients, is important for early diagnose and treatment of diseases with high mortality rates like cancer. Therefore, raising the awereness of public, and making health screen campaings especially for common types of cancer, is a public health care problem, that will be incoporably beneficial compared to after disease losses.

Keywords: incidental lung cancer, paraplegic patient, trauma

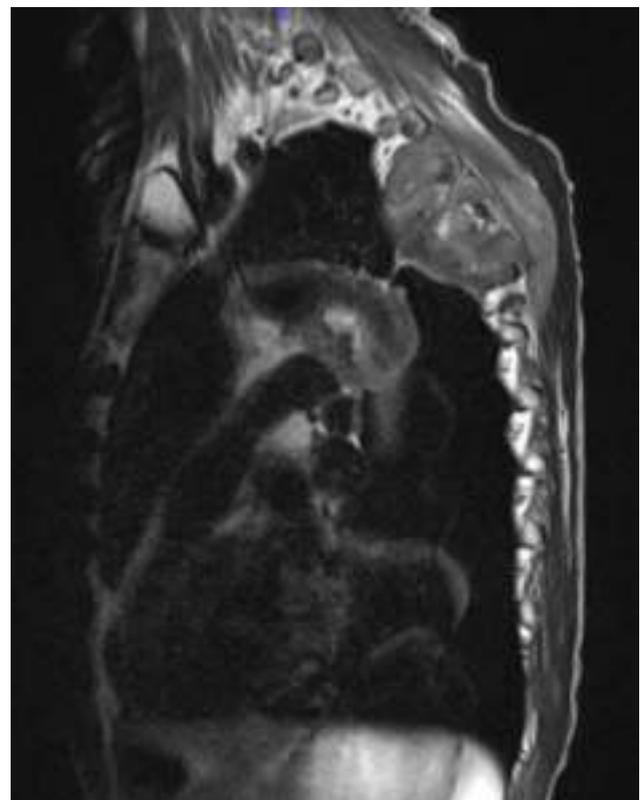


Figure 1

P-469

[Trauma]

CASE OF INCIDENTAL LUNG CANCER: PARAPLEGIC PATIENT AFTER TRAUMA

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Purpose: Lung cancer incidence is steadily increased over the last century and became the most common type of malignancy all over the world. Its relevance with cigarettes is proven, so most

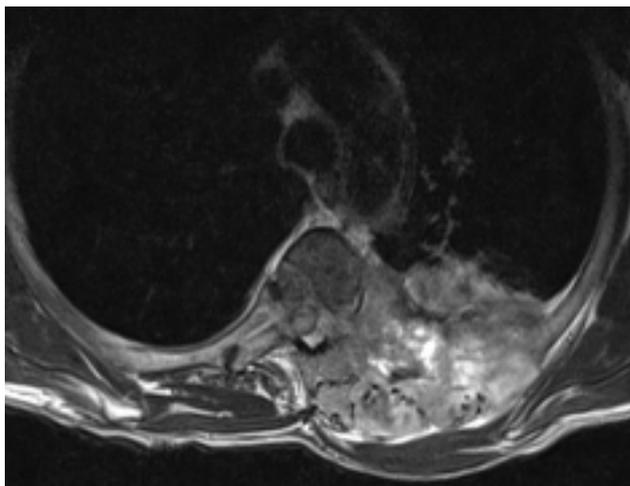


Figure 2

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[Trauma]

A TRAFFIC ACCIDENT WITH MULTIPLE RIB FRACTURES, BILATERAL PNEUMOTHORAX, PNEUMOMEDIASTINUM AND FLAIL CHEST

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Introduction: Blunt chest traumas have been an important entity especially because of the increasing incidence of traffic accidents. The chest wall and the soft tissues are the locations most commonly affected by blunt traumas. After blunt thoracic trauma, incidence development of fractures of bony thorax is 35-40% and is often benign entities. Blunt chest traumas can impact respiratory mechanics directly. Flail chest is an uncommon consequence of blunt trauma but flail chest is a serious problem due to the risk of respiratory insufficiency. Mortality in patients with flail chest is reported as 10-40% in literature. Respiratory insufficiency in flail chest is the result of paradoxical movement of flail segment and pain.

Case: A 62-year-old male patient was admitted to our emergency department after a motor vehicle accident. His chest was trapped between the seat and the steering wheel. On physical examination, the patient was conscious, agitated and dyspneic the oxygen saturation was 82 percent and respiratory rate was 22 pm. Arterial blood pressure was 100/60 mmHg, pulse 118 beats/min, respectively. Chest examination revealed flail chest on the left side of thorax on inspection and bilaterally diminished breath sounds and coarsening on auscultation. Bilateral chest tubes insertion was performed to the patient immediately in the emergency department transferred intensive care unit. Computed tomography showed bilateral pneumothorax, bilateral lung contusion especially prominent on the left side, pneumonia mediastinum, and widespread subcutaneous emphysema. There was multiple rib fractures on left side resulting in flail chest on 3,4,5 th and bilaterally nondeplaced fractures on 6,7,8,9 th ribs (figures 1,2 and 3).

Conclusion: Blunt chest trauma may result in life-threatening, pneumothorax, pneumomediastinum, flail chest and widespread

chest wall destruction, that should be noted. Early diagnose and prompt intervention could be life saving.

Keywords: blunt thoracic trauma, pneumothorax, flail chest



Figure 1. PA chest plan radiogram

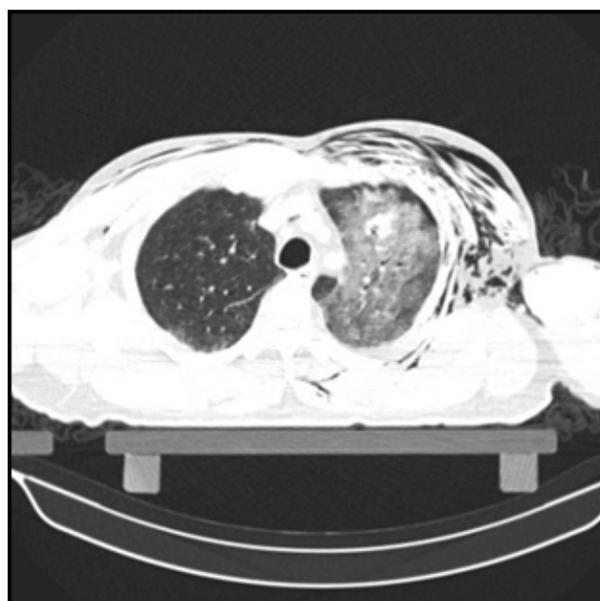


Figure 2. Shows thorax CT imaging



Figure 3. Three dimensional chest CT shows rib fractures

P-471

[Trauma]

EPILEPSY AND SPLENIC RUPTURE

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Introduction: Epilepsy and epileptic seizures related traumas are common problems in the emergency departments. Generally bone fractures are seen. But if the patient had a high energy trauma multipl organ injuries also can be seen. Organ injuries are rarely found by low energy traumas. In this case we present a splenic rupture after epileptic seizure while walking.

Case: 47 years old male patient brought by ambulance after epileptic seizure. He had a seizure while walking and then he fell on the road. He had a epilepsy history but he didn't know the drug which he used. In physical examination; GCS: 13(E3M6V4) TA: 120/70 mmHg, HR: 90atım/dk, RR:24/ dk, sPO2:98% and he had a tenderness on left upper quadrant. There was no lesions due to trauma on his body. after 10 minutes his GCS was 15 but his abdominal pain got worst. The results of laboratory tests were; WBC:7050/mm³, Hb:13.5 g/dl, Hct:40.4%, Plt:125000/mm³, ALT:14 U/L, AST:42 U/L, Na:129 mEq/L. The patient underwent abominal computerized tomography. CT revealed hypodens area in midsplenic zone and perihepatic and subhepatic free fluid(Figure 1). In control vital signs there was no instability. Consultation with genel surgery was nade and the patient admitted to the surgery intensive care unit for follow up. 4 hours after admission hypotension ocured. In complete blood count, Hb: 8.9 g/dl, Hct:26.7% ve Plt: 75300/ mm³ was calculated. The patient underwent to emergent operation to splenectomy.

Conclusion: Epilepsy related injuries are most commonly seen as bone fractures but we have to keep in mind the organ injuries due to the truma. Although it is a epileptic seizure we have to evaluate patient as a multi trauma case.

Keywords: Epilepsy, seizure, trauma

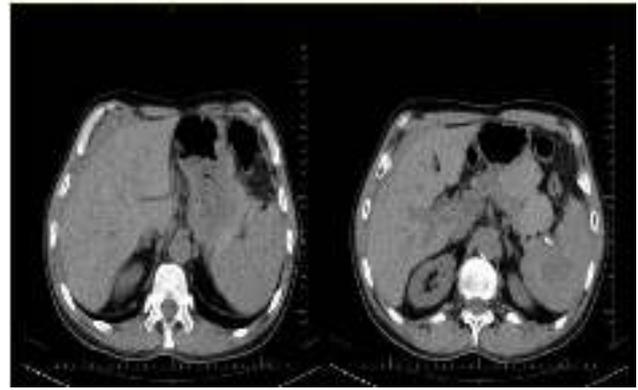


Figure 1. CT views

P-472

[Trauma]

CAN A RUBBER BALL HITTING BE REPRESENTED AS AN ACUTE ABDOMEN?

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Objective: Cystic echinococcosis (CE) is an infection caused with the parasite echinococcus granulosus(1). CE can affect all organs, but hepatic cysts account for about 75%, pulmonary for about 15% and renal for about 2–4% (1). Rupture of hepatic hydatid cysts usually occur spontaneously by the increase of intracystic pressure (2). In our case we would like to report a 8 years old boy who presented to emergency department (ED) with severe abdominal pain previously a rubber ball hit to his stomach; diagnosed as ruptured hydatid cyst.

Case: A 8 year old boy admitted to ED with abdominal pain and vomiting after a rubber ball hit to his stomach two hours ago. On his physical examination there was an abdominal rigidity with normal vital signs. We supposed possible solid organ injury or perforation and bed-side sonography was performed meanwhile. When free fluid was detected in sonografic examination, he was sent to ct scanning after routine blood and urine tests obtained. On contrast enhanced ct scan, four hydatid cysts were found; biggest one approximately 55 mm in diameter (figure1) and one of the cysts was ruptured located in the 6th segment of the liver surrounded with free fluid (figure2). On the laboratory tests WBC:13100, neutrophil: %91 and eosinophil: %0 was detected. The liver, kidney function tests and urine analysis was normal also. At the end the patient was consulted with pediatric surgery and they decided a non-operative treatment; with albendazol and iv fluids. After a week of hospitalization; he was discharged with oral albendazol treatment for three weeks to plan elective operation decision.

Discussion: The initial period of cysts formation is usually asymptomatic. Patients have no complaints until cysts reach 5 cm in diameter. Asymptomatic cysts are commonly detected as routine examinations, surgery or imaging for another reason incidentally. Symptoms arise with the pressure of cycts to adjacent organs or complications as rupture. Although a huge cysts 55 mm of diameter, he had no symptoms until a minor abdominal trauma resulting as a rupture in our case.

Conclusion: Because CE is asymptomatic unless it becomes to certain vulnerable dimensions for perforation or make pressure to adjacent organs; it should be considered in the differential diagnosis of acute abdomen following a blunt (even minor) abdominal trauma in endemic regions as Turkey.

References:

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2. Kalantari N, Bayani M, Abbas-zadeh M. Rupture of hydatid liver cyst into peritoneal cavity following blunt abdominal trauma; a case report. Emergency. 2014;3

Keywords: Acute abdomen, Minor blunt trauma, Hydatid Cyst



Figure 1. One of the cysts was ruptured located in the 6th segment of the liver surrounded with free fluid

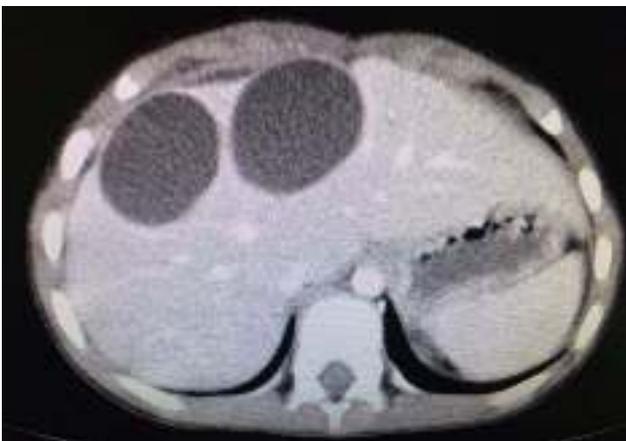


Figure 2. Four hydatid cysts were found; biggest one approximately 55 mm in diameter

P-473

[Trauma]

HEMATOMA BLOCK IN METACARPAL FRACTURE REDUCTION

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Objective: Metacarpal fractures are common causes of admission to the emergency departments. The reduction of these fractures are painful and hard. Hematoma block may be used during the reduction. We wanted to share a patient with fracture of 5th metacarpal that was performed hematoma block during reduction procedure.

Case: A 22 year old male patient admitted to ED with the complaints of swelling and pain in his left hand which occurred after punching. In his physical examination, there were deformity and edema in the distal part of fifth metacarpal bone. The finger motions were painful but were not limited. Hand radiographs showed close displaced fracture in the distal part of fifth metacarpal bone. Hematoma block was performed for pain control due to its ease of application and effectiveness. Hematoma was located with ultrasound and 5ml 2% prilocaine was injected to the hematoma region. In control examination, relaxation in the fracture line was observed and pain was decreased. After block, the fracture was reduced and applied forearm cast. After orthopedics consultation, the patient was discharged advising control examinations.

Conclusion: Metacarpal fractures are taking part in orthopedic emergencies and common causes of admission to the emergency departments. Displaced fractures shall be reduced and casted. Before these procedures, hematoma block can be used for pain control. Hematoma block can be preferred because of its ease of application and effectiveness. After block, reduction procedure will be efficiently performed. Also ultrasonography will be beneficial during the procedures, and the block will be performed more easy and fast with help of ultrasonography.

Keywords: Hematoma Block, Metacarpal Fracture, Reduction

P-474

[Trauma]

DOES A BULLET ALWAYS HIT THE DESIRED TARGET?

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Introduction: According to forensic medicine data, 4885 cases were included in firearm injuries (FAI) incidents in 2013. Bullets entering the body are likely to change direction after hitting solid surfaces such as a bone tissue. In such a case, the bullet gets stuck into an area which is unexpected when the entrance hole is considered and causes serious harms in unexpected body parts, surprising the clinicians. This presentation is related to the FAI of a case whose abdominal part was the target of bullet; however, the bullet hit the left pelvic bone and then got stuck in the right thigh area, changing its direction.

Case: A 39-year-old male patient was brought to our ED due to FAI. The patient declared that he was shot by gun and that he had pain in the left hip. He was conscious, cooperative and oriented. His vital sign values were as follows, BP:135/80 mmHg, PR:98/min, RR:18/min and SO2:96%. In his first physical examination, a bullet entrance hole of 0.5x0.5cm in the left anterior superior iliac spine (ASIS) was seen. There was bullet wipe residue around it. No exit hole was found on the back of the patient. There was no any other firearm wound on his body. He didn't describe any pain in body parts other than the bullet entrance hole. The patient, who had stable hemodynamics, was administered fluid replacement. The abdominal ultrasonography, performed under emergency conditions, didn't show any free abdominal fluid or parenchymal organ damage. In the abdominal tomography, no injuries or bullet fragments were seen in abdominal organs (Figure 1). Then, right and left femur radiographies were performed with the consideration that a bullet entering from the left ASIS is likely to hit the right iliac crest and divert to lower extremities. The bullet was found in the soft tissue of femur medial in the middle of the right thigh. There was no fracture in the bone (Figure 2). He was hospitalized for the purpose of observation and treatment.

Conclusion: As it was the case with our patient, bullets are likely to hit particularly bone structures and then change direction in the body. That is why a detailed physical examination and use of imaging techniques are required in the cases of FAI where the exit hole cannot be found. Physicians are required to be prepared for any undesirable injuries and keep in mind that a bullet does not always hit the desired target.

Keywords: Emergency Medicine, firearm injuries, Bullet



Figure 1.



Figure 2.

P-475

[Trauma]

ASSESSMENT OF TRAUMATIC DEATHS IN A LEVEL ONE TRAUMA CENTER IN ANKARA, TURKEY

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Trauma management shows significant progress in last decades. Determining the time and place of deaths indicate where to focus to improve our knowledge about trauma. We conducted this retrospective study from data of trauma victims who were brought to a major tertiary hospital which is a level one trauma center in Ankara, Turkey, and died even if during transport or in the hospital between 1 March 2010 and 1 March 2013. The patients' demographic characteristics, trauma mechanisms, time frames and causes of deaths determined by physicians were recorded. Traumas were grouped as "high energy trauma" (HET) and "low energy trauma" (LET). Falls from groundlevel were defined as LET. 209 traumatic deaths due to trauma or trauma-related conditions were found in the study period. 161 of 209 (78 %) patients suffered from HET. Motor vehicle collisions (MVC) (56 %) were the most common mechanism of trauma followed by burns (16 %), falls (11 %), gunshots (9 %) and stabs (6 %) in this group and traumatic brain injuries (TBI) (41 %) were the most common cause of death followed by circulatory collapse (22 %) and multi-organ failure (20 %). 36 % of deaths occurred

before arrival at hospital, 25 % in the first 24 h of admission, 18 % between 2nd and 7th day and 21 % after first week. Trimodal distribution of traumatic deaths was not valid for all types of injuries and the most important factor to decrease traumatic deaths is still prevention.

Also we have to keep on searching to improve our knowledge about trauma management.

Keywords: Trauma, Death, Turkey

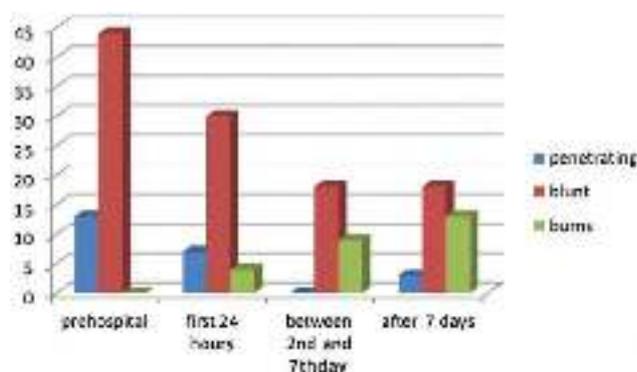


Figure 1. Deaths in the given time intervals according to trauma mechanisms

	number of patients	%
MVC	91	44
Falls (high and low)	65	31
Burns	26	12
Gun shots	14	7
Stabs	9	4
Assault	2	1
Drowning	1	0,5
Landslide	1	0,5
Total	209	100

	Prehospital	First 24 h	2-7 days	After 7 days	Total n(%)
MCV	37	26	15	13	91 (56)
Burns	—	4	9	13	26 (16)
Falls	6	4	3	4	17 (11)
Gun shots	5	6	—	3	14 (9)
Stabs	8	1	—	—	9 (6)
Assault	1	—	—	1	2 (1)
Drowning	—	—	1	—	1 (0,5)
Landslide	1	—	—	—	1 (0,5)
Total HET n (%)	58 (36)	41 (25)	28 (18)	34 (21)	161 (100)
LET n (%)	1 (2)	0 (0)	26 (54)	21 (44)	48 (100)

	Prehospital n	First 24 h n	2-7 days n	After 7 days n	Total n (%)
Traumatic brain injury (TBI)	32	12	12	10	66 (41)
Circulatory collapse (CC)	16	19	1	—	36 (22)
CC+TBI	5	9	2	2	18 (11)
Respiratory	5	1	3	—	9 (6)
MOF	—	—	10	22	32 (20)
Total n(%)	58 (36)	41 (25)	28 (18)	34 (21)	161

	Blunt	Penetrating
Gender (M/F)	85/25	21/2
Age (Mean ± SD)	51,61 ± 21,9	43,30 ± 28,1
Causes of deaths		
TBI	64	2
CC	18	18
TBI + CC	17	1
Respiratory	7	0
MOFS	8	2
Time frames of deaths		
Prehospital	44	13
First 24 hours	30	7
2-7 days	18	0
After 7 days	18	3

P-476

[Trauma]

TESTICULAR RUPTURE DUE TO BLUNT TRAUMA

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Testicular rupture is an urological emergency developing after blunt or penetrating trauma and is frequently seen in adolescents and young adults. We aimed to discuss a patient who presented to our emergency department with a history of assault 2 day ago and symptoms of pain and swelling in the scrotum, leading to a diagnosis of testicular rupture.

A 38-year-old male patient had been assaulted 2 days ago. He presented to the emergency department with symptoms of pain, swelling and bruising in the scrotum. The general condition was good. Physical examination revealed stable vital signs. Hyperemia in the scrotum was noted and a painful swelling of the left testicle 5-6 cm in size palpated. Color Doppler US revealed heterogeneous left testis parenchyma and hypoechoic heterogeneous areas with unclear boundaries, indicating testicular rupture. A urology consultation was requested and the patient underwent left orchiectomy.

The testicles are not protected by bone or muscle tissue. However, testicular rupture is uncommon as the organ is mobile and surrounded by serous fluid, and can be protected

by cremasteric muscle contraction. Testicular rupture is more common between the ages of 15 to 45 years. It may develop after blunt or penetrating injuries. Blunt testicular rupture is the most common type. History and physical examination is important in the diagnosis. The most common clinical finding is extreme tenderness and pain in the testis during palpation. Hyperemia, edema and ecchymosis can be observed on the side of the trauma or in the skin of both scrotal sides. The testicles cannot be totally palpated due to scrotum edema in many cases. Differential diagnosis with the other causes of acute scrotum may not be possible due to these findings. The reliability of scrotal ultrasound and Doppler ultrasonography for the diagnosis of testicular rupture is >90%. Blunt testicular traumas are 1% unilateral while penetrating testicular ruptures are 30% bilateral. The testicular rupture rate in severe blunt trauma to the scrotum is 50%. This ratio increases to 80% in patients where a hematocele is detected. The choice of conservative or surgical treatment is still controversial. Conservative treatment is preferred if the hematocele is smaller than 5 cm or smaller than one-third of the size of the other testicle. Surgical intervention at an early stage is known to be important in increasing the rate of saving the testicle. Surgical delay reduces the rate of saving the testicle from 80-90% to 45-55%. Surgical hematocele drainage decreases the infection and hospitalization rates. Orchiectomy was performed in our case due to presentation 2 days after the event.

Blunt testicular traumas are often the result of sports injuries and traffic accidents. Although rare, we think that the incidence will increase due to the popularity of contact sports, increase in traffic accidents, and increase in physical abuse in the society. Emergency physicians should therefore consider testicular rupture first in the differential diagnosis of testicular traumas and should know that the testicle can be saved with early diagnosis and treatment.

Keywords: emergency medicine, rupture, testicular trauma



Figure 1.

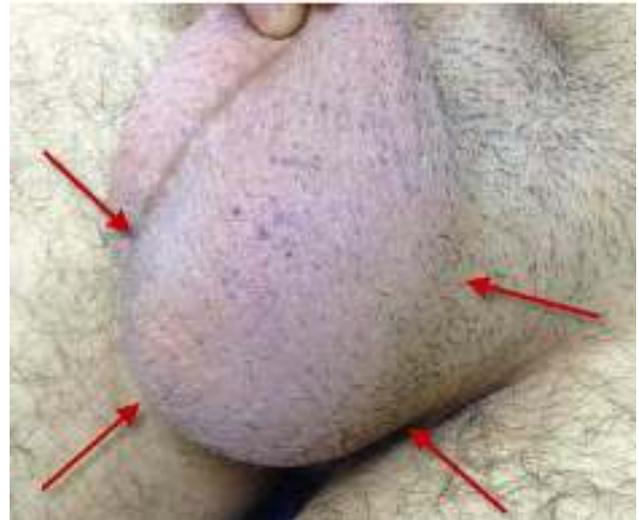


Figure 2.

P-477

[Trauma]

PENETRATING AXILLARY REGION INJURY CAUSING PNEUMOMEDIASTINUM WITHOUT PNEUMOTHORAX

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Pneumomediastinum (PM) is identified as the presence of extra-alveolar free air inside the mediastinum. PM can occur with trauma or spontaneously. We present 3 pediatric cases that developed PM due to subcutaneous entry of external air as a result of penetrating axillary region injury not penetrating the chest in this study and emphasize the difficulty and importance of diagnosing this injury at the emergency department.

An 8-year-old male presented following the entry of an iron bar into the armpit. The patient had a a cut about 4 cm in depth and 2 cm in length in the left axillary fossa. Vital signs were stable and other examination findings were normal. Subcutaneous emphysema was observed in the chest radiograph. Thoracic computed tomography (CT) revealed air densities between the skin and subcutaneous tissues and muscle planes from the left axillary region to the 6th intercostal space. The patient's primary lesion was sutured and antibiotics were prescribed. The patient presented again two days later with shortness of breath. Thoracic CT revealed air densities especially around vascular structures at the upper mediastinum (pneumomediastinum). A consultation was requested and the patient hospitalized for follow-up. The patient was later discharged after his condition improved.

A 9-year-old male presented following the entry of an iron bar into the armpit. He had a 1.5 cm incision at the left axillary fossa and crepitation on palpation. Vital signs were stable and other examination findings were normal. Thoracic CT revealed air values in the subcutaneous tissue at left axillary region and left lateral thoracic wall. The primary lesion was sutured and antibiotics were prescribed. The patient presented again the next day with chest pain. Thoracic CT revealed air values extending among the muscle planes in the left axilla to the anterior thoracic wall, prevertebral and paratracheal areas, and the superior mediastinum (pneumomediastinum). A consultation

was requested and the patient hospitalized for follow-up. The patient was later discharged after the subcutaneous emphysema resolved and his condition improved.

An 11-year-old female presented following the entry of glass into the armpit. She had a 6 cm incision in the left axillary fossa including the muscles and crepitation was present on palpation at the axillary fossa and the cervical region. Vital signs were stable and other examination findings were normal. Thoracic CT revealed air values at the left axillary region and subcutaneous tissues in the left lateral thoracic wall and the prevascular, paratracheal, parasophageal areas and superior mediastinum (pneumomediastinum). The patient's primary lesion was sutured and prophylactic antibiotics were prescribed. A consultation was requested and the patient transferred to another hospital due to the lack of space. She received conservative treatment for 4 days after admission. The symptoms improved and the subcutaneous emphysema resolved. The patient was discharged on the 5th day.

Pneumomediastinum is a clinical condition with high morbidity and mortality due to its potential complications. Pneumomediastinum should therefore be considered and the relevant tests performed in patients presenting to the emergency department due to axillary region injury.

Keywords: Axillary Injury, Emergency Medicine, Pneumomediastinum,

Case 1. Axial Thoracic CT Image



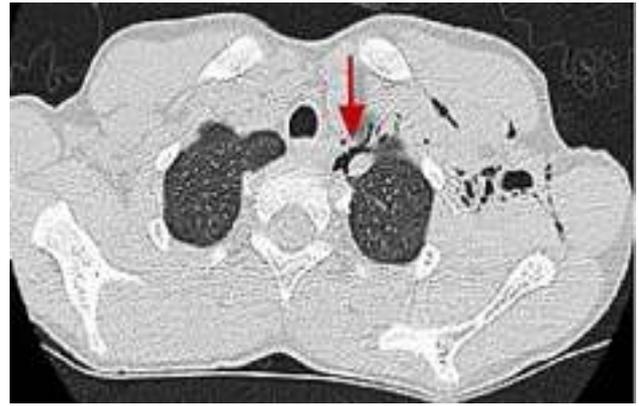
Air densities at the upper mediastinum (pneumomediastinum)

Case 2. Axial Thoracic CT Image



Air densities at the upper mediastinum (pneumomediastinum)

Case 3. Axial Thoracic CT Image



Air densities at the upper mediastinum (pneumomediastinum)

P-478

[Trauma]

CAPOEIRA TRAINING INDUCED MASSIVE SPONTANEOUS DIAPHRAGMATIC RUPTURE

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Introduction: While a diaphragmatic rupture commonly results from trauma to the abdomen and chest, spontaneous diaphragmatic rupture (SDR) in young people is extremely rare and potentially life threatening clinical entity. Many cases of SDR followed by strenuous sports have been reported in the medical literature. However, there has been no previous reports on a case of massive SDR after a Capoeira Training without any trauma.

Case Presentation: We report the case of a 27-years-old male who presented to the emergency department (ED) with pain in the left upper quadrant of his abdomen that started 2 hours before visiting the ED. He had pain during fast moves in the training of Capoeira. Capoeira is a fast and versatile martial art which is historically focused on fighting outnumbered or in technological disadvantage. The radiography and computerized tomography of his chest demonstrated a left massive SDR. After that diagnosis, the patient had immediately taken to the surgery. During surgery the diaphragm has been repaired and a chest tube had been inserted. The patient had an uneventful postoperative period and was discharged on six days after the operation.

Discussion: To our knowledge, this is the first description of massive spontaneous DR arising while in the Capoeira training, probably resulting from increased intra-abdominal pressure. This and similar reports emphasize that in cases with high clinical suspicion of DR, diagnosis should be pursued even in the absence of a preceding traumatic event. Emergency physicians should keep in mind that sport activities may cause SDR.

Keywords: diaphragmatic rupture, emergency department



Figure 1. Chest x-ray (anteroposterior view), showing an elevated left diaphragm and stomach herniation into the left thoracic cavity (bowel gas above the diaphragm).



Figure 2. Thoracic computed tomography showing Herniation of abdominal contents into the left thoracic cavity.

P-479

[Trauma]

TRAUMATIC PNEUMORRHACHIS: TWO CASE REPORTS

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Objective: The presence of air in spinal canalis known as pneumorrhachis. It is also called as aerorachia, intraspinal pneumocele, pneumosaccus, pneumomyelogram, or simply intraspinal air. Pneumorrhachis can be divided into three groups as iatrogenic, traumatic and nontraumatic. In this study we

studied two cases admitted to the emergency department with sharp object injury and detected with pneumorrhachis. **Case reports:** Two patients, at the age of 31 and 40 with penetrating injuries in the neck area and with motor deficits in the right and left half of the body admitted to the emergency service, and their treatment were examined. One patient underwent surgical intervention and the other one was followed with medical therapy. Pneumorrhachis is a rare clinical condition defined as air presence in epidural or subarachnoid space of the spinal canal. Subarachnoid air can be moved easily into the cranial or caudal through valve mechanism. It can lead to local pain in the back, the affected area, and headaches or nerve compression. Neurological symptoms due to compression were present in both patients on admission. The air in the spinal canal can be detected with graphy. However, computed tomography or magnetic resonance imaging can be required for a more precise diagnosis. In many cases it was observed that air resolved spontaneously with absorption. However, surgical intervention may be required for the definitive treatment when no evidence of absorption is observed. **Conclusion:** Traumatic pneumorrhachis is a rare important table that should be taken seriously by all trauma experts. As the air detected in the spinal canal by radiographic imaging can be connected to an active cerebrospinal fluid leak, and thus can cause spinal compression, it should be followed.

Keywords: trauma, pneumorrhachis, intraspinal air, spinal canal

P-480

[Trauma]

İLGİNÇ BİR EV KAZASI: ÜÇÜ BİR YERDE

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Amaç: Ev kazalarına bağlı yaralanmalar özellikle çocukluk çağında ciddi oranda morbidite ve mortaliteye sebep olmaktadır. Göz yaralanmaları, özellikle çocukluk döneminde görme kaybı ve az görmenin en sık nedenlerinden biri olup, yaşam kalitesini azaltan etkenlerdendir ve tüm travmaların %8-14'ünü oluşturmaktadır. Bu çalışmada dikkatsizlikten kaynaklanan ev kazası sonucu göz ve beyin yaralanması meydana gelen bir çocuk olguyu sunduk.

Olgu Sunumu İki yaşında erkek çocuk evde annesinin örgü şişi ile oynarken hastanın sol gözüne şiş batması nedeniyle 112 tarafından acil servise getirildi. Fizik muayenesinde: Genel durum orta, şuur letarjik, kooperasyon-oryantasyon kısmi, pupiller izokorik, ışık refleksi bilateral pozitif, dört extremite spontan hareketli. Ayrıca sol göz kapağı ödemliydi. Sol gözde ağır subkonjonktival ödem (kemozis) ve subkonjonktival hemoraji bulguları saptandı. Eksternal muayenede sol gözünün üst kapağının altından sol gözüne girmiş bulunan örgü şişi mevcuttu (Resim 1). Çekilen Orbita BT'de sol orbitada göz küresinin lateralinden geçerek kraniuma giren ve frontoparyetal bölgede verteks düzeyinde sonlanan örgü şişine ait olduğu düşünülen yabancı cisim izlendi (Resim 2). Beyin Bilgisayarlı Tomografisinde (BT) sol frontoparietal bölgede kalınlığı en geniş alanda 3 mm'ye ulaşan subdural hemoraji görüldü. Sol frontoparietal bölgelerde en geniş yerinde 5x10 mm boyutlarında kortikal- subkortikal yerleşimli intraparakimal hemoraji ve SAK ile uyumlu olabilecek hiperdens

görünüm izlenmiştir. (Resim 3). Göz ve beyin cerrahi klinikleriyle konsülte edildi. Bu bulgularla hastanın sol orbitasındaki yabancı cisim çıkarıldı. Gözde perforasyon bulgusu izlenmedi. Beyin cerrahi açısından takip önerildi. Yoğun bakımda 5 gün takip edilerek servise alındı. 4 gün servis yatışı sonrası taburcu edildi. Hastanın takiplerinde görme bozukluğu ve nörolojik defisit gelişmedi.

Sonuç: Çocukluk çağı yaralanmalarında ebeveynlerin dikkatli olması çok önemlidir. Küçük bir dikkatsizlik, bizim olgumuzda olduğu gibi ciddi organ yaralanmasına neden olabilir. Bu bakımdan uygun ev ve oyun alanları çocukları pek çok yaralanmadan korumaya yardımcı olacaktır. Ev kazalarına karşı dikkatli olunmalı ve ebeveynler bilinçlendirilmelidir.

Keywords: Ev kazası, beyin yaralanması, göz yaralanması



Figure 1. Göze batmış örgü şişsi

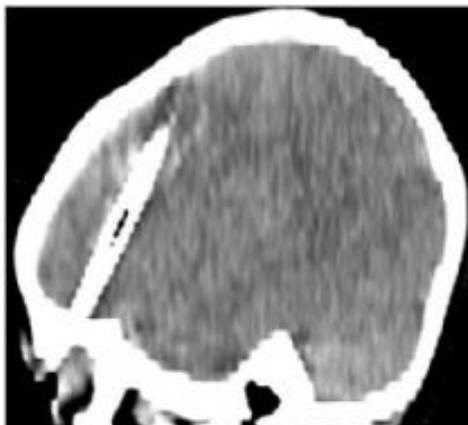


Figure 2. Orbita BT

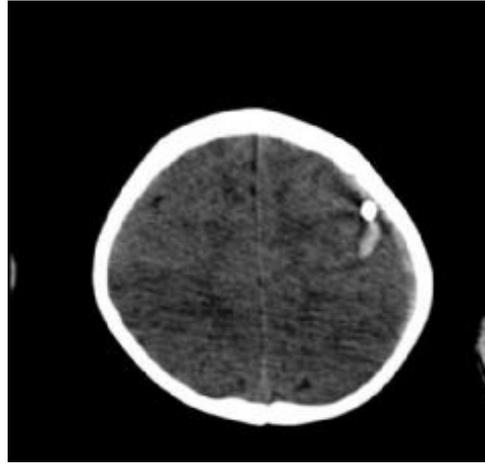


Figure 3.

P-481

[Trauma]

IDENTIFICATION OF THE RISK FACTORS OF INTRACRANIAL PATHOLOGY FOR PATIENTS WITH MINOR HEAD TRAUMA AND WHO USE ANTIAGREGAN AND ANTICOAGULANT

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Anticoagulation treatment are used for a variety of medical conditions. Warfarin or aspirin are commonly used to treat atrial fibrillation, deep vein thrombosis, pulmonary embolism, coronary artery disease, transient ischemic attacks. The use of these drugs is prominent in the age group over 65 years. For these patients, the risk of a fall or other trauma increases.

Minor head trauma is defined as patients' having GCS 15, with or without post-traumatic amnesia or loss of consciousness. Minor head trauma is one of the most common causes of emergency department presentations. Due to the increasing use of CT, diagnosis with head injuries has increased, but for minor head trauma CT examination has been debated. For the ones with minor head trauma study, the results of clinical and brain CT were found to be compatible, however in another study CT scan for patients with minor head trauma was found to be unnecessary.

Methods: Patients should be evaluated by doctors in the ED; no interference will be made during diagnosis and treatment. Demographic information, symptoms, risk factors, tests and results of patients will be recorded. In addition to the required consultation in the emergency department, length of stay in intensive care unit, in hospital or according to the intracranial pathology, the requirement of surgery and mortality rates will be examined. We will call patients or their relatives after one month. The medical condition of the patients and whether they have suffered from intracranial pathology in the past month will be questioned by an investigator.

Results: Between June 1, 2014 and October 15, 2014, 264 patients with minor head trauma were admitted to the emergency department. 15.9% of them (n=42) were taking antiplatelet or anticoagulant and among those patients, 69% (n=29) were taking aspirin 14% (n=6) were taking clopidogrel, 4.7% (n=2) were taking warfarin, 9.6% 's (n=4) were taking aspirin and clopidogrel.

Forty patients (95%) had CT scanned. 9.5% (n=4) were identified and admitted to intensive care unit because of bleeding even one of the patients has died. In most of the cases the reason was falling 66%(n=28), the most common symptom was nausea 21% (n=9).

Discussion: Severe studies have reported vomiting as a post traumatic symptom, which predicts abnormality related to the trauma in brain CT scan. However, Viola et al. said that vomiting was insignificant. In our study the most common symptom was nausea. Mack and colleagues proved that headache is a low-risk predictor. But some studies did not lead to similar results and showed that headache could not be used as a risk indicator. In this study headache was detected in 75% of patients with intracranial bleeding.

In a more recent retrospective study, Spektor et al. found no statistically significant increase in traumatic intracranial hemorrhage for patients taking low-dose aspirin who suffered minor to moderate head trauma. Mina et al reported that preinjury anticoagulation therapy contributes significantly to the mortality of intracranial head injuries with a four-to fivefold higher risk than nonanticoagulated patients. In this study, Cranial CT scan detected bleeding in 4 patients (9.5%). All of these patients were taking aspirin and one of them was taking both aspirin and the clopidogrel.

Conclusion: For patients with minor head trauma and who take antiplatelet, intracranial bleeding and even death may occur.

Keywords: aspirin, antiagregan, anticoagulant, head trauma,

P-482

[Trauma]

CERVICAL DISLOCATION AFTER A MINOR FALL

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Introduction: Cervical zone injuries compose 55-60% of all vertebral injuries. Especially, mechanism of trauma gives valuable information about the type of the spinal trauma. Motor vehicle accidents, diving accidents, falls, injuries which causes mental status change are high risk situations for spinal injuries. We presented a patient with cervical dislocation after a minor fall.

Case: A 40 year old female was brought by paramedics with complaints of extremity weakness and numbness; which began after fall. Vitals were stable and Glasgow Coma Score was 15 on initial examination but had paresthesia and paresis in all extremities. She defined pain on the neck and cervical spine tenderness was present with palpation. Cervical immobilization was ensured and imaging was performed. Cervical CT scan revealed dislocation of C5-6 vertebrae (Figure-1). She was hospitalized for further observation in the neurosurgery clinic.

Conclusion: In patients with high risk for spinal injury, cervical immobilization should be provided for secondary injuries and imaging should be done as soon as possible. However in this case, mechanism of the trauma did not contain high risk but patient had symptoms of cervical spinal injury. Therefore, high risk or not, every patient, whose neurological examination is not intact, should have cervical immobilization.

Keywords: cervical, dislocation, vertebra



Figure 1.

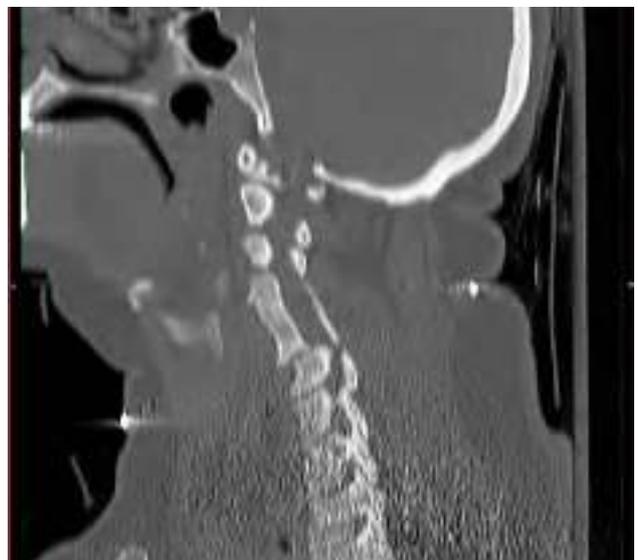


Figure 2.

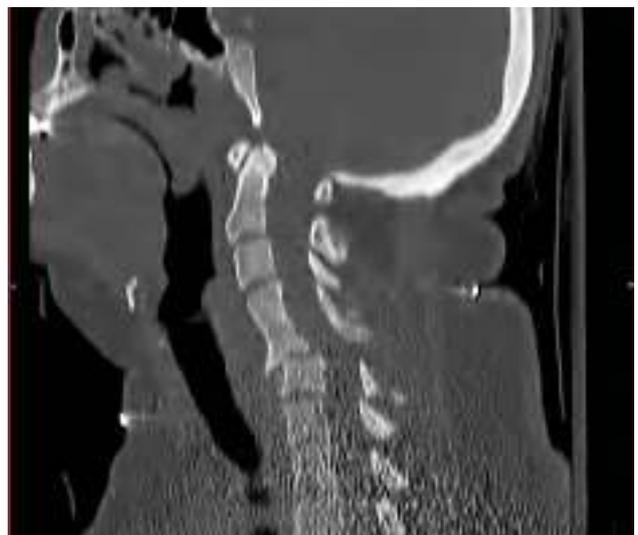


Figure 3.

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[Trauma]

DEPRESSED (PING-PONG) SKULL FRACTURE

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Introduction: Depressed fractures of skull are most likely to seen in infants and newborns, and compose 25% of childhood head traumas. Generally loss of consciousness does not accompany with early age. In newborns, these fractures could be seen in Ping-Pong type. Typically these types of fractures are located in parietal bone and 80% are asymptomatic. We presented an infant with closed depressed skull fracture.

Case: 6 month old baby girl was brought by her family because of falling from bed. Pediatric Glasgow Coma Score was 15, vitals were stable, newborn reflexes were natural. Examination of cranium revealed a depression on the left and subcutaneous edema on the right parietal bones. CT scan revealed left parietal depressed fracture (Ping-Pong) and right parietal linear fracture (Figure-1,2). She was hospitalized in neurosurgery clinic for further observation.

Conclusion: In newborn period, approximately 80 % of cranial depressed skull fractures are asymptomatic; but close depressed fractures should be monitorized for increased dural hemorrhage risk and seizures. Besides, ping pong fractures and other minor depressed skull fractures could heal spontaneously.

Keywords: depressed, fracture, Ping-Pong, skull

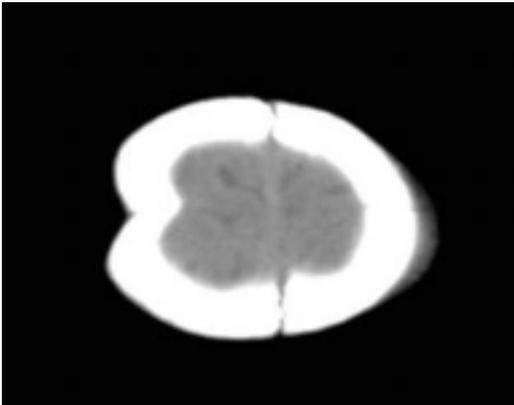


Figure 1.

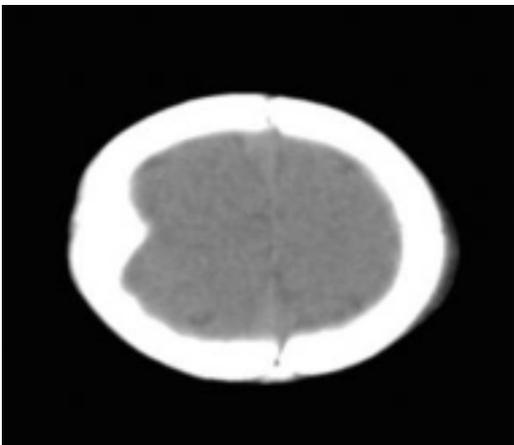


Figure 2.

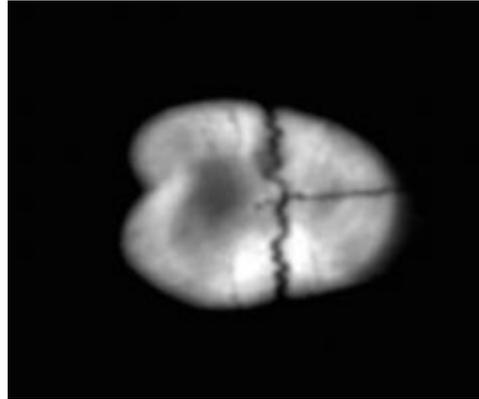


Figure 3.

P-484

[Trauma]

HEAR LOSS AFTER HEAD TRAUMA

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Introduction: Forceps usage during birth, falls of infants and children; with age motor vehicle accidents, and sports related injuries are the main reasons of head traumas. Cranial nerve paralysis is seen often with head traumas. Mostly injured cranial nerves are 6th, 3rd, 7th, 8th, 1st and 2nd; respectively. We presented a patient with an acute hear loss due to head trauma 4 hours after motor vehicle accident.

Case: 24 years old female patient was brought by paramedics for head trauma caused by a hit from a car. No mental status change or motor deficit was indicated on the initial examination. She was alert, and cooperated. There were skin abrasions over left maxillary bone, tenderness and edema on left temporal zone. She complained about headache and nausea. CT scan revealed left sphenoidal and maxillary fractures (Figure-1). During the follow up period, nausea got worsen and left sided hearing loss become evident.

Conclusion: Although, in patients with head trauma the most seen symptom is mental status change. Cranial nerve injuries are frequently seen and should kept in mind. Therefore, a proper neurological examination should not be neglected in head trauma patients.

Keywords: head, hear, loss, trauma

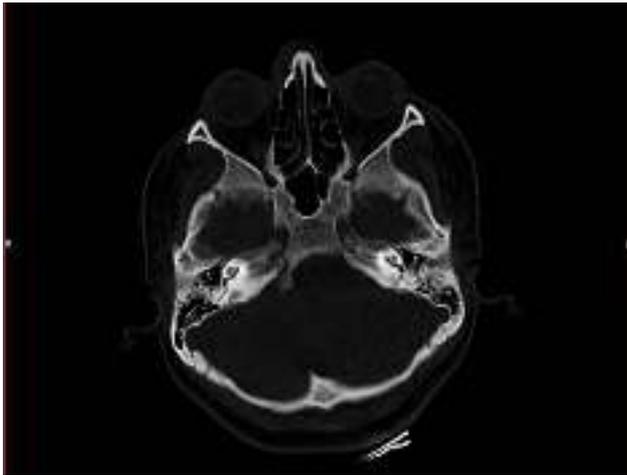


Figure 1.

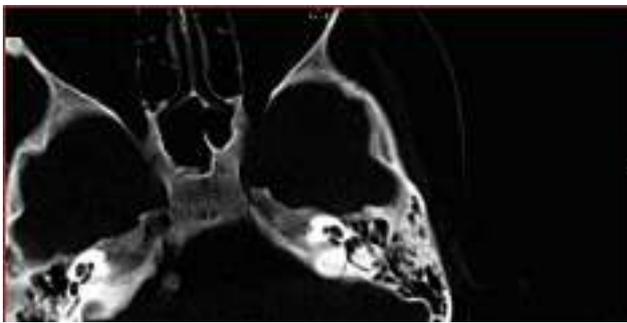


Figure 2.



Figure 3.

P-485

[Travma]

OX CLASH RESULTED IN FLAIL CHEST

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Introduction: Flail chest occurs when a segment of thoracic cage is separated from the rest of the chest wall and moves independently. It composes the most serious group of blunt thoracic traumas. Paradoxical breathing is typical for flail chest. Supportive treatment, oxygenation, pain management, mechanic ventilation and chest wall stabilization are the main steps of the treatment. We presented a patient with flail chest after a blunt chest trauma accompanied by splenic injury.

Case: 40 years old male presented to our ER with chest pain and dyspnea. Vitals were as follows; spO2 85%, HR 110 bpm, RR 30/min, TA 130/80. One day before his presentation, he was

admitted to another hospital because of chest pain after an ox clash. Unfortunately; he was discharged with a prescription of painkillers. Patient reapplied for increased pain and dyspnea. At inspection; paradoxical chest movement at the left anterolateral chest wall was identified and subcutaneous emphysema was palpable. Thoracoabdominal CT imaging revealed hemo-pneumothorax and Grade 1 splenic injury (Figure-1,2). Chest tube was inserted through the left thoracic wall. Chest wall stabilization was planned and patient was hospitalized in thoracic surgery clinic for operation and further follow-up.

Conclusion: Flail chest is a life threatening medical condition and requires immediate recognition and treatment. A trauma which can lead to flail chest has probably high energy; so a clinician should not sink into catastrophic scene of flail chest and look for possible organ injuries to provide excellent care.

Keywords: chest, flail, hemothorax, pneumothorax



Figure 1.



Figure 2.



Figure 3.

P-486

[Trauma]

POST ABDOMINAL TRAUMATIC HEPATIC ARTERY PSEUDOANEURYSM: CASE REPORT: SEVDEGÜL KARADAŞ¹, MEHMET KADIR BARTIN², EDIP GÖNÜLLÜ³, MUZAFFER ÖNDER ÖNER², HARUN ARSLAN⁴

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Introduction: Hepatic artery pseudoaneurysms (HAP) are generally a consequence of abdominal trauma, accidental arterial injury during abdominal surgery or chronic pancreatitis. They can present acutely with rupture of the aneurysm. Emergency management of the bleeding is very important, and can result in death. We present a case of acute severe abdominal bleeding secondary to rupture of the HAP.

Case: 34 years old male patient appealed to emergency service suffering from mouth and anus bleeding. During this process, his general condition was bad and he was conscious. Hematemesis and melena was detected by rectal examination. His blood pressure was 80/60 mmHg, pulse was 110/min, respiratory rate was 20/min. Vascular access was established immediately. 0.9% saline solution and omeprazole infusion has started. Blood type, cross and other emergency laboratory detections were sent. 2 units of erythrocyte suspension was required. Negotiations were held with gastroenterology department for endoscopy. Meanwhile patient's history was elaborated. It is noticed that the patient has fallen from high approximately 2 months ago and had rib fractures, pelvic fracture and hepatic artery pseudoaneurysm. Patient relative has informed that a surgery is on schedule for hepatic artery pseudoaneurysm. Hemoglobin was measured as 10.1, hematocrit was measured as 30% on laboratory parameters. Abdomen tomography was taken. Approximately 6.5cm ranged thrombosed hepatic artery aneurysmal dilatation of which margin was unclear was observed on stomach pylorus and duodenum 1st section (Figure 1). Active bleeding was detected by endoscopy on duodenal 1st section. The patient was taken to emergency surgery. The patient having cardiac arrest on operating table responded to CPR. Cholecystectomy, subtotal gastrectomy were applied. The patient was ex 6 hours after the operation.

Conclusion: Hepatic artery pseudoaneurysms may occur after trauma. Emergent surgery following the diagnosis may reduce mortality risk.

Keywords: Hepatic Artery Pseudoaneurysm, trauma, surgery

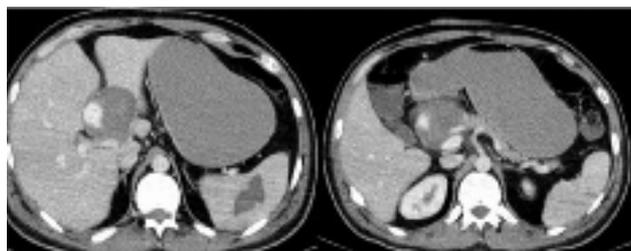


Figure 1.

P-487

[Trauma]

COMPARISON OF TRAUMA SEVERITY BETWEEN YOUNG, YOUNGER OLD AND OLDER OLD PATIENTS ADMITTED FOR TRAFFIC ACCIDENTS

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Introduction: Increasing proportion of geriatric patients and declining birth rates increase the burden of geriatric trauma patients in emergency departments (ED) over the world. But anatomic and physiologic changes cause these patients more vulnerable to severe trauma and impair their response to severe trauma. Although a clear definition for sub-grouping geriatric patients to younger old and older old patients doesn't exist, both two groups have increased morbidity compared to young patients. The aim of this study is to compare the severity of trauma between young patients (<65 years old), younger old (65-79 years old) and older old patients (>80 years old) admitted to ED after traffic accidents.

Materials-Methods: We retrospectively evaluated patients admitted to our ED after traffic accidents (passenger/driver, motorcycle/bicycle and pedestrian) between 1 January 2012 and 31 December 2013. Trauma severity was assessed with Abbreviated Injury Scale (AIS) for 6 body regions and Injury Severity Scale (ISS). Hospitalization and operation rate, ICU admission rate, hospitalization time and mortality were compared between three age groups. A statistical difference of $p < 0.05$ is considered significant.

Results: Between study period, 2942 patients were eligible for the study and 91.3% were young while 5.2% were younger old while 3.5% were older old. No statistical difference was found between age groups for face, thorax and external body regions. Head-neck injury and extremity AIS scores and ISS score were significantly more severe in younger old compared to young patients and older old compared to young patients but failed to show a difference between younger old and older old patients. Abdominal injury was more severe in older old group compared to young group but a difference between young vs younger old and younger old vs older old group didn't exist. Hospitalization and operation rate, ICU rate, hospitalization time and mortality were similar between younger old and older old groups but were similar between younger old and older old groups.

Conclusion: Generally 65 age is defined geriatric for trauma patients, but a clear definition does not exist for subgroups of elder patients. Our study concluded, beside disparities of severity between body regions, older patients experience more severe trauma than younger patients but similar severity between younger old and older old groups.

Keywords: trauma, geriatric, trauma severity

P-488

[Trauma]

ODONTOID FRACTURE AFTER FALLING FROM SOFANurcan Günarlı¹, Mehtap Kaynakçı Bayram¹, Lütfullah Başköy¹, Emel Koç¹, Ali İhsan Kilci¹, Sinan Yıldırım², Aynur Yurtseven³¹Department of Emergency Medicine, Kayseri Training and Research Hospital, Kayseri, Turkey²Department of Emergency Medicine, Ağrı State Hospital, Ağrı, Turkey³Department of Emergency Medicine, Sincan State Hospital, Ankara, Turkey

Introduction: Odontoid fractures are usually resulted by serious traumas. Alert patients present with muscle spasms and sudden onset, severe upper cervical pain increasing with movement. The pain may radiate to occipital region.

The case: 83 years old man was admitted for head and neck pain resulted by face-sided falling from sofa. The vital signs were stable, gcs was 15, pupils were isochoric, the light reflex was bilaterally positive and no neurologic deficit was found. Upper cervical and occipital sensitivity was present and cervical ct revealed type 2 odontoid fracture. Neurosurgery consultation was done and elective surgery was planned.

Discussion: Odontoid fractures generally accompany other cervical spinal damages or multiple traumas. The symptoms are sudden onset, movement dependent, severe upper cervical and occipital pain and muscle spasms. Type 2 odontoid fractures are the unstable fracture located at the articulation place of odontoid process and C2 vertebrae and it is the most frequent odontoid fracture type.

There are some conditions requiring cervical imaging in lower risk trauma patients. The imaging will be unnecessary, if the patient has no middle-line cervical sensitivity, 15 points of GCS, no poisoning or substance abuse, no neurologic deficit or painful, attention-deviating abrasion.

We evaluated this case for the possibility of odontoid fracture development after basic traumas. ER management of the patients, especially over 65 years old, is important if there is middle-line cervical sensitivity and these patients require imaging.

Keywords: basic trauma mechanism, odontoid fracture, older patient

P-489

[Trauma]

EPIDEMIOLOGICAL REVIEW AND INVESTIGATION OF THE ROLE OF THE TRAUMA SCORING SYSTEMS IN PREDICTION OF PROGNOSIS IN PATIENTS ADMITTED TO THE EMERGENCY DEPARTMENT BECAUSE OF BEING BATTEREDErkut Erol¹, Ferhat İçme², Havva Şahin Kavaklı³, Selçuk Coşkun², Alp Şener², Gül Pamukçu Günaydın², Fatih Ahmet Kahraman⁴, İshak Şan²¹Elazığ Eğitim ve Araştırma Hastanesi Elazığ²Atatürk Eğitim ve Araştırma Hastanesi Ankara³29 Mayıs Hastanesi Ankara⁴Bayburt Devlet Hastanesi

We investigated the epidemiological characteristics of the patients who admitted to our emergency department due to assault and being battered, and the role of trauma scoring systems which are used in multiple traumas in predicting the prognosis. We found that there is no significant difference between the trauma scoring systems in determining prognosis in terms of the injury. Therefore we suggest that any of the trauma scoring

systems which is most practical and easily available for emergency department physicians may be used in predicting the prognosis.

In our country 112 emergency ambulance services are carried out by teams of paramedics and emergency medical technicians who have insufficient clinical knowledge and experience and no scoring system has been used in the pre-hospital emergency ambulance system. Consequently, many cases of mild traumas which could be treated by simple medical interventions have been transported to high-level trauma centers and intensity in these centers is increased. This results in relatively limited period of time is left for the diagnosed and treatment of severe trauma patients, and mortality and morbidity rates may increase.

Most of the battered patients are 18-45 years of age young adults, therefore death and disability in this population may lead to serious socio-economic losses. In conclusion we suggest that establishment of a national trauma system which is carried out in a coordinated manner, including pre-hospital triage performed through trauma scoring systems may increase the survival rates and decrease the rates of disability.

Keywords: trauma, scoring, assault, emergency

P-490

[Trauma]

DISLOCATION OF THE RADIAL EPIPHYSISÜmit Kaldırım¹, İbrahim Arzıman², Yusuf Emrah Eyi³, Salim Kemal Tuncer², Şükrü Ardic⁴, Ali Osman Yıldırım²¹Department of Emergency Medicine, Siirt Military Hospital, Siirt, Turkey²Department of Emergency Medicine, Gulhane Military Medical Academy, Ankara, Turkey³Department of Emergency Medicine, President Guard Regiment, Ankara, Turkey⁴Department of Emergency Medicine, Elazığ Military Hospital, Elazığ, Turkey

Objective: Dislocation of the radial epiphysis is rare among orthopedic emergencies. It is more common in children mostly dealing with sports and at game age. Diagnosis is made by physical examination and radiological imaging. Findings on physical examination maybe interfere in symptoms of soft tissue trauma. Therefore, doctors shall be careful at radiological diagnosis. In this presentation, we wanted to share a young patient with a dislocations of radial epiphysis.

Case: A 12 year old patient admitted to ED with severe pain and limitation of motion in his right wrist which occurred after falling on his right hand during wrestling training. In his physical examination, there were edema and deformity in his right wrist. Sensory examination and inspection of hand and finger movements were normal. Peripheral pulses were palpable. There was no radiological fracture, but observed dislocation of the radial epiphysis in the right wrist. Dislocation was tried to be reduced for three times but was unsuccessful. The patient was hospitalized to the orthopedics clinic for surgery. Dislocation was reduced with the surgical procedure and the patient was discharged after three days with no complaints and complications.

Conclusion: Dislocation of the epiphysis are rare with 3-5% of all dislocations. The most common is the radial epiphysis due to wrist injury, and common in children dealing with active sports. The findings on physical examination are similar to soft tissue trauma. Diagnosis is made radio graphically. Diagnosis must be made carefully in children and bilateral radiographic imaging should be performed for diagnosis. Reduction should be attempted and in terms of easiness of procedure procedural sedation should be performed. As in our case, sometimes the

reduction process may not be successful. In this situation surgical procedure can be necessary.

Keywords: Dislocation, Radius, Epiphysis



Figure 1.



Figure 2.

P-491

[Trauma]

FOOT DROP AFTER PENETRATING TRAUMA

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Introduction: 50% of penetrating injuries related to trauma involves extremities. 82 % of vascular injuries on extremities are considered penetrating trauma. Accompanying soft tissue, nerve and bone injuries are important on the salvage of the limb. Emergency Room physicians have a critical role on saving limb that early diagnosis and immediate treatment are important on penetrating extremity injuries.

Case: 30 age old male patient admitted to E.R. with a penetrating trauma. His blood pressure was 127/78 mmHg and heart rate was 88 bpm. On his right proximal fibula approximately 3 cm of cut with straight borders was present. Dorsalis pedis and

posterior tibial artery pulses was present. X-rays were normal. At his neurological examination a defect was noticed on dorsiflexion of the foot. Patient was admitted to neurosurgery ward with the diagnosis of common peroneal nerve damage.

Discussion: Even if the arterial injuries are most life threatening, nerve damage can cause morbidity on the long run. 70% of peripheral nerve injuries that noticed at first examinations are completely heal in 6 months. When handling penetrating extremity injuries during E.R., both sensory and motor functions must carefully examined for possible nerve injuries.

Keywords: Foot drop, Trauma, Nervus peroneus communis

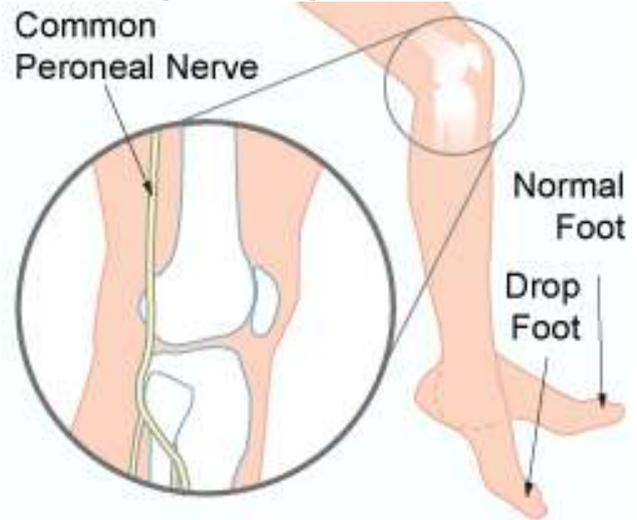


Figure 1. Foot drop

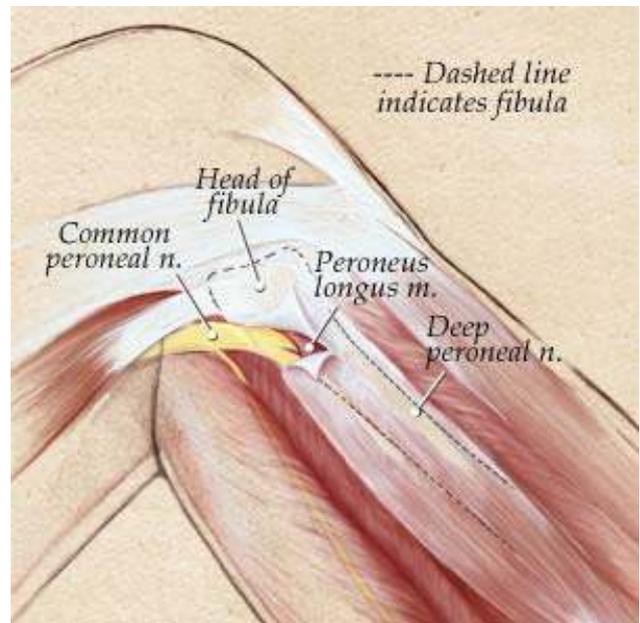


Figure 2. Nervus peroneus communis

CHRONIC DISLOCATION AND DIFFICULTY IN REDUCTION

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Objective: The definition of a “chronic” shoulder dislocation is not clear but current approach is they are the dislocations in the use of 3 weeks as the defining time. Chronic anterior shoulder dislocations are more frequent than chronic posterior dislocations. In adults, most common reasons are trauma and mental disorders, and in youth, epileptic seizures and alcohol. In this case, we wanted to share an old dementia patient with suspected chronic shoulder dislocation and the difficulties of reduction procedure.

Case: An 82 year old dementia patient admitted to ED with the complaint of left shoulder deformity. In his history he was having physiotherapy for two days, and they recognized the deformity and advised for the hospital admission. Sensory examinations of left hand and forearm and peripheral artery examination were in normal ranges, but the movement of shoulder was limited. Limitation of movement was bilateral and was thought that it was due to flask paralysis which occurred because of immobilization. In X-ray graphics, left posterior shoulder dislocation and fracture of tuberculum majus were observed. Due to additional systemic disorders, suprascapular nerve block was performed instead of procedural sedation. Reduction attempt was unsuccessful for three times. Team continued reduction procedure and was successful after fifth attempt. It was a challenging and risky procedure. After control graphs, old fracture line was observed clearly. Velpeau's Bandage was performed and the patient was discharged.

Conclusion: Treatment options of chronic shoulder dislocations depend on the patients' age, pain, general condition, pathologies in the joint and they are observation, closed reduction, open reduction, arthroplasty, and resection of head of humerus (Jones Procedure). Damage of the joint gets worst with the extension of dislocation time, and fibrosis increases at capsule and tendons, so the surgical treatment becomes more complex and risky for complications. In these cases, closed reduction is a tough procedure and it shall be stopped after a few attempts especially in elderly due to risks of complications, and shall be referred to the orthopedics clinic. Emergency physicians shall be aware of close reduction is difficult and risky in these cases.

Keywords: Chronic, Dislocation, Reduction



Figure 1.



Figure 2.

CHEMICAL MATRICECTOMY IN EMERGENCY DEPARTMENT

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Introduction: In the last decades, phenol cauterization and surgical matricectomy have been widely used with high success rates for the treatment of ingrowing toenails. However, unpredictable tissue damage and prolonged healing time are the disadvantages of this technique. Sodium hydroxide is an alternative chemical agent that causes less tissue damage.

Case: A 28-year-old male patient was admitted to the emergency department with pain and gleet on the right toe's lateral side. In his physical examination he had an ingrown toenail on the right toe and have ached for 2 weeks and got gleet last 2 days. We decided to apply chemical matricectomy (CM) for this patient. In the CM method the cutting off the ingrown toenail part, NaOH was administered to the radix of the nail, soon acetic acid used for neutralization. After that the lesion cleaned with physiological saline solution. After this operation, patient had been told to rest. Then, patient was called to control at third,

seventh and tenth days for hemorrhage, discharge and infection. Any complication was detected.

Discussion and Conclusion: We conclude that CM for the treatment of ingrowing toenail is excelent because of its simplicity, low morbidity and high success rate. It can easily be done as an outpatient procedure. CM can be used for the treatment of choice in emergency service.

Keywords: Chemical Matricectomy, toe, Emergency Department

P-494

[Trauma]

INVESTIGATION OF BOMB EXPLOSION RELATED HEAD INJURIES DEMOGRAPHIC CHARACTERISTICS AND BRAIN TOMOGRAPHY FINDINGS AMONG PATIENTS IN EMERGENCY DEPARTMENT SETTINGS

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Introduction: Weapons of mass destruction (WMD) manufactured by terrorist regimens pose a significant threat to civilized society. Explosive agents have predominated in recent terrorist attacks. High-order explosives produce primary blast injuries in survivors who are in close proximity to the blast, and secondary injuries from flying debris. The authors aimed to investigate the bomb explosion related head injuries demographic characteristics and brain computed tomography findings.

Materyal-Method: The study was designed as data collection from medical records. Patients who were admitted to the Emergency Department between January 01, 2014 and June 07, 2014 with WMD event constituted the study group.

Results: The study population included 42 patients. In the study 38 (%90.5) of the patients were male and 4 (%9.5) patients were female. The mean age of those 42 people was 25.40 ± 16. Intracranial pathology types were found as intracranial hemorrhage (ICH) 41 (%97.6), pneumocephalus 35 (%83.3), subdural 9 (%21.4) epidural 5 (%11.9) and subaracnoid hemorrhage (SAH) 5 (%11.9). While a total of 31 (%73.8) patients died, 11 of the patients (%26.2) survived. The skull bone lesions were listed as 28 (%66.7) parietal, 25 (%59.5) temporal, 23 (%54.8) frontal, and 15 (%35.7) occipital.

Conclusion: Prehospital and hospital care providers should know to face a large and overwhelming number of victims who will require evaluation and treatment after a WMD event.

Keywords: blast injuries, bomb explosion, blast injuries

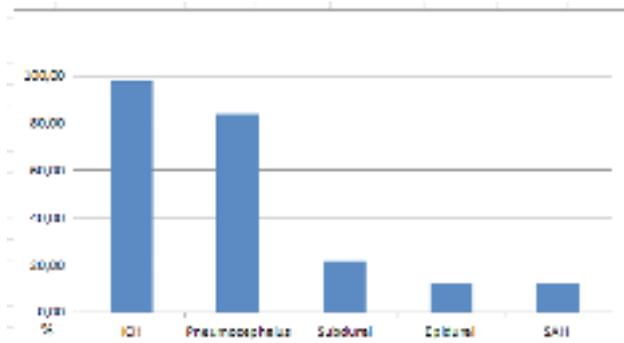


Figure 1. The Distribution of the Lesions in the Brain

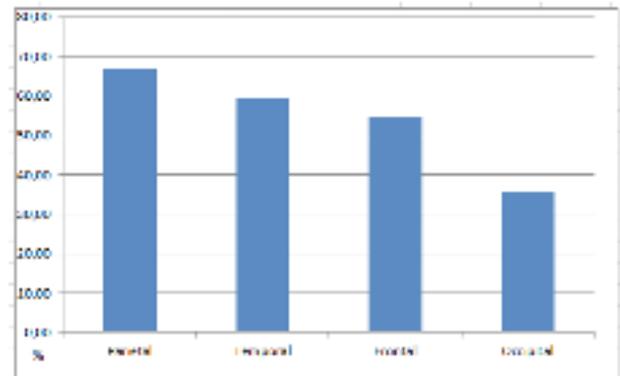


Figure 2. The Distribution of the Skull Bones Injuries

P-495

[Trauma]

TESTICULAR DISLOCATION DUE TO MOTORCYCLE ACCIDENT

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Introduction: Although testis is vulnerable to injury, it's traumas do not occur frequently. One reason why serious trauma is rare is that scrotum is mobile. Testicular dislocations are quite rare and develop secondarily to blunt trauma. Many of the cases are due to the compression exerted by gas tank on testis. In this report, a case of testis dislocation owing to motorcyscle accident is presented.

Case: A 31 year old male patient was brought to our emergency service due to motorcylce accident. His blood pressure was 118/70 mmHg, hear rate 83 beat /minute, body temperature 36.8 oC, respiration 16 /minute. Glasgow coma score was 15. In exploration, right humerus head was observed to be dislocated, left radius distal end was dislocated and protruding from skin, and right scrotum, was dislocated and protruded from skin in inguinal region. Patient underwent testicular fixation operation by urology department. In control visits, no problem was observed in dislocated testis.

Conclusion: Although testicular dislocation occurs seldom, it should be borne in mind in motorcycle accidents.

Keywords: testicular,dislocation,motorcyle accident,blunt trauma



Figure 1. Testicular Dislocation CT



Figure 2. Testicular Dislocation Photograph

P-496

[Trauma]

ANIMAL INJURY AND FLAIL CHEST

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Introduction: Animal-related injuries constitute a significant health risk for people living in rural areas. Flail chest is one of the most severe types of multiple rib fractures and chest trauma. Typically, so arises ribs broken in two places and floating when independent from any other part of the chest wall when it moves. In this study, we offer developing flail chest case exposure to chest injury due to cow kicked.

Case: 40 year-old male patient was admitted to emergency department with shortness of breath, worsening of the general condition. In the history he exposed to trauma on the left side of chest by the cow about 6-7 hours ago. He was poor general condition and was present crepitus on palpation. The breath sounds were reduced on left hemithorax drastically. There were extensive subcutaneous emphysema on the left chest wall and displaced fracture of 4-5-6-7 ribs on X-ray and CT examination of the thorax. It was observed haemopneumothorax in the left lower lobes. He was consulted and was performed left anterolateral thoracotomy and rib stabilization by thoracic surgery clinic. He was discharged on the 11th day.

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Conclusion: Injury due to animals are common in young and men. Both blunt and penetrating injuries can occur in various parts of the body due to the high energy transfer during the injuries caused by cattle. Flail chest is one of the consequences of these injuries. 'Paradoxical chest wall movement' is the best way to describe flail chest. Treatment depends on the severity of the patient's clinical status and respiratory distress. The most important pathology on clinical condition is pulmonary contusion. Therefore, supplementation is important for the improvement of the lung.

Keywords: Animal injury, Flail chest, Thorax

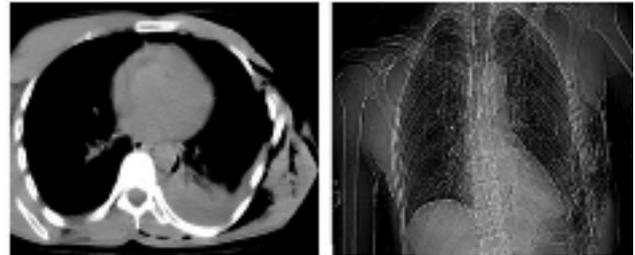


Figure 1. Rib fractures on Thorax CT and P-A Chest X-Ray

P-497

[Trauma]

TRAUMATIC TRACHEAL RUPTURE

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Introduction: Tracheal rupture after blunt cervical trauma is a rare condition. It can be misdiagnosed easily because of the variability of clinical findings. Early diagnosis and intervention is important in reducing the overall mortality.

Case: Five year old male was admitted to the emergency room with swelling around his neck area after crushing a cyclist while playing around the garden. His vital signs were normal, he didn't have any known diseases before. His initial evaluation showed abrasion on the anterior neck area, and subcutaneous emphysema at the face and chest extending to the abdominal area. Lung auscultation sounds were diminished bilaterally, especially on the left side. Other physical examinations were normal.

Chest X-ray showed subcutaneous emphysema. Cervical and Thorax CT showed a rupture on the posterior wall of the proximal trachea, left side pneumothorax, pneumomediastinum and subcutaneous emphysema. He was administered to ICU, intubated and left side tube thoracostomy was administered. On the third day, control CT was administered, which revealed that the cuff of the endotracheal tube was localized at the site of the rupture and the rupture was partially narrowed and the air leakage had stopped. The bronchoscopy at the seventh day showed that the rupture site was covered with granulation tissue.

Discussion: Trauma is the leading cause of death in pediatric age group, and most of them are due to blunt forces.(1)

Cervical tracheal injuries are caused by blunt trauma to the cervical area. Shear stress and increasing airway pressure while glottis is closed are involved in the mechanism of rupture of the posterior mucosal wall which is accordingly weak.(2,3)

Major airway rupture is rarely seen in children(3). Children may present with very minor signs injury and non-specific

symptoms such as shortness of breath, cough, subcutaneous emphysema, haemoptysis even in the case of total airway disruption after blunt thoracic trauma(1,4). There may be no visible sign of trauma and respiratory distress may be minimal, but this relatively stable state may suddenly worsen.(4) Unless diagnosed and treated preoperatively, progressive respiratory failure is often observed.(1)

Bronchoscopy is the main suggested method for evaluation. Prognosis of tracheobronchial injuries depend on the location and the size of injuries, other accompanying injuries, early diagnosis and treatment(3,4).

Conclusion: Tracheal rupture is a rare condition observed after cervical blunt trauma. It may be misdiagnosed due to variabilities in clinical findings. Early diagnosis and treatment are important to reduce the mortality and morbidity of these cases. Therefore, it should be kept in mind in the presence of subcutaneous emphysema and shortness of breath accompanying high energy accidents.

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Keywords: Tracheal Rupture, trauma, subcutaneous emphysema

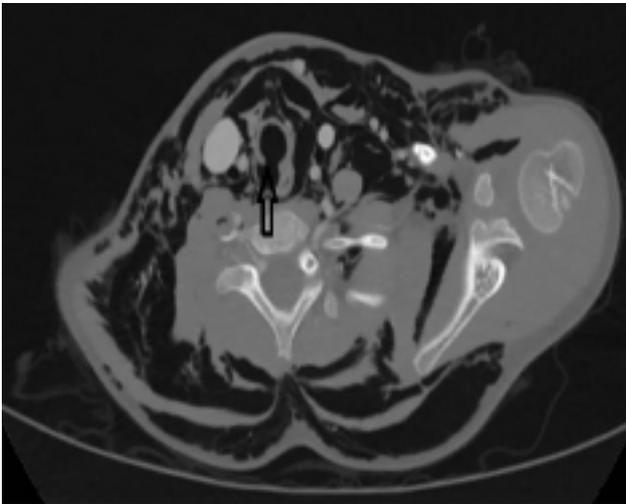


Figure 1. Arrow pointing the rupture on the posterior wall

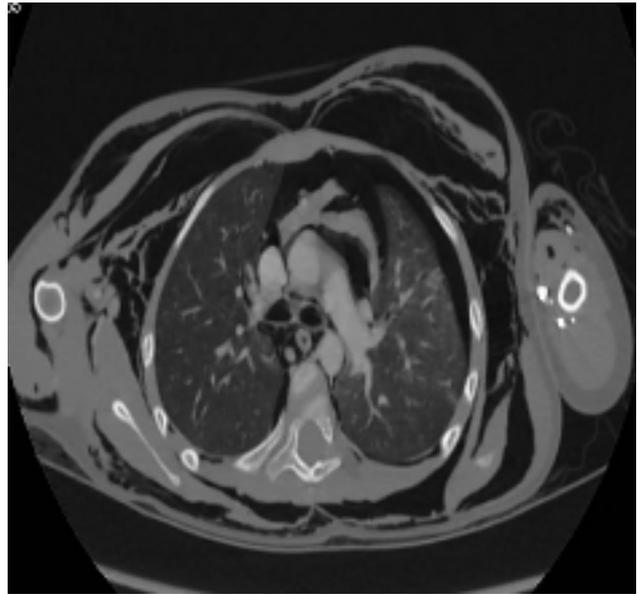


Figure 2. Left side pneumothorax, pneumomediastinum and subcutaneous emphysema in Thorax CT images

P-498

[Travma]

A RARE CAUSE OF BURN: HOT MELTED TAR. WHAT PRACTICAL TECHNIQUES TO BE USED TO REMOVE IT ?

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Melted tar is a chemical compound used in roof insulations and road surfacing. Presenting to emergency departments (ED) with exposure to melted tar is not a usual entity. Both the lack of proper guideline to treat these type of burns and sticky structure of the hot tar itself makes the management more complicated than the other type of burns. Usage of olive oil, de-solv-it and sunflower oil are some of the options for tar removal. In this case report, we present a 29-year old male construction worker who was exposed to melted tar while working on a roof insulation (Figure 1). The melted tar was removed using olive oil and then the patient was referred to the Burn Unit (Figure 2). This report focuses on the elimination process of hot tar and the management of the patient in the ED.

Keywords: Tar, Burn, Olive oil,



Figure 1.



Figure 3.



Figure 2.

P-499

[Trauma]

GOOD LUCK OR BAD LUCK? A WOMAN WITH AIR GUN WOUND OF NASOPHARYNX

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Air guns are used throughout the world as instruments of amusement such as toys in funfairs, for bird hunting and firearms training. There isn't any law or restriction on the user's age. This enables a person to gain access to this instrument quite easily. Sometimes serious and fatal injuries result when it is used by an ignorant person or by a criminal. There are reports which suggest that these 'toys' can cause painful injuries but only a few cases of death have been reported. Here we report a case where a woman was accidentally shot while playing.

Thirty five years old patient referred to emergency department for air gun wound of the nasopharynx. She was shut accidentally from her nasal region and a nasal gauze applied at previous hospital before referral. On her physical examination, her vital signs were in normal range and there wasn't tachypnea, dyspnea or any other respiratory distress finding. There was not any visible wound on entire body surface, but only she had an inactive nasal bleeding with a nasal gauze placed in primary hospital. In her anterior rhinoscopy, there was inactive bleeding in left nasal ala and right nasal concha, the nasal septum was destroyed. There was not any visible bleeding or wound in oropharynx. Cranial and cervical computed tomography showed fractures in medial walls of bilateral maxiller sinuses, vomer and left nasal bone and also

hyper density artifacts in nasal and oropharyngeal region which was supported foreign body and there was not any fracture in cervical vertebrae. Angiography with cranial tomography showed no vascular pathology. Neurosurgery and ENT consultations ordered and there was no need for surgical intervention. Patient discharged with outpatient follow up for one month later.

In our case, air gun bullet was so close to vital organs but did not cause mortality or morbidity, however everybody in this situation are not so lucky unfortunately. According to literature, there are so many reported cases related to air gun injury such as cardiac injury, penetrating abdominal and abdominal aorta injuries, trans-orbital intracranial injuries, maxillofacial bone fractures, corneal perforation, liver laceration, stomach and intestinal perforation, intracranial bleeding, cardiac perforation, and hemo-pneumothorax. In one review article, some patients with air gun injury were underestimated for their injury in the triage and life-threatening penetrating injuries were diagnosed later. We wanted to take attention serious capacity of this innocent-looking 'toys' via our case. Currently available air guns are capable of serious injuries causing mortality and morbidity. Physicians at emergency department must not underestimate their capacity of serious injury and a general and deeply approach starting from triage is needed immediately for this patients. At the other hand, some strict legislation is needed for restrictions of their sell and usage.

Keywords: Air Gun Wound



Figure 1. Air gun bullet is anterior to C1 vertebra.



Figure 2. Foreign body artifact in axial view of cranium

P-500

[Trauma]

ABDOMINAL ORGAN EVISCERATION DUE TO STAB WOUNDS

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Introduction: One of the common reasons for admission to the emergency department is stab wounds (SW) to the abdomen. Treatment of penetrating abdominal SW has changed to nonoperative treatment from a routine laparotomy over the years. In patients with organ or omentum evisceration, although more needs laparotomy in selected cases can be treated non-operatively. In our case the patient who is bedridden about 22 years due to paraplegic from down the sixth thoracic level, with SW herself forming abdominal organs and underwent surgery is described.

Case: A 72 year-old bedridden female patient was admitted to another hospital with SW to abdominal region at home. It was understood from the detailed history taken that the patient was traumatized 22 years ago and bedridden due to paraplegia. On the physical examination of the patient with a history of antidepressants and antipsychotic drug use; blood pressure was 90/60 mmHg, pulse was 60 beats/min, respiratory rate was 26 breath/min. There was approximately 15 centimeter incision about 5 centimeter below the xiphoid bone at epigastric region extending from the left and colon and omentum evisceration from the incision. In laboratory tests; leukocytes was 21.79 K/uL, hemoglobin was 6.3 g/dL, hematocrit was %21.8, mean corpuscular volume 102.5 fL and other biochemical parameters were normal. A large bore intravenous line was opened in both upper extremities. Aggressive fluid and blood resuscitation was initiated. Tetanus and antibiotic prophylaxis was performed. Eviscerated organs were wrapped with sterile gauze. The patient was taken to the surgery after emergency general surgery

consultation. On the 14th day of hospitalization the patient was discharged in good health.

Conclusion: By emergency physician, the management and approach of patients who presented to the emergency department with penetrating SW is known a very good level and it should be noted that this clinical condition can be mortal rapidly.

Keywords: evisceration, stab wounds, emergency



Figure 1.



Figure 2.

P-501

[Trauma]

LATE DIAGNOSIS OF SEGMENTAL FRACTURE OF STERNUM

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Background: Multiple trauma injuries are important entities faced with in emergency departments. These patients should be evaluated thoroughly even though they present late after the trauma.

Case: A 48 years old male patient presented with pain over the sternum. He had fallen from 3 meters one week ago. He had admitted to another emergency department(ED) and been given only analgesics. Since his complaints did not resolved he admitted to our ED. His vital signs were as follows: Blood pressure 120/70 mm Hg, pulse 85 bpm and regular, respirations 18 /min, body temperature 37,8°C and oxygen saturation with pulse oximetry 98%. In his physical examination nothing notable except tenderness over the sternum. Chest X-ray gave suspicious appearance of sternal fracture (Figure 1). After that he had computed tomography of thorax which revealed segmental fracture of sternum (Figure 2).

Conclusion: Traumas due to great forces could cause serious injuries. When a patient admit secondly in a short period of time due to same complaint he/she should be evaluated thoroughly as should be in the first admission. Sometimes serious injuries could be missed because of many reasons especially in crowded emergency departments.

Keywords: sternum, late diagnosis, trauma



Figure 1. Lateral X-ray appearance



Figure 2. CT appearance

P-502

[Trauma]

INNOTICED BULLET INJURY

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Introduction: Gunshot wounds is increasing in both developed and developing countries. Gunshot wounds to the neck and maxillofacial region has high rate of mortality and morbidity due to the complex anatomy and presence of various vital structures in these regions. Bullets passed through the neck without damaging any vital structures is a rare condition (1). In our case, a patient with a bullet puncturing the neck without even being aware of it was described.

Case: 70 years-old male patient was admitted to the emergency medicine when he saw bleeding on the point of impact after striking a hard object suddenly to his nape of neck. The patient was referred to our center when a bullet appeared in the neck on his head X-ray taken another center. He told that the object hit very heavy, he would almost fall by effect of impact and bleeding on the nape was stopped with compression by himself. On physical examination, he was conscious, GCS was 15, and vital signs were normal. He had a laceration 1 cm sized on the scalp over occipital bone at the suboccipital region. Neurological examination was normal, cranial nerves were intact and there was no lateralization. Carotid artery pulses were palpable bilaterally. Neck movements were normal. Laboratory tests were unremarkable. In brain and cervical CT, a bullet in the left paravertebral posterior muscle tissues at C2 vertebral level and contusional changes in surrounding tissues were detected. Bone structures were normal in CT. The patient was consulted to neurosurgery in the emergency department. He was hospitalized and operated by neurosurgery department. No pathology or postoperative sequelae was occurred and on the 7th day of hospitalization the patient was discharged in good health.

Conclusion: Gunshot wounds to the face and neck have 40% rate of mortality (2). This type of injury can be mortal rapidly, but can also result without any life-threatening damage. In gunshot wounds emergency physicians should behave quickly and carefully, and identify the severity of injury.

Keywords: gunshot injuries, bullet injury, emergency



Figure 1.



Figure 2.



Figure 3.

P-503

[Trauma]

RESUSCITATIVE THORACOTOMY IN EMERGENCY MEDICINE DEPARTMENT

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Thoracic trauma is a common cause of emergency department visits and many patients die because of preventable causes of thoracic trauma. Also emergency resuscitative thoracotomy is one of this important treatment steps in patients with penetrating trauma when applied quickly. We aimed to remind in this case which we performed the emergency resuscitative thoracotomy after an atypical injury that resuscitative thoracotomy should be made by experienced and trained doctors under emergency conditions and resuscitative thoracotomy should be a part of resuscitation.

Case: 26-year-old male patient, was brought to the emergency department by 112 with penetrating chest trauma. In history, patient was brought to the emergency after isolated penetrating chest trauma which occurred after work accident and formed by high density and high pressure of oil with 1500 bar pressure from the high-pressure oil machine to the chest area. Patient has 10x5 cm width incision area at anterior of the right chest and 12x6 cm width incision area at back. Patient was unresponsive and unconsciousness, Cardiopulmonary resuscitation was started to patient who has not sensed pulse. Patient airway controlled by

endotracheal intubation. 2000 cc %0,9 NACL is given by bilateral peripheral antecubital veins and 4 units of O Rh negative red blood cell infusion was performed to patient who was in shock stage 4. At first plan lesion was turned to closed pneumothorax which seen at primer appearance simultaneously with CPR, closed from three side which localized at anterior line of chest and back patient with open pneumothorax. Because of open pneumothorax tube thoracostomy was performed and wounds were primary sutured. We performed resuscitative thoracotomy to patient on right anterolateral line in the resuscitation unit by thoracic surgery clinic and emergency service clinic together because of bleeding 2000 cc blood in the fifth minute after tube thoracostomy. (image)And performed internal cardiac massage inside the chest cavity simultaneously after thoracotomy. At the beginning, 1500 cc hematoma was drained from the mediastinum. Crushing injury at the middle lobe and inferior lobe of right lung and pulmonary venous injury were determined. Patient's bleeding control could not be achieved although clamping right pulmonary hilus and than after 100 minutes resuscitation patient was defined as exitus

Discussion: Intrathoracic haemorrhage due to penetrating chest injury is one of the pathology which can grow fast enough to require resuscitative thoracotomy and should be evaluated quickly even in emergency service. In haemorrhagic shock external cardiac compression is not enough at resuscitation and should pass to the internal cardiac massage treatments in patients who performed resuscitative thoracotomy that internal cardiac massage provides %55 of basic perfusion. Survival rate calculated less than 1% also depends on the severity of the injury despite all resuscitative procedures to patients who has performed resuscitative thoracotomy which together with haemorrhagic shock after cardiac arrest.

Results: Despite the low survival rate, patients should be performed resuscitative thoracotomy by experienced doctors under emergency conditions that if patients with uncontrolled hypotension although there are largely of liquid and blood transfusion, with massive hemothorax, has not tolerate the loss of time for transport to the operating room and in case of hemorrhagic shock after trauma.

Keywords: resuscitative thoracotomy, emergency medicine



Figure 1.

P-504

[Trauma]

A HOME ACCIDENT CASE OF FOOD PROCESSOR

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Introduction: Although home accidents are seen all in all age groups, they are considered as a real public health problem and 10% of emergency admissions are because of home accidents. Mostly falling, poisoning and burns are severe mortality and morbidity causes of home accidents. Hall, balcony, and bathroom are the most frequent places that accidents happen. In despite of technology, kitchens are still hazardous places for home accidents

Case: A 50 year old female admitted to Ed with the complaint of foreign bodies in right eye and right forearm. In her history, food processor exploded, foreign bodies leapt up her body, and hit her chest while she was cooking. Conjunctival hyperemia in right eye, 1 cm lacerations in right forearm and in left anterior axillary line were observed, tenderness at palpation and 3x4 cm hyperemic areas in left thorax were observed. Biomicroscope examination showed 2 minimal epithelial spaces in the right eye. Chest graph was in normal ranges, abdominal and mammary ultrasonography were in normal ranges. Laceration was sutured and the patient was discharged.

Discussion & Conclusion: Home accident are the preventable problems mostly affect females and increase in number in children

and in elderly population. Although it causes many system injuries, especially direct contact of foreign bodies can evoke severe eye wounds. In these cases further examinations should be considered.

Keywords: home accident, eye injury, trauma

P-505

[Trauma]

TWO PAINLESS VERTEBRAL FRACTURES IN TWO STERNUM FRACTURE CASES DUE TO SEAT BELTS

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Introduction: Sternal fractures constitute a small percentage of pathologies seen in patients with chest trauma admitted to the emergency department. However, due to being harbinger of cardiac injury, diagnosis and follow-up is important. Sternal fractures are seen in 3-8% of cases with blunt chest trauma.² The incidence of these fractures seen in the passengers in the front seat due to traffic accidents has increased in recent years with the introduction of mandatory seat belt use.^{3,4} Cardiac injury risk accompanied by sternal fracture ranged from 18 to 62%.⁵ There is no consensus regarding evaluation and treatment algorithm of patients.⁶ Although lateral chest x-ray is adequate for diagnosis, sometimes this may be neglected during the initial assessment of trauma patients or sternal fractures may be overlooked due to lack of x-ray as patient cannot be positioned because of pain.⁶

Case: Two passengers were injured in the car leaving the road and hitting side protection. Both the passenger's seat belt was fastened. 47-year-old male patient had tenderness in the anterior chest wall just below the sternal angle. A non-contrast CT was taken as the patient had periosteum disorder on the front side of sternum below sternal angle on lateral x-ray: A non-displaced, full-thickness sternal fissure was detected. ECHO and ECG were normal. A depressed fracture was also detected in T10 corpus. Vertebral canal invasion was present, but neurological examination was normal. The patient was admitted to the neurosurgery clinic and internal fixation was performed. Direct sternal radiographs of 48-year-old female patient were normal, 50% displaced sternal fracture below sternal angle was detected on non-contrast chest CT taken as analgesia cannot be achieved. ECHO and ECG were normal. In addition, T8 compression fracture was detected, there was no invasion of canal and the patient had no pain.

Discussion: Lateral chest radiographs should be obtained for the evaluation of sternal fracture in all patients admitted to the emergency department with chest trauma. If there are abnormalities in the electrocardiogram or cardiac enzymes, patients should be evaluated with echocardiography. Although conservative approach is adequate for treatment; surgical fixation should be implemented without delay in non-displaced fractures causing disrupted breathing due to flail chest deformity.¹ Identification of painless vertebral fractures in our two cases may reveal the need for vertebral column visualization in sternal fractures due to the use of seat belts.

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Keywords: Sternum and Vertebral Fractures

P-506

[Trauma]

A RARE CASE: CHOPART DISLOCATION

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Introduction: Chopart's joint, used as a reference especially in diabetic foot amputation, was first described by a French surgeon, Dr. François Chopart. Chopart's joint is formed by talocalcaneonavicular joint and calcaneocuboid joint. Chopart dislocations occur mostly in young males as a result of falling from a height or motorcycle accidents and are rarely seen. Generally, calcaneus, cuboid, and navicular fracture accompany.³ Main and Jowett categorized midtarsal joint injuries into five groups:⁴

1. Medial displacement
2. Longitudinal impact injuries
3. Lateral displacement
4. Plantar displacement
5. Crush injuries

Case: A 34-year-old male patient admitted to our emergency department with complaints of foot pain and swelling the next day as a result of injury caused by pounding his foot firmly on the ground. There were deformity, swelling and tenderness at dorsum of the right foot. Neuro-vascular examination was normal. X-ray revealed talo-navicular dislocation and multiple fractures of the talar bones. Computed tomography was performed; no talar fracture was observed, but the navicular bone was total subluxated and fractured. Fissure in the superior lateral of calcaneus, comminuted fractures of cuneiform and lateral cuboid bone fractures were identified. Orthopedics department reduced the joint in the emergency department, the patient underwent a surgery 3 hours later and the reduction was achieved by surgery.

Conclusion: Chopart complex dislocations are among the most difficult foot injuries in terms of management. Neuro-vascular examination is crucial before and after reduction. Compartment syndrome can develop in high-energy trauma. Physical examination and plain radiographs are sufficient for diagnosis. If presence of a distal pulse is not certain, evaluation can be done by doppler ultrasonography. As plain radiographs may not detect small fractures, tomography is recommended for patients. Treatment is urgent closed reduction and immobilization of the foot. Open reduction should be considered when necessary.

Keywords: Chopart Dislocation

P-507

[Yara Bakımı]

ISOLATED FOREARM AMPUTATION AFTER GUNSHOT WOUNDS INJURY

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Introduction: Traumatic amputation is the loss of a body part usually a finger, toe, arm, or leg that occurs as the result of an accident or injury. Traumatic amputations usually result directly from factory, farm, or power tool accidents or from motor vehicle accidents. Natural disasters, war, and terrorist attacks can also cause traumatic amputations. Also isolated forearm amputation can occur rarely as a result of gunshot wounds. Now we report a case of a isolated traumatic forearm amputation and associated complete avulsions of the ulnar and median nerves and bones due to gunshot wounds injury of the distal part of the right forearm.

Case: 32 year old male patient were brought to the emergency department due to gunshot wounds. Patient's wound was only in the right forearm. Forearm was total amputated in inspection (Figure 1). No injury was observed in another part of the body. According to his medical records he has no disease history. Her initial vital signs were; blood pressures 115/62, pulse rates was 84/min, temperature was 36,6 C, respiratory rate was 18 breaths/min, oxygen saturation %94. In the physical examination he had severe forearm pain and bleeding. Other system examination were normal. Bleeding was buffered. Plastic surgery and orthopedic consultation was requested. Patient were operated for replantation by plastic surgery and orthopedic department.

Conclusion: Finally our case was extremity amputation after gunshot wounds. It is a very rare condition that isolated forearm amputation due to gunshot wound. Amputations of the upper extremity largely follow the same basic principles as those of any amputated limb. There are various complications associated with amputation of a body part. The most important of these are bleeding, shock, and infection. In all traumatic amputations firstly we should check the person's airway, check breathing and circulation, control bleeding by applying direct pressure to the wound. Time is vital in limb amputations because depending on the severity of the injury, the partially severed extremity may or may not be able to be reattached.

Keywords: Forearm Amputation, Wounds Injury, Traumatic amputation



Figure 1. Amputated forearm with gunshot wounds injury

P-508

[Yara Bakımı]

A RARE CASE REPORT: THE PENILE INJURY CAUSED BY DOG BITES

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Objective: From the 3-6 million animal bites happen each year in USA, 80-90 percent is dog related (1). One of five dog bites needs medical attention. But extragenital injuries related to dog bite attacks has been seen rarely. In this case we wanted to evaluate a patient admitted to E.R. with penile trauma after a dog attack.

Case: 35 age old male patient admitted to emergency room after an hour of dog attack. Patient's Vital signs were stable and within normal limits. Patient was conscious, but uncomfortable and agitated. In his physical examination 4.5x3 cm tissue loss ventral side of the penis was present, but all the other system exams were normal and urination of patient was uneventful and natural. The wound was cleaned with soap and water. Tetanus vaccine and iv. Antibiotics were administered. Urinary catheter was inserted. The dog, on the other hand, was taken under supervision by authorized personnel. The patient consulted with urology and plastic surgery and admitted to ward for operate open wound by plastic surgery (Figure 1). Developed after debridement and wound dressing, granulation tissue was repaired with full-thickness skin graft (Figure 2).

Conclusion: From 4,5 million dog bites happens every year in the US (2). Extragenital injuries are rare and usually occur on children and adolescents. Even if the bite is small there is always the risk of rabies, tetanus and other bacterial infections at this case because of unknown vaccination status of the dog, rabies immunization and because the 5 years passed since last tetanus vaccine of the patient, the tetanus vaccination is started. At 20 – 25 percent of dog bites wound infection is seen (3). If the infection is seen at first 48 hours especially *Pasteurella multocida* must be considered, since Amoxicillin - Clavulanic Acid treatment is started (4).

Even if the penile injuries related to the animal attack are rarely seen, it can be seen in the E.R. In these patient urethral injury must be identify. Genital bites are considered high risk because the copious amount of loose subcutaneous tissue easily allows bacterial spread (5). Early wound treatment is essential, with irrigation and debridement as key measures to be implemented. Antibiotics should be given if obvious signs of infection are present, including coverage for the most common pathogens, and prophylactic antibiotics, although controversial Immunization and antibiotic treatment must considered.

Keywords: Dog bites, Penil injury, Reconstruction



Figure 1.



Figure 2.

P-509

[Yara Bakımı]

UNUSUAL PRESENTATION OF NECROTIZING FASCIITIS

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Introduction: Necrotizing fasciitis (NF), a life-threatening rare infection of subcutaneous soft tissue, is characterized by spreading inflammation and subsequent necrosis of the fascia. Although NF can occur in any region of the body, it is more common seen on abdominal wall, perineum and extremities. The disease occurs more frequently in diabetics, alcoholics, and immunosuppressed patients. We reported a rare form of NF located in the breast of patient who does not know that having diabetes mellitus until that time.

Case: A 60-years old female was referred to emergency department with complaint of centrally blackened right breast wound and pain, which emerged as acne on right breast and then grown rapidly since last 10 to 15 days (figure 1and 2). She has hypertension in past medical history. On physical examination showed ulcerated necrotic lesion involved in near total of right breast. Fever was 37.5 C and other vital signs were normal limits. Glucose was 400mg/dL, but she did not know that she has diabetes mellitus up to that day. CRP measured as 25. The diagnosis was established as Necrotizing fasciitis related to diabetes mellitus. The patient underwent segmental mastectomy and necrotic tissue derided. No bacterial grown was obtained on cultures.

Conclusion: NF is a dramatic subcutaneous soft tissue infection, that early diagnose, proper antibiotic choosing and an

adequate debridement is cornerstones of treatment and results in cure. Because of this, in patient with subcutaneous tissue infection and those with immune comprised and under any risk group, practitioners should primarily keep in mind a NF.

Keywords: necrotizing fasciitis, breast, emergency department



Figure1. Centrally blackened right breast wound

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[Yara Bakımı]

TOXIC EPIDERMAL NECROLYSIS; DERMATOZ RARE SIGHTED IN THE EMERGENCY DEPARTMENT DERMATOLOGICAL WITH

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Enterance: In patients presenting to the emergency department with complaints of dermatological conditions most commonly detected infection and allergy. Few of dermatological diseases are life threatening. Toxic Epidermal Necrolysis(TEN), a rare and this is one of the high mortality dermatological emergencies. Lyell sendrom efor the first time in 1956 was identified as. The annual insidance per million 1-1.4 mortality rate %25-%35 is. The most common cause of anticonvulsants, sulfonamides and penicilin group and is located some infections. In this case we use valproic acide, TEN have discussed the development and dermatological emergencies.

Case: An other hospital generalized rash and fever followed in the intensive care two weeks ago 50 years old female patient's groin and armpit rush began to fever to the an other hospitalso it was learned. Where she prescribed antifungal medication due to fungal infection. Decline in patient complaints and has spread to the whole body has been admitted to another hospital dermatolgy departments hospitalized under intensive care. After 2 days, the patient was referred to our hospital. Biography type 1 diabetes mellitus and diapetic nephropaty due to the patient's follow up 4 months valproic acid for bipolar disorder also had a history of usage. In the patient's vital signs, blood pressure 120/90 mmHg, pulse 114beats/minute, respiratory rate 18/minute, heat 38.6 °C, oxygen saturation was %97. Widespread all over the body on physical examination, erythema, blisters, blisters debris, superfisial erosions were present in the area. Nikolsky sign was positive. There was erosion in the oral mucosa, the other system examinations were normal. From patients

laboratory tests leukocytes: 17800microliter, CRP:45.81mg/L, ESR:77mm/hr, anti HCV 3.97 was detected and patientswere bein admitted to dermatology service. Patients, 50 mg/day of systemic steroid, pantoprazol tablets, permanganate bath and calsium tablet treatment was started.For month sores due to the otoloryngology Deportment at the suggestion of the patient's treatman siprofloksasin drops, Deksametazon drops, nasal wash with Ringer's lactate was added to the suspension and get pistachios. All lesions heal 12 th day investment in control patients were discharged and outpatient prescription.

Results: All the loyers of skin that holds TEN, a rare and fatal disease that it seen in our case, like it had a simple dermatological diseases, suchas emergency medicine, these types of patients the immune system suppressing diseases or drug use,previous history of emergency physicions by the carefully questioned and TEN are deadly diseases like the differential diagnosis necessarily should be consired.

Keywords: Dermatoz, Emeryency,TEN



Figure 1. TEN 1



Figure 2. TEN2

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[Diğer]

PERFORATED PEPTIC ULCER PRESENTING WITH RIGHT LOWER QUADRANT PAIN AS ACUTE APPENDICITIS - VALENTINO'S SYNDROME

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Introduction: Valentino's syndrome is pain presenting in the right lower quadrant (RLQ) of the abdomen caused by a duodenal or gastric ulcer with perforation through the retroperitoneum. The pain is caused by gastric and duodenal fluids that tend to settle in the right paracolic gutter causing peritonitis and RLQ pain. When there is perforated duodenal or gastric ulcer with the contents tracking into the right iliac fossa, it is often extremely difficult to distinguish this condition from acute appendicitis. Now we present a case of a 24-year-old male who presented with symptoms and signs suggestive of appendicitis accompanied by elevated inflammatory markers. That is Valentino's syndrome—unusual presentation of perforated peptic ulcer.

Case: A 24-year-old man visited our ED with the complaint of abdominal pain in the right lower quadrant for 8 hours. He had a history of gastric ulcer without any treatment. The pain was initially in the epigastric area and right flank for 6 hours and then shifted to the right lower quadrant in the following hours. The character of the pain was persistent but not cramping. There was nausea, vomiting, fever but no, diarrhea and constipation. He had no other systemic diseases, major operations, daily medication, or history of allergy. On physical examination, vital signs revealed only heart rate of 116 beats per minute. The abdomen was soft, but there was tenderness and rebound tenderness in the RLQ area and epigastric area. The degree of tenderness in the RLQ was more severe than in the epigastric area. The obturator sign was present, but psoas and Rovsing's sign were absent. The bowel sounds were normoactive.

Laboratory data revealed a white blood cell count of $9.2 \times 10^3/\mu\text{L}$ with 77% neutrophils and 5% bands, hemoglobin level of 14.5 g/dL, and platelet count of $252 \times 10^3/\mu\text{L}$. After 3 hours of admission at control laboratory data revealed a white blood cell count of $14.6 \times 10^3/\mu\text{L}$ with 84% neutrophil. In the emergency ultrasonography there was 5mm, minimal compressible tubular

structure in right lower quadrant. There was free fluid monitored around the tubular structure. There was no free air in the patient's chest X-ray. With acute appendicitis suspected clinically by the surgeon, He underwent appendectomy via the McBurney incision. During the operation, turbid ascites approximately was aspirated, but unexpectedly, the appendix was minimally inflamed. After appendectomy there was still purulent discharge in the appendectomy area. The surgeon extended the incision and on further inspection, a perforated prepyloric ulcer was discovered and perforation repair was performed. He was discharged from the hospital 9 days after admission.

Conclusion: It is often difficult to distinguish perforated gastric and duodenal ulcer when the contents track into the right iliac fossa from acute appendicitis. At first, it is located in the epigastrium but quickly spreads over the entire abdomen, especially along the right side of the abdomen, as the chemical peritonitis. Physical examination may reveal rebound tenderness and guarding of the abdomen. Laboratory study findings reveal leukocytosis.

In summary, if a patient with peptic ulcer history suffers from RLQ pain, ultrasonography demonstrates pericecal and peritubular fluid accumulation without obvious blindended tubular structure, despite rarity, Valentino's syndrome should be taken into consideration.

Keywords: Acute Appendicitis, Abdominal pain, Perforated Peptic Ulcer

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[Diğer]

SIMULTANEOUS ACUTE BILATERAL POPLITEAL ARTERY OCCLUSION

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Introduction: Popliteal artery occlusion is occlusion in popliteal artery lumen with embolic or thrombotic reasons. Diagnosing popliteal artery occlusive disease is very important because of the risk of limb-threatening ischemia, thrombosis, or distal embolization. Popliteal artery occlusive disease is a common occurrence, especially in elderly patients, smokers, and those with diabetes mellitus and other cardiovascular diseases. Unilateral occlusion of the popliteal artery is common but bilateral occlusion of the popliteal artery is a rare condition. We report a rare case that admitted with pain in both left and right leg and than diagnosed bilateral popliteal artery occlusion.

Case: 60 year old male patient admitted to emergency department with pallor, coldness and pain in the feet and legs. He had a history of diabetes mellitus, moderate heart failure, 20 pack-years smoking. His initial vital signs were; blood pressures 110/64, pulse rates was 84/min, temperature was 36,4 C, respiratory rate was 16 breaths/min, oxygen saturation %96. On examination the patient had an intact airway, equal breath sounds, and strong carotid and femoral pulses bilaterally. His dorsalis pedis and posterior tibial pulses were absent to palpation and his bilateral lower extremities were cold to touch with decreased sensation and motor movement below both knees. Other neurological examination were normal. Doppler ultrasound and DSA was performed. Doppler and DSA were detected bilateral popliteal artery occlusion (FIGURE 1). Cardiovascular surgery consultation

was requested. The patient was hospitalized for surgery. General condition of the patient worsened during operation and patients developed cardiopulmonary arrest. CPR was administered to the patient approximately 45 minutes. Patients did not respond to CPR.

Conclusion: Popliteal artery occlusion and the disease processes leading up to it cause morbidity and mortality by decreasing or completely blocking blood supply through the popliteal artery and into the lower leg and foot. As a result of tissue ischemia, these patients have a significant reduction in ambulatory activity, daily functional capacity, and quality of life. Lower extremity ischemia can manifest as claudication, rest pain, or tissue loss (gangrene) and can lead to limb loss. Once a portion of a lower extremity becomes gangrenous, the patient is at risk for limb loss and death. In addition, patients with peripheral artery disease, in general, have markedly increased prevalence of coronary artery disease and cerebrovascular disease and mortality. Recognition of this relationship allows for proper management of medical comorbidities and risk factor reduction.

Keywords: Popliteal artery occlusion, occlusive disease, leg pain



Figure 1. Patient's DSA image - arrows indicate bilateral popliteal artery occlusion

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[Diğer]

A RARE MEDICAL EMERGENCY - SPONTANEOUS AND ISOLATED ULNAR ARTERY THROMBOSIS

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Introduction: Spontaneous ulnar artery thrombosis is an uncommon disease. Generally ulnar artery thrombosis is a complication of repetitive blunt trauma. The diagnosis is often missed or delayed. The history usually involves blunt trauma to the hypothenar eminence. The differential diagnosis includes embolic phenomenon, Raynaud's disease, ulnar tunnel syndrome, peripheral vascular disease, and myriad connective tissue and autoimmune diseases, including Buerger's disease and scleroderma. Symptoms of ulnar artery thrombosis range from none at all to debilitating pain and ischemic changes of the fingers. We present a patient with isolated ulnar artery thrombosis who admitted the emergency department left forearm and hand pain.

Case: A 63-year-old man, came to the emergency department with a 2-day history of an erythematous painful lesion of the left forearm. The patient reported tingling sensation, paresthesia, dysesthesia, pain, and reduction of the sensitivity of the left hand and forearm. There were no history of drug use or chronic

disease.. Patients had a history of smoking for 38 years. His initial vital signs were; blood pressures 110/64, pulse rates was 84/min, temperature was 36,4 C, respiratory rate was 16 breaths/min, oxygen saturation %96. On examination there was non-palpable pulses of the left ulnar arteries and he had an intact airway, equal breath sounds. No other pathology was seen on other system examination. Patient underwent superficial ultrasound and doppler ultrasound. Superficial ultrasound were detected perivascular inflammation commonly under the skin on the forearm. Proximal ulnar artery occlusion was seen in the doppler ultrasound. Diagnosis of proximal ulnar artery occlusion was confirmed with DSA (figure 1). Cardiovascular surgery consultation was requested. Patients were hospitalized and were heparinized. The patient was discharged after 3 days with anticoagulant therapy.

Conclusion: The rarity of the spontaneous ulnar artery thrombosis generally cause a delayed diagnosis because the disease may go undetected for flow compensation through radial artery and probably is underestimated in hand workers. Artery occlusion should be considered necessarily in patients presenting with tingling sensation, paresthesia, dysesthesia, pain, and reduction of the sensitivity in isolated one limb. Than treatment should start quickly. Therapy approaches are observation and risk factor management, drug therapy and surgery.

Keywords: Ulnar Artery thrombosis, forearm pain, artery occlusion

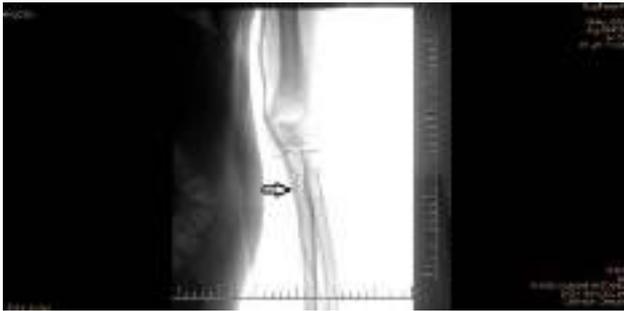


Figure 1. Patient's DSA image - place indicated by the arrow is proximal ulnar artery occlusion

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[Diğer]

RUPTURED INTRACRANIAL DERMOID CYST

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Dermoid cysts are benign, congenital ectodermal inclusion cysts. Intracranial dermoid cysts are rare intra-cranial tumors commonly located in the subarachnoid spaces. They are commonly asymptomatic and symptoms result from mass effect of them. But if it ruptured or infected it may cause acute symptoms. We discussed a patient applied to emergency room because of focal seizure and diagnosed with intracranial mass and ruptured intracranial dermoid cyst.

59 years old male patient applied to emergency room with involuntary movement in his left arm for 30 minutes. He had no similar complaints before. He did not lose consciousness and he did not have any additional complaints. We observed the involuntary

movements for a few minutes and it stopped spontaneously during the first evaluation of patient. We accepted it as a focal seizure. He had no chronic disease or drug use history. His initial vital signs were; blood pressures 155/95, pulse rates 69/min, temperature 36,6 C, respiratory rate 14 breaths/min, oxygen saturation %97. In his neurological examination he is conscious, cooperative, his motor, sensorial and cerebellar examinations were normal, pupils were isochoric, pupillary light reflex was normal. The laboratory tests were within the standard range except few white blood cell elevation. We performed cranial CT and we observed a hypodense area in right centrum semiovale and a fat density lesion which contains soft tissue components and calcifications (ruptured dermoid cyst) in left suprasellar area. In left periventricular white matter and right lateral ventricle there was hypodense areas which considered fat particles. Diffusion MRI and cranial MRI with contrast were performed and right sided intracranial mass with edema and left sided ruptured intracranial dermoid cyst detected. The patient hospitalized by brain surgery department for treatment and observation.

Intracranial cysts are rare intracranial tumors. They grow slowly and can stay asymptomatic until they rupture. When it ruptures and its content spills into the subarachnoid space or ventricles, it can lead to chemical meningitis, hydrocephalus, seizures, cerebral ischemia and infarction.

Keywords: Dermoid Cyst, focal seizure, intracranial

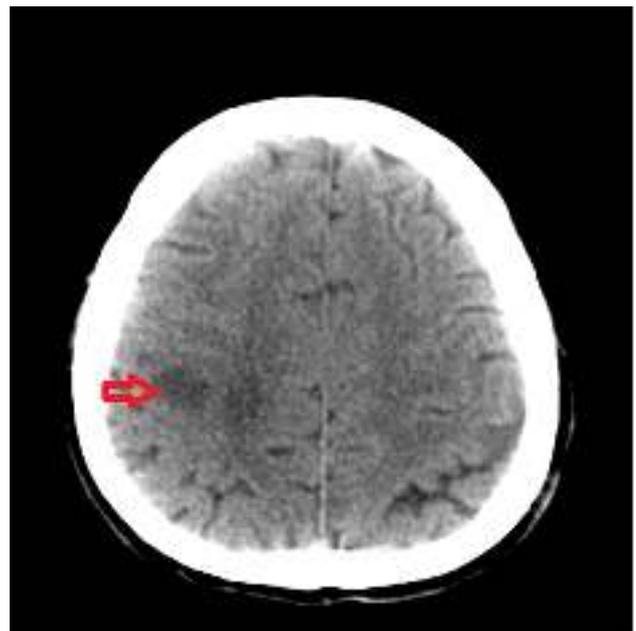


Figure 1. Dermoid Cyst on CT

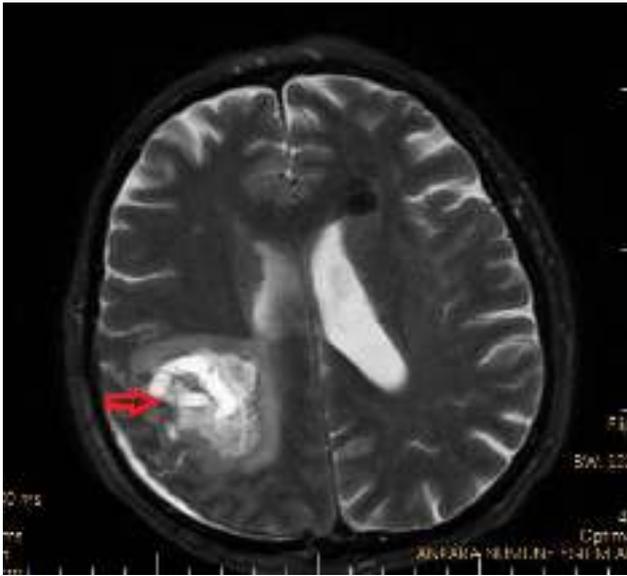


Figure 2. Ruptured Intracranial Dermoid Cyst on MRG

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[Diğer]

ATYPICAL PRESENTATION OF RUPTURED ECTOPIC PREGNANCY WITH NECK PAIN

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Introduction: Ectopic pregnancy is an important public health problem due to a being cause of maternal morbidity and mortality in developing countries. 1

Case: A 23 year old female was admitted to our hospital via ambulance with abdominal pain and then neck and right shoulder pain that started 5 hours ago. She described her neck and right shoulder pain more severe than her abdominal pain. There was abdominal guarding, rebound and tenderness in physical examination. Her blood analysis was hemoglobin 8.75 g/dl, hemotocrit 26.1%, leucocyte count 24.7 thousand/ μ l and β -hCG 2072 mIU/ml (normal limits 0-5). During follow up her hemoglobin levels decreased to 6.3 g/dl and hemotocrit decreased to 18.8%. Abdominal ultrasonography showed 109x68 mm hemorrhagic fluid and it was consistent with rupture of ectopic pregnancy. (Figure 1) Other than this, pleural fluid with maximum 34 mm was seen at left chest region. Patient underwent emergent surgery by obstetric and gynecology department. During surgery rupture of ectopic pregnancy from right cornu of uterus was seen. Patient was discharged from hospital with good health status at 2 days after surgery.

Conclusion: Cornual ectopic pregnancy is rare form of ectopic pregnancies and it has high morbidity and mortality. 2 Kehr sign is described as supraclavular pain due to stimulation of phrenic nerve secondary to diaphragm irritation. According to literature Kehr sign can be seen after splenic abscess, splenic rupture, spontaneous phrenic artery rupture and psoas abscess. Physicians should be alert of conditions that can irritate the diaphragm when encounter with a patient who has neck and left shoulder pain that accompany abdominal pain. 3-7

Keywords: Ectopic pregnancy, emergency, neck pain



Figure 1. Abdominal ultrasonography showed hemorrhagic fluid

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[Diğer]

A RETROSPECTIVE ANALYSIS OF CASES OF DEATH IN TRAINING AND RESEARCH HOSPITAL

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Objective: In this study, the findings we obtained in the evaluation of data after the use of National Death Notification System (OBS) due to natural causes in Kayseri Training and Research Hospital (KEAH) are intended to contribute to the work of national and regional planning.

Materials and Methods: We analyzed retrospectively natural deaths in all of our clinics and additional building, located in KEAH, between 1 January, 2013 and 30 January, 2014. Criminal cases were excluded from the study. Deaths younger than 16 years of age were not assessed because of the study were carried out in adult emergency department. 1402 patients were included in the study. Patients' age, gender, infectious disease status, province of residence, date of death primary and secondary diseases that directly cause death were included in the evaluation of the study.

Results: A total of 1402 death occurred in our hospital in 2013. Of the patients, 753 (53.7%) were male, 649 (46.3%) were female. F / M ratio was 0.86. There were 213 cases who died in our hospital coming from other provinces. 45 different patient groups have been found when analyzed according to cause of death. The disease was combined under similar codes. They were grouped in 15 different diagnosis codes compatible with ICD-10 coding system and were considered statistically. The most common causes of death were acute coronary events, 238 patients (17%), and acute cerebrovascular events, 219 patients (15.6%). Although there were no distinct differences in the number of deaths by months, the marked increase in the number of deaths were identified in May, in October and December. Distribution of deaths by gender was similar. Most deaths are around 80 years old. The youngest and oldest deaths were 17 years-old and 99 years-old, respectively.

Discussion: It is very important to record the causes of deaths regularly for reliable and accurate information. Although the forms are corrected by public health as much as possible, the significant differences in diagnosis codes were also detected. When examined according to age group, deaths rate between 60-90 years of age occurred 79.3% similarly with Turkey Statistical Agency (TÜİK). This rate was 18% under 60 years-old and 2,6% above 90 years-old. When examining gender distribution, of the patients, 53.7% were male and 46.3% were female. Deaths in men more than in women before 40 years-old but less than above 80 years-old. A total of 1765 deaths has been in Kocasinan, Kayseri. A total of 1402 of these cases have occurred in our hospital. Accordingly, 80% of deaths occurred in our hospital in the region. This is important for emergency services and intensive care planning. June, October, and December have been identified as a maximum of the months of deaths.

Conclusion: Regularly prepared hospital mortality statistics by the hospital each year will provide to be made more effective planning, to be able to overcome the lack of infrastructure, to be made monetary and personnel distribution better and to analyzed health problems effectively. According to the findings obtained from the study, keeping records of death should be better in the KEAH Hospital. Use of ICD codes should be mandatory. The causes of death of those who died must be informed to the family physician.

Keywords: National death notification system, emergency management, emergency planning

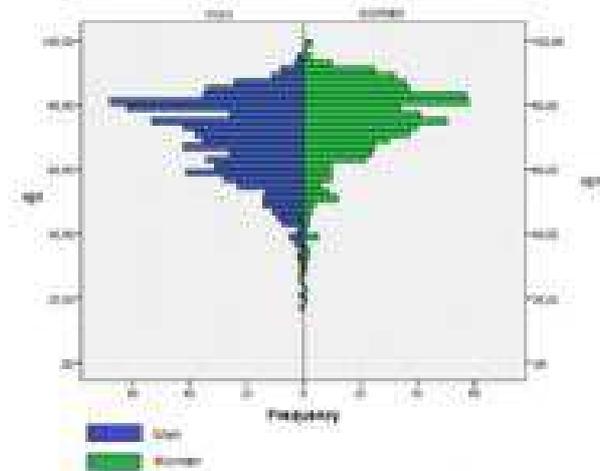


Figure 1. Distribution of deaths by age

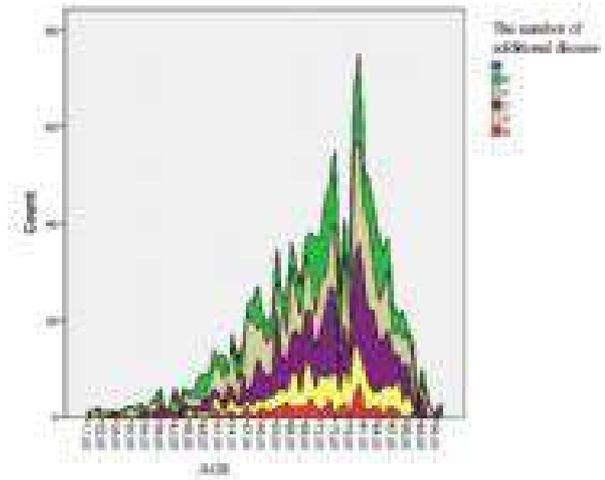


Figure 2. The age distribution of additional diseases

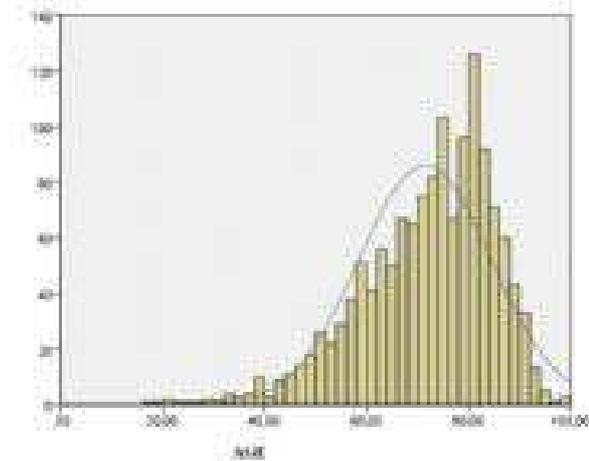


Figure 3. Age histogram

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[Diğer]

MESENTERIC PANNICULITIS

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Objectives: Mesenteric panniculitis is a rare, benign and chronic fibrosing inflammatory disease that affects the adipose tissue of the mesentery of the small intestine and colon. The specific etiology of the disease is unknown. The diagnosis is suggested by computed tomography and is usually confirmed by surgical biopsies. Treatment is empirical and based on a few selected drugs. We report a 31-year-old girl who presented with a main complaint of abdominal pain diagnosed by computed tomography due to mesenteric panniculitis.

Case: A 31-year-old male patient presented with complaints of pain in the epigastric and umbilical region. On clinical examination there was tenderness in the umbilical region, but no defense or rebound. Physical examination was unremarkable, and the general

condition was good. Blood pressure 120/80 mmHg, body temperature: 37.4, heart rate: 98/min, respiratory rate: 12, GCS: 15. Laboratory tests: Leukocytes 15,900 / pl, CRP: 56.6 g / dl, AST: 18 u / l, ALT: 16 u / l, total bilirubin: 1.71, direct bilirubin: 0.32, lipase: 22 U/l, alkaline phosphatase: 91 U/l. We performed CT scan of abdomen and pelvis. Intravenous contrast was given and 1 mm serial sections were taken. Uncertain contour, slightly hyperdense mesenteric area was detected, beginning from origin of superior mesenteric artery and reaching up to level of jejunal loops connections through perivascular distribution, arching the adjacent bowel loops. And also there were many reactive lymph nodes at defined area. The area was interpreted as quite characteristic for mesenteric panniculitis with these features. The patient was discharged with symptomatic medical therapy and recommended a close follow up.

Conclusion: Mesenteric panniculitis is a rare clinical entity that occurs independent in association with other disorders. Diagnosis of this nonspecific, benign inflammatory disease is a challenge to gastroenterologists, radiologists, surgeons and pathologists. CT features of the disease, usually highly suggestive, have recently been delineated clearly. Open biopsy seems rarely necessary. There is no standardized treatment, and it may consist of anti-inflammatory or immunosuppressive agents.

Keywords: mesenteric panniculitis, abdominal pain, emergency medicine



Figure 1. Mesenteric panniculitis in mesenteric artery superior

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[Diğer]

VALENTINO'S SYNDROME A PERFORATED PEPTIC ULCER MIMICKING ACUTE APPENDICITIS

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Objective: Perforation of a duodenal ulcer (DU) into the retroperitoneal space presenting with clinical features of acute appendicitis is known as Valentino's syndrome. Post duodenal perforation, the gastric and duodenal fluids tend to settle in the right paracolic gutter causing peritonitis and clinically mimicking acute appendicitis. Now we present a case of 43 years old male who

presented with symptoms and signs suggestive of appendicitis accompanied by elevated inflammatory markers. That is Valentino's syndrome –unusual presentation of perforated peptic ulcer.

Case: A 21-year-old gentleman presented to the emergency department with complaints of severe right lower abdominal pain, vomiting, and fever of 8 h duration. On examination, he was febrile and had rebound tenderness in the right iliac fossa. The character of the pain was persistent but not cramping. He had no other systemic diseases, daily medication. He had history of peptic ulcer with out any treatment. Physical examination was unremarkable, the general condition was good. Blood pressure 120/80 mmHg, body temperature: 38.4, heart rate: 102/min, respiratory rate: 24, GCS: 15. Laboratory tests: Leukocytes 13,900 / pl, CRP: 112.6 g / dl, dL AST: 18 u / l, ALT: 16 u / l, total bilirubin: 0.51, direct bilirubin: 0.09, amylase: 51 U/l, lipase: 22 U/l, alkaline phosphatase: 39 U/l. There was no free air in the patient's chest X-ray. In the emergency ultrasonography appendix didn't visualise. Minimal fluid collection was noted in the right paracolic gutter with adjacent fat stranding. Clinically, acute appendicitis was suspected and the patient was referred for computed tomography (CT) scan of abdomen and pelvis. CT scan of abdomen and pelvis with intravenous (IV) contrast there were 4 mm perforation and edematous of the gastric antrum. The surgeon was closed the perforation. He was discharged 9 days after admission

Conclusion: We present a very rare case of preoperative diagnosis and successful surgical management of Valentino's syndrome. If a patient with peptic ulcer history suffers from right lower quadrant pain, ultrasonography demonstrates pericecal fluid Valentino's syndrome should be taken consideration.

Keywords: perforated peptic ulcer, valentino's syndrome, acute appendicitis



Figure 1. No air-fluid levels in radiography



Figure 2. Perforated peptic ulcer

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[Diğer]

FOURNIER'S GANGRENE

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Objectives: Fournier's gangrene is a very serious surgical emergency seen all over the world. Fournier's gangrene is a rare, necrotising fasciitis of the genitals and perineum caused by a mixture of aerobic and anaerobic microorganisms. The complications of this synergistic infection are multiple organ failure and death. Due to the aggressive nature of this condition, early diagnosis is crucial. Treatment involves extensive soft tissue debridement and broad spectrum antibiotics. Despite appropriate therapy, mortality is high. Here we report a case of an elderly man who applied to Emergency Department with necrotic perineal areas.

Case: A 67-year-old male, a known diabetic on irregular treatment, admitted to Emergency Department with complaints of swelling, pain, and smelling discharge from the scrotum of 9 days duration. On examination, he was conscious. There was pallor but no icterus, and lymphadenopathy. He was mild dehydrated. His pulse was 110/min, his blood pressure was 110/78 mm Hg. Body temperature: 38.2, Systemic examination revealed no abnormality. His scrotum was gross lyedematous with multiple discharging gangrenous patches left sides. Scrotum was tender with palpable crepitations. Laboratory tests hemoglobin: 8.8gr/dl, Leukocytes 20.800 / pl, CRP:142.g / dl, creatinine 1.05mg / dL, sodium 130 mmol / L, AST: 43 u / l ALT: 25 u / l In the emergency ultrasonography; scrotal tissue edematous and thickened. On the left under the subcutaneous tissue had increased echogenicity compatible with gas. Appearance was consistent with Fournier gangrene. He was taken up for emergency debridement. All the devitalized tissue was excised. Postoperatively patient was managed with broad-spectrum antibiotics and wet dressing. In the following days the patient was discharged.

Conclusion: Fournier's gangrene is not common, a clinical diagnosis is confirmed by suspicion. Treatment of patients are haemodynamic stabilization, broad spectrum antibiotics and early

aggressive surgery. When there is Perineal, genital and perianal lesions we should consider Fournier gangrene in preliminary diagnosis with multidisciplinary approach

Keywords: Emergency Medicine, debridement, Fournier's gangrene, scrotum,

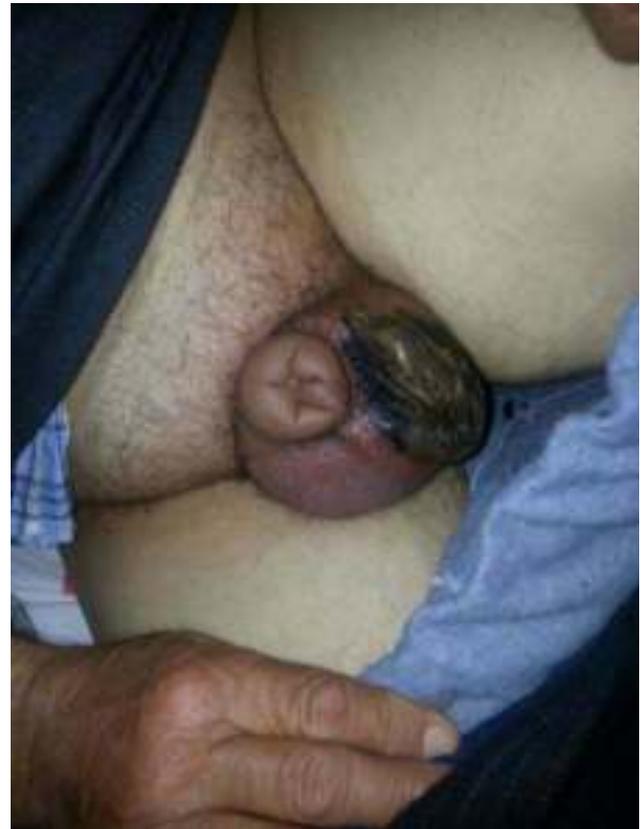


Figure 1. Fournier's Gangrene



Figure 2. Fournier's gangrene

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[Diğer]

A RARE CAUSE OF INTESTINAL OBSTRUCTION: ABDOMINAL AORTIC ANEURYSM

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Objectives: Intestinal obstruction is the partial or total blockage of the passage of the gastrointestinal system fluid. Intestinal obstructions can be classified as mechanical intestinal obstructions, paralytic ileus and intestinal pseudo-obstructions.

The characteristic signs and the symptoms of intestinal obstruction are abdominal pain, distension, obstipation and vomiting. Hemodynamic stability is the main principle of the treatment. Oral feeding should be stopped. Nasogastric decompression and fluid resuscitation are the other important steps of treatment. Early surgery is generally necessary for the treatment of mechanical intestinal obstructions; but paralytic ileus and intestinal pseudo-obstruction generally can not be treated by surgery. Obstruction due to vascular causes are rare in the literature, there is no clear data on the incidence.

Case: 88-year-old male patient was admitted to our emergency department with complaints with severe diffuse abdominal pain, vomiting, constipation continued for 2 days. On examination, there was abdominal tenderness. Rebound and defense did not. He has known any disease, except hypertension. Physical examination was unremarkable, the general condition was good. Blood pressure 150/90 mmHg, body temperature 37.2, heart rate: 102/dk, respiratory rate 16, GCS: 15. Laboratory tests: WBC 14,900 / ul. CRP: 97.8 g / dL, in the patient's abdominal directly radiography had air-fluid levels. In contrast-enhanced abdominal computed tomography in patients; the abdominal aorta, in the infrarenal area, after starting renal artery ostia of level 4 cm, 13 cm long, 10.1 cm, measured at the widest transverse diameter of mural thrombus containing intense abdominal aortic aneurysm was detected. The image associated with Abdominal aortic aneurysm had compressed of duodenum. In the patient aneurysm was thought to be intestinal obstruction. The patient was treated conservatively. Surgery said high risk for cardiovascular surgery, after that the patient's relatives had left the emergency at his own request.

Conclusion: Intestinal obstruction therapy is based for the treatment of the underlying condition. As in our case induced vascular obstructions did not have a clear treatment scheme, emergency surgery for aneurysm treatment is not planned in conjunction with oral intake gastric drainage be provided with a nasogastric tube, to suppress inflammation giving proton pump inhibitor in the definitive treatment until the obstruction is helping to trouble shoot.

Keywords: Intestinal obstrüksiyon, Abdominal aort anevrizması, Acil Tıp
Intestinal obstruction, abdominal aortic aneurysm, Emergency Medicine



Figure 1. Abdominal directly radiography air-fluid levels



Figure 2. Abdominal aortic aneurysm

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[Diğer]

A RARE CAUSE OF ABDOMINAL PAIN IN ED: MESENTERIC PANNICULITIS

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Introduction: Mesenteric panniculitis is a very rare cause of abdominal pain with a prevalence of 0.6% on abdominopelvic CT scans. It affects intestinal mesenteric tissue and represents a spectrum of disease processes characterized by degeneration, inflammation and scarring of the adipose tissue of the mesentery. Although the aetiology is not clear it is associated with

malignancies, previous abdominal surgery, trauma and infections. CT findings such as a-left sided distribution, 'fat-halo' sign, pseudotumorous hyperattenuation stripe (Fig.1), nodules and the absence of features suggesting haemorrhage, neoplasia, lymphoedema or other organ involvement are often diagnostic. Histologically, there is a chronic inflammatory process involving the adipose tissue with fat necrosis, inflammation and fibrosis.

Mesenteric panniculitis can be managed medically with analgesia and steroids.

Case Report: A 61-year-old woman presented with a 4 hour history of dull epigastric pain, radiating to her back and unrelated with movement. Her background included cholecystectomy and ERCP intervention due to choledocolithiasis. Her abdomen was soft but tender, she was not guarding and no palpable masses were evident. There was a mild elevation of GGT and ALP and normal level of cardiac markers on her blood tests. Her ECG was sinus rhythm. Abdominopelvic CT scan demonstrated mesenteric panniculitis and she was managed conservatively with analgesics and steroids and her symptoms settled.

Conclusion: Abdominal pain represents an important fraction of ED visits with a prevalence of 5-10% per annual. Overall, 35-40% of the patients have normal findings in blood tests and imaging modalities. These patients are usually diagnosed 'non-specific abdominal pain'. It is crucially important that ED physician has to keep in mind of other rare causes of abdominal pain to lower this ratio and manage patients thoroughly.

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Keywords: Abdominal Pain, Mesentery, Panniculitis

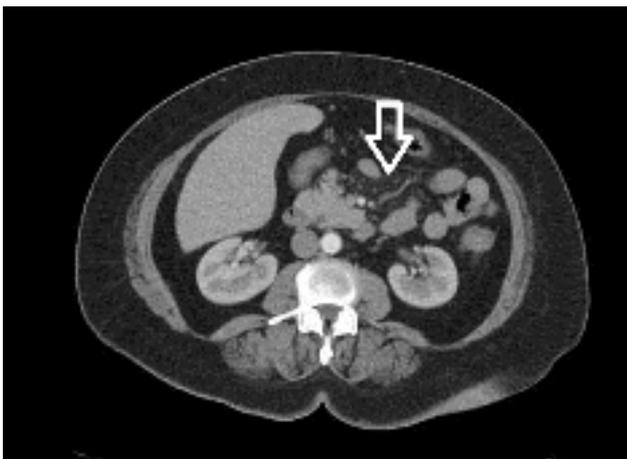


Figure 1. Pseudotumorous hyperattenuation stripe around the root of mesenteric artery

A CASE WITH RECURRENCE OF PARANASAL SINUS MUCOCELE

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Paranasal sinuses mucoceles are benign, expansile cystic masses covered by respiratory epithelium, resulting from accumulation and retention of mucus secretion in cases where the sinus drainage is obstructed. Mucoceles rarely occur in the paranasal sinuses. The exact etiology of mucoceles still remain uncertain. The predisponent factors for obstruction such as trauma, surgery, expansile lesion, chronic sinusitis, allergy or cystic fibrosis, facilitate the mucocele formation. Mucoceles primarily occur in the frontal sinuses (60%-65%)(1), but may also be found in ethmoid sinuses (20%-25%), maxillary (10%) and sphenoid sinuses(1%-2%) (2). The clinical presentation is variable according to the affected region, normally with insidious symptoms and slow course, possibly causing facial pain, headache, facial pressure, nasal obstruction, dental pain and ophthalmological alterations.

A 47 year old man presented to the department of emergency medicine with a history of diplopia for the past 2 days. History revealed that he had a sinus surgery done eight years ago by neurosurgery department for mucocele that wasn't known it's source by the patient. On clinical examination, he had proptosis of the right eye and diplopia in straight and upward gazes. The left eye deviated upward in primary position and eye movements were limited in all directions. Visual acuity was 6/6 in both eyes and an ophthalmologic examination was otherwise normal with no evidence of intraocular pathology. The patient was planned for cranial computerized tomography (CCT) because of suspected recurrence of mucocele. CCT scans showed a large cystic mass starting from anterior clinoid, spreading to intraorbital compartment, is compatible with the mucocele (figure). He consulted with neurosurgery department because of recurrence and was hospitalized for resurgery.

Mucoceleles occur most frequently in the frontal sinus, followed by the ethmoid, maxillary and sphenoid sinuses. Headache, diplopia, proptosis, visual disturbances and displacement of the globe are common manifestations of paranasal sinus mucoceles. Our findings are diplopia and proptosis as expected. A CT scan is an excellent diagnostic tool for revealing paranasal sinus mucoceles with orbital involvement; thus we obtained a CCT and revealed recurrence of mucocele. Both optic nerve compression and neuritis can cause deterioration of visual acuity. Besides the optic nerve, other cranial nerves (abducent or oculomotor) passing through the orbital apex or superior orbital fissure may be involved, thus resulting in impairment of ocular mobility. In our case, as mucocele spread out from the superior orbital fissure, eye movements were affected. The management of mucoceles is surgical. Currently, the endoscopic surgery is considered the treatment of choice for paranasal sinuses mucoceles (1). The main objective of such method is the complete removal of both the lesion and the sinus mucosa, thus preventing disease recurrence.

Usually, patients with paranasal sinus mucoceles have no nasal symptoms, initially seek help only for subjective ophthalmologic

complaints. Therefore, a good understanding of mucoceles is important for early diagnosis and rapid surgical intervention.

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Keywords: mucocele, paranasal sinuses, ophthalmic manifestations



Figure 1. A large cystic mass, starting from anterior klenoid, spreading to intraorbital compartment, is compatible with the mucocele.

P-523

[Diğer]

A PRESENTATION OF A CASE: ATTACK TREATMENT OF HEREDITARY ANGIOEDEMA IN EMERGENCY DEPARTMENT

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Introduction: Hereditary angioedema is a chronic disease which develops with acute attacks. Despite the prophylactic treatment in order to prevent the attacks, patients consult the emergency department (ED) because of attacks and they do not get benefit from classical angioedema treatment. One of the first step medicine which is used currently for treatment of attacks is C1 inhibitor extracts which are obtained from plasma by recombination technology. It is mentioned here about a patient with hereditary angioedema diagnosis who consulted to ED because of attack and to whom a C1 inhibitor extract Cetor® is applied.

Case: 55 year old woman patient applied to the ED with the complaint of tumescence on lower lip and right cheek. The patient, who was diagnosed as hereditary angioedema 4 months ago, had many applications to ED due to often complaints of tumescence especially of face around lips and cheeks. Danazol treatment was started but the patient did not get benefit of it and her complaints rose up. According to physical examination, her general situation was good and cooperate, oriental, vital symptoms were stable. The patient had a distinctive edematose

appearance on lip and right cheek. There was not uvulas edema, respiratory sound was bilaterally equal, there was not rale and rhonchus. Other system examinations were normal. C1 esterase inhibitor 1000 U (Cetor®) was applied to the patient. According to follows of ED the patient was discharged from the hospital without any complications and with regressing symptoms and advices.

Discussion: The patients with hereditary angioedema do not give good responses to the agents such as adrenaline, steroids and antihistaminics which are used for the treatment of classical allergic reactions. The duration of the acute attacks can be shorten by replacement of concentration of C1 esterase inhibitor. When it is not possible to obtain C1 esterase inhibitor concentration, Fresh Frozen Plasma (FFP) can be used instead of missing inhibitor protein for healing of symptoms during the attack. In addition to this, after FFP treatment more laryngeal edema may develop and threaten the respiratory system for some patients.

Keywords: Hereditary angioedema, Attack treatment, Emergency Department.

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[Diğer]

RHABDOMYOLYSIS AFTER SUNBURN

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Introduction: Rhabdomyolysis literally refers to “striated muscle wasting” occurs as a result of striated muscle cell damage due to traumatic or non-traumatic reasons, enhancing the passage of intracellular elements into systematic circulation. Trauma, excessive exercise, hereditary muscle enzyme deficiencies, convulsions, infections and some toxins or drugs like colchicine, statines and lithium were encountered in the etiology. Here in this report an unusual reason of rhabdomyolysis is presented.

Case: A twenty five year old male patient presented to the emergency department with the complaints of asthenia, nausea and vomiting the day after a prolonged sunbathing. He denies any trauma or excessive exercise nowadays. He did not use any recent medication. Vital signs were as follows: 36.6°C, blood pressure: 114/63 mmHg, spO₂:100%, pulse:103 beats per minute. During physical examination, a generalized erythema compatible with sunburn was observed on patient’s back. The creatine kinase (CK) level was 5640 U/L and the rest of the laboratory tests were within the normal limits. After hydration with 3000 ml 0.9%NaCl, the patient was discharged from the hospital. His CK level checked two days later was 1160 U/L and he didn’t have any active complaints.

Discussion: People usually present with sunburn complaints to the emergency department in summer. Rhabdomyolysis should be kept in mind in such benign cases to prevent serious complications such as myoglobinuric acute renal damage, hyperkalemia, cardiac arrest and disseminated intravascular coagulation.

Keywords: emergency medicine, rhabdomyolysis

P-525

[Diğer]

A RARE CAUSE OF UNCONSCIOUSNESS IN ELDERLY PATIENTS: CHRONIC LITHIUM TOXICITY

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Introduction: Lithium is a widely used drug for bipolar disturbances and for emotional instability treatment. Despite the lithium's pharmacokinetics and the factors effecting its clearance is well known, at the present time lithium intoxication is not a rare occurrence with different clinical presentations which delays the diagnosis and treatment. The reason of the intoxication is always overdose or decreased excretion. The acute intoxication is usually because of missed drug use or overdose for suicide, at times for self treatment of high doses of lithium intake causes acute intoxication on chronic base, on the other hand while having the usual dose an acute intoxication may lead to chronic lithium intoxication. Deaths and rate of sequellae can only be reduced by performing the rules for lithium treatment and to recognize the signs of intoxication.

Case Report: A 82 years old female patient under treatment for bipolar disease for 20 years admitted with signs such as feeling cold, hand tremors and unconsciousness. During the examination, her history revealed that the patient was under treatment with lithium (Lithuril 900 mg/day) and besides she had haloperidol oral drops (Norodol 3-5 drops/day), Paroxetine (Paxil 20mg/day). On physical examination blood pressure was 90/60 mmHg, pulse rate: 71/min, respiratory rate: 20/min, PaO₂: 92%, fever 37.7 C. On her neurological examination confusion, disorientation, postural tremor of the hands was observed. On her blood routine tests, BUN: 62 mg/dL (9,8-20), creatinine: 3.36 mg/dL (0,6-1.1) and lithium level was 1.93 (0,6-1,2 mmol/L). Venous blood gas revealed pH: 7,49 (7,37-7,41), HCO₃: 24,3 mmol/L (22-28). The average urinary output was 10 mL/hour. Her brain computerized tomography was normal. The findings mentioned above lead the diagnosis of chronic lithium intoxication based on acute renal failure. The patient was taken to emergent hemodialysis. After hemodialysis her BUN was 28 mg/dL, creatinine was 1,59 mg/dL and lithium level were lowered to 1,01 mg/dL. The confusion of the patient was regressed. After hemodialysis chest pain appeared and afterwards bradycardia, hypotension occurred and finally resulted with cardiac arrest. Despite cardiopulmonary resuscitation, the patient died.

Discussion: Lithium used in psychiatry with near to maximum dose levels. Its effective and toxic doses are so close. So, on the therapeutic dose levels, side effects encountered frequently. Physical tolerance to lithium differs from one to another. Lithium intoxications are evaluated as acute, acute on chronic usage and chronic intoxication. Frequently the reason is failure at lithium discretion. This clinical picture occurs in elderly patient and is more severe in cases like our case. The increase of serum creatinine and age decreases the excretion.

Chronic lithium intoxication is worse and resistant to treatment compared to other intoxications. Especially in elderly may be confused with cerebrovascular accident and this situation may result in delayed diagnosis and treatment. Whereas early

diagnosis and treatment are vital importance. Emergency physician must be careful for the patient's history and the drugs that they used, in this way the precise diagnosis may be done.

Keywords: Lithium intoxication, emergency department, treatment

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[Diğer]

A FATAL ENDOCRINOLOGICAL EMERGENCY: MYXEDEMA COMA

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Introduction: Hypothyroidism is described as absence of thyroid hormones. It is a common problem with an incidence of 0.1-2% in all population. Most common clinical presentations are fatigue, weakness, cold intolerance, constipation, bradycardia and hypokinesia. These symptoms are due to the decreased metabolic rate in absence of thyroid hormones. Another group of symptoms occur by the effect of matrix glucosaminoglycans which deposit in interstitial tissue. These include thickening of hair and dermis, macroglossia and hoarseness. Myxedema coma is presented with the combination of these symptom groups when hypothyroidism persists for a long period of time. It is described as altered mental status, hypothermia and functional loss in all organ systems due to the slow metabolic rate in absence of thyroid hormones. It is relatively rare but a deadly condition. In this report we'd like to present such a case of myxedema coma in a bipolar patient who uses lithium for her condition but do not follow her recommended hypothyroidism treatment.

Case: A 51 year old female patient presented in emergency department with altered mental state, weakness and diarrhea. She had a history of hypothyroidism, hyperlipidemia, diabetes mellitus and bipolar disorder and was prescribed lithium, thyroid hormones and oral antidiabetics. Patient described diarrhea with non infectious characteristics and also confessed not using her thyroid hormones. Her blood pressure was 80/50 mmHg and her glasgow coma scale was 14 with a confused mental state. Other vital signs were stable. In her physical examination she was aphatic and she had edema all over her body. Laboratory results showed a creatinine level of 5.1 (normal 0.3 – 1.1 mg/dL), blood urea nitrogen was 97 with mild hyponatremia (133mg/dL). C-reactive protein was 43 and prolactin was 0.65. She had a TSH level over 100ng/dl. Oral levothyroxin was administered. Patient was admitted to intensive care unit. Her blood cultures revealed gram positive bacteriemia and tazobactam treatment was started. Following her admission patient developed multi organ dysfunction and had a cardiac arrest. She did not respond to resuscitation and was deceased on 6th day of her admission.

Discussion: Myxedema coma is a rare but deadly endocrinological emergency. Common causes of hypothyroidism may lead to this condition. Myxedema coma should be in the list of differential diagnosis in all patients with a thyroidectomy scar or who received I-131 treatment. Typically a comatose patient with hypothermia, hyponatremia and hypocalcemia suggests myxedema coma. Other causes of myxedema must always be considered but it is essential to remember fever may not be present. Even though this clinical state is called a coma, patients sometimes present with altered mental status or with psychotic symptoms rather than full

loss of consciousness. Even with an aggressive approach mortality can be as high as 40%. Risk of mortality is increased in elderly patients, patients with cardiac history, altered mental status, hypothermia and sepsis (12). In our case, even though treatment was administered immediately, mortality could not be prevented.

Keywords: Myxedema Coma, Hypothyroidism, Endocrinology

Myxedema coma



Figure 1. Patient had an altered mental state and had global edema.

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[Diğer]

A SELF-INSERTED RECTAL FOREIGN BODY

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Introduction: Intentional or unintentional insertion of rectal foreign bodies is not uncommon and often poses a serious challenge on the clinician. Objects can be inserted for diagnostic or therapeutic purposes or self-treatment of anorectal disease by criminal assault and accident or most commonly for sexual purposes. Most patients with rectal foreign bodies present to the emergency room usually after efforts to remove the object at home. A complete history, physical examination and radiographs are important to identify the condition in patients that hide the insertion of rectal body. We report a case with the complaint of abdominal pain and hides the correct history.

Case report: A 34-year-old male patient presented to our emergency department with the complaint of abdominal pain. Clinically, the abdomen was soft and flat and bowel sounds were normal. In the rectal examination, the distal part of a foreign body was palpable superior of the sphincter ani muscles. It was learned that he self-inserted the material into his rectum. Digital

removal of the object was unsuccessful. On standing plain X-ray, a radiopaque foreign body measuring approximately 15 cm*6 cm diameter was observed (figure 1). A general surgeon was consulted the patient and an emergence operation was performed. The foreign material was extracted with the patient in lithotomy position after anal dilatation, under general anesthesia. The material was a glass bottle (figure 2). No procedure-related complications occurred and the patient was discharged 24 hours after the operation.

Discussion: Rectal foreign bodies are not an uncommon presentation to the emergency department and a known phenomenon, most frequently associated with anal eroticism. Various foreign bodies and their management have been reported including bottles, spray cans, hosepipes, money, iron bars and sex toys. Frequently they can be removed through the transanal approach. However, this often is not well tolerated by patient or can force the foreign body more proximal. Most patients will only report anal pain. If they complaint of abdominal pain, leucocytosis or A thorough history, physical examination, and radiographs often are necessary to identify and plan treatment. Nearly 40 percent of rectal foreign bodies can be removed in the emergency department with intravenous sedation. If digital removal of the object is unsuccessful, emergence operation should be performed as in our case.

Conclusion: The patients who presented to the emergency department with abdominal pain, a complete history and physical examination also the rectal examination are absolutely required.

Keywords: foreign bodies, rectum, plain film



Figure 1. On standing plain X-ray, a radiopaque foreign body measuring approximately 15 cm*6 cm diameter was observed



Figure 2. The figure shows a glass bottle that removed from rectum

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[Diğer]

POSTOPERATIVE SHIVERING AFTER GENERAL ANESTHESIA

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Postoperative shivering due to anesthetics is a relatively common condition in postoperative anesthesia units. However, the true prevalence is not known. We report a case of a 43-year-old female patient presented to the emergency department with shivering, sweating and malaise. She had a history of laparoscopic cholecystectomy a day earlier and discharged on the day of ED presentation. Her vital signs were in normal limits with the body temperature of 36.5 °C. Her symptoms subsided with tramadol and magnesium. She was observed and asymptotically discharged. Emergency physicians generally face with symptoms related to the surgical procedures, however postoperative symptoms may be an adverse effect of an anesthetic agent and being familiar with rare conditions is also essential.

Keywords: postoperative anesthesia shivering

P-529

[Diğer]

HEMATOLOGICAL MARKERS IN HYPERTENSIVE URGENCY

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Introduction-Objective: Hypertension is one of the most common disorders presenting to emergency departments. Hypertensive urgency (HU) defines the situation in which

no end-organ damage accompanies to elevated blood pressure, while hypertensive emergency (HE) is suggested when end-organ damage occurred.

In the present study, we aimed to investigate whether there are significant difference in hematological parameters between HU and HE.

Materyal Method: Overall, 130 patients who presented to emergency department of our university during 6-months period were included to the study. The case group was consisted of 52 patients who were diagnosed as hypertensive emergency, while the control group was consisted of 72 patients who were diagnosed as hypertensive urgency. In both groups, age, gender and blood pressure measurements were recorded at admission. White blood cells, Hb, RDW, MPV, PLT, neutrophil and lymphocyte ratios were studied in blood samples drawn from the patients included.

Laboratory Methods: Blood samples were drawn into tubes with sodium citrate, which were evaluated at room temperature by using Penta DF Nexus analyzer (Hariba Medical) in biochemistry laboratory of Muğla University, Medicine School)

Statistical Analysis: All data obtained were recorded into SPSS Version 20.0 software. Data with normal distribution was compared with a parametric test, while data with skewed distribution was compared with a non-parametric test between groups. $p < 0.05$ was considered as statistically significant.

Findings: Overall, 130 patients who presented to our emergency department within 6 months period were enrolled to the study. Age varied from 32 to 94 years and there were 77 men (59.2%) and 53 women (40.8%). In the history, the most common complaint was headache while there was history of hypertension in 94 patients (%72.3). Of the patients, 119 (91.5%) were conscious at presentation. When diagnoses were considered, it was seen that 78 patients (60.0%) were diagnosed as hypertensive urgency while 52 patients were diagnosed hypertensive emergency. When patients were classified as HU and HE, there were significant differences in systolic blood pressure, platelet, neutrophil and outcome between groups (Table 1).

Conclusion: There were significant differences in platelet and neutrophils between HU and HE groups.

Keywords: Hypertensive urgency, hypertensive emergency, hematological parameters

P-530

[Diğer]

A FATAL ACUTE ABDOMEN: ACUTE MESENTERIC ARTERY RUPTURE

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Introduction: Non-traumatic mesenteric artery rupture is a rarely seen entity which is generally caused by conditions such as underlying connective tissue disease. Cases related to Ehler Danlos Syndrome type IV have been described in children. In general, it can manifest in a wide range from non-specific symptoms such as abdominal pain, nausea and vomiting to acute abdomen and intraabdominal hemorrhage. By this case report, we aimed to emphasize that this fatal diagnosis should be kept in mind in cases presenting with abdominal pain and vomiting, although it is rarely seen.

Case: In the history, it was found out that the patient (55-years old man) presented to another healthcare facility with epigastric pain and pain which onset within same day as his complaints didn't relieve. He was admitted to emergency department for observation with intravenous fluid infusion to evaluate etiology of abdominal pain and to exclude a cardiac pathology as he was conscious and had no physical finding other than epigastric tenderness on physical examination. It was also found out that the patient was discharged after intravenous fluid infusion as biochemical and cardiac evaluations were normal. It was found out that relatives of the patients called EMS as abdominal pain was exacerbated and the patient was transferred to ED of the hospital; however, he was unconscious with superficial breathing and tachycardia in the presentation; thus, intubation was attempted and cardiac arrest was developed during intubation but no respond was observed to CPR. The patient underwent autopsy because of suspected death. It was detected that the patient died due to mesenteric artery rupture in the autopsy.

Conclusion: Abdominal pain, nausea and vomiting that are observed in many diseases are most common presenting complaints in emergency departments. Particularly, these symptoms are also seen in rare but fatal acute abdominal cases; however, they could be missed as they are elusive. Mesenteric artery rupture should be kept in mind in cases presenting with these complaints.

Keywords: Acute Abdomen, Acute Mesenteric Artery Rupture, Emergency Medicine

P-531

[Diğer]

HYPONATREMIA WHICH IS ASSOCIATED WITH THE USE OF VALPROIC ACID

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Introduction: Valproic acid (Valproate), has a broad spectrum of anticonvulsant activity, although it is primarily used as a first-line treatment for tonic-clonic seizures, absence seizures and myoclonic seizures and as a second-line treatment for partial seizures and infantile spasms. It has also been successfully given intravenously to treat status epilepticus. The most common adverse effects of valproic acid are digestive complaints like diarrhoea, nausea, vomiting and indigestion; vision problems like seeing double or lazy eye; hormonal disturbances, hair loss, memory problems, weight gain, infections, dizziness, drowsiness, tremor and headache. Less common, yet serious side effects include syndrome of inappropriate antidiuretic hormone secretion, hyponatremia and peripheral oedema.

Hyponatremia is defined as a low sodium concentration in the blood. signs and symptoms of hyponatremia include nausea and vomiting, headache, short-term memory loss, confusion, lethargy, fatigue, loss of appetite, restlessness, irritability, muscle weakness, spasms or cramps, seizures, and decreased consciousness or coma.

With this case report, we are aimed to present the development of hyponatremia which is associated with the use of valproic acid.

Case: A 82-years old woman presented to our emergency department with altered mental status and lethargy for 1-2 days. The general health status was poor-to moderate with somnolence.

She had no finding of lateralization. Vital signs were as follows: blood pressure, 150/80 mmHg; pulse: 92 bpm; temperature, 37°C. In history, it was found out that the patient had no known disorder other than epilepsy; thus, using valproic acid. On the CT scan performed, no abnormal finding was detected; however, it was found that sodium (Na) was 110 mEq/L in blood test; thus altered mental status was attributed to altered mental status. After neurology and internal medicine consultations, the patient was admitted to hospital with the diagnosis hyponatremia related to valproic acid.

Conclusion: Hyponatremia is a critical, life-threatening situation and it should be kept in mind that valproic acid may cause hyponatremia

Keywords: valproic acid, hyponatremia, altered mental status

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[Diğer]

THE CHOKING GAME

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Introduction: Unintentional injury is the leading cause of death in children, adolescents, and young adults in the United States. Unintentional injury often results from risk-taking behavior such as alcohol or drug use. Self-induced hypoxia (eg, engaging in strangulation activities, such as “the choking game”) is another risky behavior among children and adolescents that may have a fatal outcome. The “choking game” refers to self-strangulation or strangulation by another person with the hands or a ligature to produce a euphoric state caused by cerebral hypoxia and is perhaps more accurately described as a “strangulation activity” than as a game. Breath holding and/or compression of the abdomen or thorax are involved in some versions of the activity. The intent is to release the pressure just before loss of consciousness; failure to do so can result in death, particularly when the activity is performed alone using ligatures

Case report: 16-year-old woman was brought to emergency department (ED) cause of drowning with bicycle lock (figure-1). According to anamnesis that was received from her friends, it is learned that twenty minutes before arriving to ED patient wrapped the bicycle lock around her neck two times by her as a joke. After a short time, she became cyanotic and unconscious, also had urinary and stool incontinences. On initial evaluation, she was unconscious and glasgow come score was 6. Vital signs were as follows: blood pressure 110/70mmHg, heart rate 150beats/min, and oxygen saturation 80% on room air. On physical examination, telem sign was seen on neck, decreasing breath sounds and bilateral rales were detected on thorax examination (figure-2). Decorticated posture and bilateral babinski slapdash reflex were detected. The patient immediately was intubated and performed brain and cervical computed tomography (CT). Brain and cervical CT demonstrated was normal. After admitted intensive care unit (ICU), oxygen saturation levels decreased. Chest X-ray demonstrated bilateral diffuse opacities in parenchyma of lung and diagnosed ARDS (figure-3). During follow-up period oxygen saturation levels did not increase and she arrested. Although CPR was performed for 40 minutes, spontaneous circulation did not return and patient died two days after admitted ICU.

Discussion: The “choking game” is defined as self-strangulation or strangulation by another person to produce a euphoric state by reducing cerebral oxygenation. Failure to release pressure before loss of consciousness can result in serious neurologic injury or death, particularly when strangulation activity is performed alone. The pathophysiologic effects of strangulation activities have not been well studied. Several mechanisms, including cerebral hypoxia and hypoperfusion, cerebral vascular engorgement, decreased cardiac output (related to increased thoracic pressure), and hypercarbia have been postulated to play a role in loss of consciousness and other clinical manifestations. After loss of consciousness, when the pressure is released, there may be a secondary “high” related to the rush of blood and oxygen to the brain. Children and adolescents who are found unconscious may require aggressive resuscitation and treatment of post-anoxic brain injury

Keywords: Self-induced, suffocation



Figure 1. Bicycle lock



Figure 2. telem sign

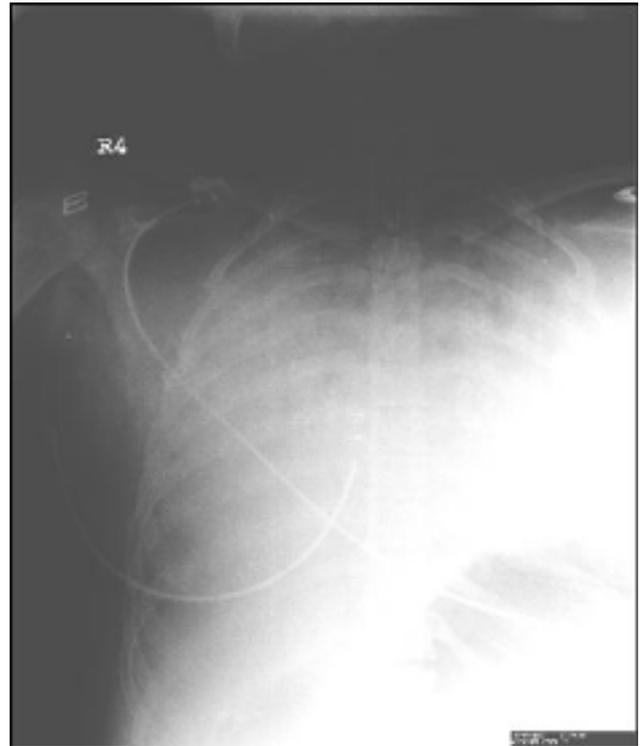


Figure 3. Chest X-ray of the patient

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[Diğer]

SPONTANEOUS INTRA-PERITONEAL BLEEDING SECONDARY TO WARFARIN THERAPY

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Introduction: Warfarin is a coumarin anti-coagulant, widely used for the therapeutic and prophylactic anti-coagulation. Although it is considered as a life saving medicine, it is associated with the several significant adverse effects. Intra-peritoneal bleeding is one of the complications, usually following trivial trauma. There are only very few reported cases of the spontaneous haemoperitoneum in literature without any evident cause. Spontaneous onset of the intra-peritoneal bleeding due to warfarin therapy is also exceptional. We report a case of the spontaneous intra-peritoneal bleeding secondary to warfarin therapy

Case report: 82-year-old man was admitted to emergency department with abdominal pain and weakness. On anamnesis revealed that he had generalized abdominal pain for two days and vomited twice. He did not have diarrhea, constipation, and dysuria. On his past history revealed that patient who had coronary artery disease and atrial fibrillation was admitted hospital two months ago due to overdoses of warfarin. Patient’s medications were warfarin, digoxin, ramipril, bisoprolol, and isosorbide dinitrate. On initial evaluation he was alert, oriented, and cooperated. Vital signs were as follows: blood pressure 150/80mmHg, heart rate 75beats/min and arrhythmic, respiratory rate 16 min, temperature was 36.6°C, and oxygen saturation 93% on room air. Spot blood sugar was 98 mg/dl. On physical examination, he had generalized tenderness and no defense on abdomen, normal stool was seen on rectal examination. On other systems examination

revealed no pathological findings. There were atrial fibrillation and T wave inversions in leads D1-aVL and V2-V6 T on his electrocardiogram. On laboratory results were as follows: Hgb 8mg/dL (value of two months ago was 13mg/dL), Plt: $799 \times 10^3/\mu\text{L}$ urea: 80 mg/dL, creatine 1.1 mg/dL PT 272 sec aPTT 153 sec, INR: very high. No hematuria on urinalysis. Computed tomography of abdomen demonstrated that generalize abdominal free fluid and deterioration on mesenteric fat tissues (figure-1). Thus, patient was consulted to general surgery and in internist and was admitted intensive care unit. After transfused 4 unite fresh frozen plasma and 3 unit erythrocyte suspensions, control INR was 3 and Hgb was 11 mg/dL. The patient whom hemoglobin levels and vital signs were stabile during follow-up period was discharged with planning medical treatment.

Discussion: Warfarin is used in the treatment and the prophylaxis for the various clinical conditions including deep vein thrombosis, pulmonary embolism, valvular heart disease, atrial fibrillation, recurrent systemic emboli, recurrent myocardial infarction, prosthetic heart valves and prosthetic implants. However, it is associated with the serious adverse effects such as the haematuria, soft tissue bleeding and haematoma, intra cerebral bleed, skin necrosis, purple toe syndrome and abdominal bleed. Theoretically, the bleeding can occur in any part of the body following any kind of the anticoagulation therapy. Bleeding in the gastrointestinal tract is by far the most common complication of the warfarin therapy. Bleeding may occur intra-, extra- or retroperitoneally, but the intramural bowel haematoma is the most common cause of the abdominal pain in the patients who are on anticoagulation therapy

Here, we report the rare complication of the warfarin therapy – spontaneous intraperitoneal bleeding

Keywords: warfarin, hemoperitoneum

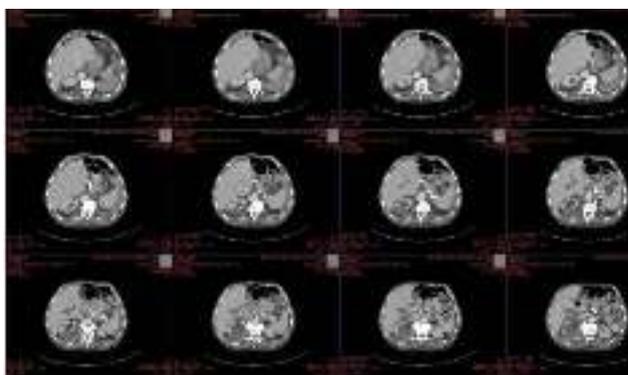


Figure 1. abdomen CT of the patient

P-534

[Diğer]

WEAKNESS IN THE EMERGENCY DEPARTMENT: STRENUOUS PHYSICAL ACTIVITY INDUCED HYPOKALEMIC PERIODIC PARALYSIS

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Introduction: Hypokalemic periodic paralysis is a rare but serious disorder that is typically caused by a channelopathy. Thyrotoxicosis, heavy exercise, high carbohydrate meal and

some drugs can trigger channelopathy in genetically predisposed individuals.

Case: A 33-year-old male patient presented to the emergency department with weakness in the lower extremities. He stated that he had done heavy physical activity during the previous week. The patient exhibited motor weakness in the lower extremities (2/5 strength) during the physical examination. Initial laboratory tests showed a potassium level of 1.89 mEq/L. The initial electrocardiogram demonstrated T wave inversion and prominent U waves. The patient was treated in the emergency department with oral and intravenous potassium. The physical and ECG symptoms resolved within 16 hours of potassium supplementation and biochemical tests showed normal serum potassium levels. The patient was discharged shortly after the resolution of the symptoms.

Conclusion: Weakness is an important but nonspecific symptom that may be brought on by a number of underlying physiological processes. Hypokalemic periodic paralysis is a rare disease that may be triggered by heavy physical activity and presents with recurrent admissions due to weakness

Keywords: hypokalemic periodic paralysis, muscle weakness, emergency department



Figure 1. ECG findings of hypokalaemia



Figure 2. hypokalemia improved ECG

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[Diğer]

AN INTERESTING CASE OF PORENCEPHALIC CYST

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Introduction: Porencephalic cysts, also called poroncephaly, are cysts filled with cerebro spinal fluid and shows continuation with ventricular system and subarachnoid space. These cysts are generally formed after a parenchymal injury (e.g. hemorrhage, infarction, inflammation). The affected brain parenchyma undergoes necrosis and is replaced by fluid-filled cysts. Although generally asymptomatic, these cysts may cause increased intracranial pressure symptoms. When symptomatic, cysts are surgically connected to the ventricles. A nontraumatic porencephalic cyst is a rare entity and our case is a presentation of this condition.

Case: Our patient is a 32 year old female presenting with three days of headache and rhinorrhea, especially increasing with bending forward. The patient had no history of trauma or fever.

Vital signs were BP 120/75 mm Hg, pulse 98 bpm, respiratory rate 20/ min, temperature of 36,8 C(98,2 F), oxygen saturation of 97%. Upon examination, rhinorrhea was observed to increase with kneeling forward. Neurologic examination showed isochoric pupils, reactive to light, no neck tenderness, a positive Kernig sign. A head CT without contrast showed a 5,5x4 cm left frontal cystic lesion extending to the contra lateral lobe. Patient was started on IV antibiotics and consulted to neurosurgery and admitted for further evaluation. The cyst was surgically removed during her admission.

Conclusion: Although this disorder is rare, porencephalic cysts should be considered in the differential diagnosis of patients with non traumatic rhinorrhoea or otorrhea.

Keywords: Porencephalic cysts, rhinorrhoea

CD image



CD image



CD image



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[Diğer]

GIANT RETROPERITONEAL ABSCESS WITH UNKNOWN ORIGIN IN A PATIENT WITH ALZHEIMER DISEASE

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Introduction: Infections of the retroperitoneal space may present with insidiously vague symptoms and non-specific clinical signs make it diagnostic difficulty. It is classified primary or secondary. Most commonly origin of abscess is urinary tract infection, bowel-related diseases, and spinal and renal tuberculosis disease. Less common origins include bone infections, trauma, hematogenous spread and malignancies.

Case: We report a case of primary retroperitoneal abscess whose diagnosis was delayed for weeks. A 65- year-old male with the history of vague abdominal pain and fever for 20 days was admitted to emergency department. He had history of Alzheimer disease and constipation for last 15 days. Patients' initial vital signs were normal limits. Abdominal examination revealed left lower quadrant and flank tenderness and nothing else. Laboratory studies WBC 15000, PLT 621. HTC; 47.1, Kreatinin 0.8, ALT 65, AST 99, GGT 75. Urine microscopic analyzes showed 1-2 leucocytes. Abdominal ultrasound indicated fluid collection about 8.5x9x17 cm diameter adjacent to right midrenal line and extending to pelvis. Abdomino-pelvic computed tomography showed a giant mass consistent with retroperitoneal abscess (figure 1a-b). Approximately 6 L pus was drained by surgical intervention. Multiple anaerobic bacteria grew in microbiological cultures.

Conclusion: This was a case of a retroperitoneal abscess secondary to unknown etiology in a patient with Alzheimer disease. A high index of suspicion is essential for early diagnosis in elderly patient's especially coexisting Alzheimer disease.

Keywords: giant abscess, retroperitoneal, Alzheimer disease

Figure 1a



Figure 1b



Figure 1a-b. Show a mass ranging 10x8cm diameter and containing air-fluid level, initiating from lower pole of the right kidney and extending into right pelvic cavity and involved in iliopsoas muscle.

P-537

[Diğer]

A RARE CAUSE OF CHEST PAIN IN THE EMERGENCY DEPARTMENT: PNEUMOMEDIASTINUM AS A RESULT OF BOERHAAVE SYNDROME

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Introduction: First described by Boerhaave in 1724, Boerhaave syndrome refers to transmural rupture of esophagus.1 In this paper we report a patient with Boerhaave syndrome.

Case: A 19-year-old man presented to the emergency department with pain starting in neck and spreading to chest following retching after he drank a cold beverage. The pain was of stinging and burning character and was exacerbated by swallowing and breathing. His past history was notable for gastroesophageal reflux disease, for which he had used no drugs. His physical examination and ECG were normal. Laboratory results were as follows: Creatinine - 1,04 mg/dL Sodium - 141 mmol/L Potassium - 3,6 mmol/L CK-MB mass - 3,6 ng/mL Troponin - I - 0,021 ng/mL Hemoglobin - 14,4 g/dL Leukocyte count - 9,92 thousand/ μ L, and D-Dimer - 0,21 μ g/mL. A posteroanterior chest X-Ray revealed no pneumothorax, pleural effusion, mediastinal widening, and pneumonia. A thoracic computed tomography without contrast administration was performed upon persistence of symptoms. It showed signs consistent with minimal

pneumomediastinum in mid mediastinum. This condition was attributed to focal esophageal rupture following forceful retching. The patient was considered to have Boerhaave syndrome and appropriate consultations were obtained from other departments.

Conclusion: Boerhaave syndrome is a condition that is clinically characterized by a triad of forceful vomiting, sudden-onset chest pain, and subcutaneous emphysema. It may be fatal unless recognized and treated early in its course.2, 3 Spontaneous rupture is typically a result of a sudden increase in intraesophageal pressure following forceful vomiting and retching episodes4, 5. Its diagnosis may be made with the help of cervical and chest X-Rays as well as gastrointestinal imaging studies with contrast, although computed tomography has proved useful for making a rapid and accurate diagnosis6.

The differential diagnosis of patients presenting to emergency department with chest pain following retching and vomiting should include Boerhaave syndrome and the resulting pneumomediastinum. In suspected cases a computed tomography with contrast should be obtained without delay.

Keywords: Boerhaave, Emergency, Pneumomediastinum



Figure 1. Minimal pneumomediastinum in mid mediastinum

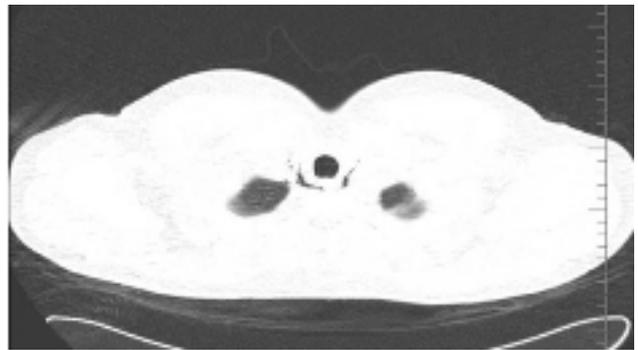


Figure 2. Minimal pneumomediastinum in mid mediastinum

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[Diğer]

THE DEVELOPMENT OF THE 112 AMBULANCE SERVICE IN OUR COUNTRY DESPITE THE INSUFFICIENT PERFORMANCE OF THE BURN CENTERS

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Introduction: The emergency ambulance service is a very important public health service which provides support and

help in the maintenance of the vital functions of a patient during transportation to the nearest Emergency Department Unit in cases when a patient's life is in danger or when he needs immediate medical assistance. Since the 1990s the Turkish Armed Forces, besides land transportation, have provided air transportation services for emergency cases. The usage of civilian airways for emergency transportation began in the 2000s in our country and they are developing at a high rate.

Burning is a very important public health problem for our country and for developing countries. Its treatment requires special units and a multidisciplinary approach. Despite the increase in the number of Burn Centers in our country, there are still a lot of obstacles in having a patient in need of an Intensive Care Unit (ICU) being transferred to one of these centers. In this report we evaluate the difficulties of having a child with severe burning wounds and in need of an ICU, accepted to a Burn Center.

Case: A 30-month-old female patient was brought at around 3:30pm by her parents to the Emergency Department. She had fallen into a hot tendour and the mother had only realized this 1-2min later. Her general condition was bad when she came in. She was conscious and actively crying. Second and third degree burnings were visible over all her body. She was dyspneic, tachypneic and had a prolonged expirium. There were black secretions coming from inside of her nose and mouth and she was tachycardic. There were no distal pulses on both her upper extremities and there was edema on her hands, forearms and arms. As an analgesic the patient was given IM Ketamine on a 5mg/kg dose and she was also therefore sedated. A femoral central venous catheter was inserted and the patient was intubated. Beside as analgesic, antibiotic and fluid therapy, tetanus prophylaxis was applied. Urinary and nasogastric catheters were inserted and fasciotomy was performed by a plastic surgeon. Because there was no current free place in the Burn Center, the patient was admitted into the pediatric ICU until one was available. The attending physicians consulted with the specialist and through the 112 service of Van city coordinated themselves with the Burn Centers of Turkey to find a suitable place for the patient. After 8 hours an appropriate place was found in Izmir. 12 hours after being admitted to the Emergency Department, the patient was transferred to Izmir through the air ambulance service provided by the Ministry of Health.

Conclusion: Despite the presence of well-equipped Burn Centers in our country, there are still obvious difficulties in the treatment and follow-up of pediatric or adult patients with burning wounds that require ICU service. To resolve this issue in the near future effective measures should be taken.

Keywords: 112 Ambulance service, Burn Centers, Emergency Department

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[Diğer]

AN OUGHT-TO-BE- GASTROINTESTINAL-BLEEDING MUNCHAUSEN SYNDROME

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Introduction: Munchausen syndrome (MS) is a disease characterized by fictitious symptoms defined by the patient and recurrent applications to health institutions with inconsistent

medical history. This is a case report of a patient with Munchausen syndrome who was followed up for gastrointestinal bleeding. The patient had been evaluated in many different medical centers by different doctors and had undergone various treatments and procedures of diagnosis and examinations, but his complaints were still repeating. As a result of these findings; we thought MS and consulted with an adult psychiatrist.

Case: A 24-year-old male patient admitted to the Emergency Department with bleeding from his mouth. The patient was vomiting blood. During history taking we learned that the patient was unemployed, he had a history of cocaine usage and had experienced blood vomiting before. There were no apparent signs of trauma. We later discovered that the patient had been priorly admitted to another hospital because of blood vomiting and being suggested an endoscopic procedure, he had refused. Including a rectal touché, an overall physical examination was performed and no pathological signs were detected. His vital signs were within normal range. CBC and clotting profile were normal. An endoscopy and colonoscopy were performed and they were both reported as normal. There was no change in the follow-up of his CBC and the patient was discharged.

The same patient admitted again with the same symptoms a week later. He still had mouth bleeding symptoms but the physical examination and vital signs were normal. The doctors decided then to check all his electronic medical records and they discovered that the patient had applied numerous times with bleeding symptoms in the emergency departments and in other policlinics. They also noted that he had been operated because of septal perforation due to cocaine usage. There was also nothing abnormal with his otolaryngologic and gastroenteric evaluations. His first CBC upon arrival was normal; Hb: 14.4 and Hct: 42%, but on his second one a decrease in the mentioned values was observed (Hb: 8.5 and Hct 28%). There was no impairment in his vital signs although. A control CBC was performed and a psychiatric diagnosis was being evaluated. The patient was followed-up and he was then seen adding water to his blood tube. Despite insisting to be hospitalized for further analysis, the patient was consulted with a psychiatrist.

Conclusion: Besides the patient overload that doctors experience in the Emergency Departments, MS patients can present themselves quite often and incompatible physical examination and laboratory results can sometimes confuse the attending doctors. Because Emergency Departments require social and legal responsibilities, these kind of cases should be handled in an appropriate way.

Keywords: gastrointestinal bleeding, munchausen syndrome, emergency department

P-540

[Diğer]

THYROTOXIC HYPOKALEMIC PERIODIC PARALYSIS: A CASE REPORT

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Introduction: Thyrotoxic hypokalemic periodic paralysis (THPP) is a rare complication of thyrotoxicosis. This clinic condition is often encountered in Caucasians and male gender

while thyrotoxicosis is frequently seen in women. The escape of potassium into the cell is the mechanism responsible for this disease and its etiology is not completely known. THPP can be treated by obtaining a state of euthyroidism and this is why this disorder can be avoided by a good control on hyperthyroidism. Here, we report a twenty-eight-year-old male patient with Basedow-Graves disease who was admitted with thyrotoxic hypokalemic periodic paralysis.

Case: A male patient with widespread weakness across his body and inability to walk presented himself into the emergency clinic. During the physical examination, his general condition was found to be good, he was conscious, well orientated and cooperative. Although it was mainly situated in the lower extremities, his weakness was widespread. No positive pathological reflexes or focal neurological deficits were observed. He had a blood pressure of 100/70 mmHg, a pulse of 110/min and his temperature was 37.2°C. The patient was diagnosed with Graves' disease a year ago and had been treated with propylthiouracil (PTU) for about 6 months. His laboratory results were as follows: K: 2.1meq/L (normal range 3.5 – 5.5), free T3: 8.98pg/ml (1.71-3.71), free T4:2.78 ng/dl (0.7-1.48), TSH: 0.0003 µIU/ml (0.35-4.94). The patient was diagnosed with thyrotoxic hypokalemic periodic paralysis. His symptoms improved after potassium replacement and treatment with beta-blocker and antithyroid drugs. The patient was discharged from the hospital after a treatment of 4 days and with his potassium levels and neurologic functions recovered. A new antithyroid therapy was prescribed to the patient on his discharge.

Conclusion: Thyrotoxicosis and hypokalemia are the characteristic symptoms of the thyrotoxic hypokalemic periodic paralysis (THPP). They are more frequent in white skinned patients and can be observed in our country too. While investigating the possible causes of hypokalemia in the Emergency department, thyrotoxicosis is a diagnosis that should come to mind and the thyroid function tests have to be performed.

Keywords: Thyrotoxicosis, hypokalemia, paralysis

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[Diğer]

OPINION ABOUT THE DEFENSIVE MEDICINE OF THE EMERGENCY MEDICINE SPECIALISTS AND RESIDENTS WHO WORKS IN THE MEDICAL FACULTIES AND EDUCATIONAL HOSPITALS

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In this study, it is aimed that if the practitioners who works on emergency medicine have defensive medicine or not, if they have defensive medicine, to determine its dimension, if there are diferanciation on patients and illness or not and to determine their objective and subjective factors.

Survey questioning is used to collect information. The target group was emergency medicine specialist and residents who works in emergency departments of the medical faculties and educational hospitals. The target group was 264 practitioners. Survey forms has been sent to the emergency medicine

departments of the hospitals. Totally 223 practitioners has been included to the study who answered and send the forms to our center in the date between 6th June -1st August. It is determined that the 61%of all practitioners who joined to the study had been reported by the patient and proxies. It is determined Emergency Medicine Residents who works more than 6 years needs more extra-indicational laboratory examinations than who works 5 and less years (p=0.020) and Emergency Medicine Specialists who works less than 3 years needs more extra-indicational imaging examinations than who works 3 and more years (p=0.048). The medical records and demographic properties of the participants had been compared. The practitioners who works in the medical faculties were more careful about medical records than the practitioners who works in the educational hospitals (p=0.034), like the residents who works less than 3 years compared to the residents who works 3 and more years (p=0.003).

Our results; it is seen that more than half of the emergency medicine practitioners were aware about the relation between the malpractice lawsuits and defensive medicine.

Keywords: Emergency medicine, defensive medicine, malpractice

Table 2. The frequency of defensive medicine practitioners that participating in this study

MEDICAL DEPARTMENT	Emergency Medicine Residents		Emergency Medicine Specialists		Emergency Medicine Residents and Specialists		Emergency Medicine Residents and Specialists		Emergency Medicine Residents and Specialists		Emergency Medicine Residents and Specialists	
	n	%	n	%	n	%	n	%	n	%	n	%
Emergency Medicine	12	4.6	22	8.3	34	12.9	34	12.9	34	12.9	34	12.9
Emergency Medicine Specialist	10	3.8	15	5.7	25	9.1	25	9.1	25	9.1	25	9.1
Emergency Medicine Resident	10	3.8	15	5.7	25	9.1	25	9.1	25	9.1	25	9.1
Total	22	8.3	37	14.0	59	22.0	59	22.0	59	22.0	59	22.0

Table 1. Distrubution of practitioners and their degrees

Degree	n (Number)	%
Emergency Medicine Assistant	171	76.6
Emergency Medicine Specialist	28	12.6
Academic Staff	24	10.7
Professor	5	2.3
Associate Professor	9	4.0
Assistant Professor	10	4.5
Research Assistant	2	0.9

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[Diğer]

EVALUATION OF THE PATIENTS WHO WERE ADMITTED TO TRAKYA UNIVERSTY MEDICAL SCHOOL EMERGENCY DEPARTMENT AS FORENSIC CASES AND CONCERTED MEDICOLEGAL REPORTS

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In this study, we aimed to evaluate demographic and epidemiological characteristics of patients judicially who admitted to the emergency department of a tertiary care hospital which is the most important center in our region and also we aimed to determine the deficiencies and errors medicolegal reports.

This study was conducted retrospectively and included the records which could reached of the patients who admitted to

the emergency department between the dates 01.01.2012 - 30.11.2013 and reported as forensic cases. 76.7% (n = 1900) of the 2478 patients which were forensic cases included in the study were men. The average age was 36.10 ± 14.63 (18-99).

Patients qualified as forensic cases admitted to our clinic mostly in August with a rate of 10.6% (n = 263), on weekdays with a rate of 67.9% (n = 1682), between the hours 12:00 to 17:59 pm and summer seasons with a rate of 31.1% (n = 771). 53% of qualified forensic patients (n=1314) was referred to our hospital from other health care provider determined.

The most common causes of application to the emergency medicine department were traffic accidents (34.8%), poisoning (14.5%) and falls from height (11.1%). Most of injuries were the extremities with a rate of 39.1%.

It has determined that 698 of the forensic cases in the emergency department hadn't consulted to any clinics. 44.5% of admitted to the emergency department as forensic patients were discharged, 35.8% percent were hospitalized. 131 cases was taken to emergency operations after the first intervention in the emergency department. 18.6% of the forensic reports was not legible in terms of font. Patient age and father's name informations in the forensic reports were the most frequently identified missing data (respectively 83.5%, 82.2%).

Physicians must fulfill legal responsibilities incase of loss of rights for the forensic cases which are treated by. Otherwise they may be faced with penalties and compensation cases. To raise awareness of this issue of the legal duties and responsibilities of physicians should be emphasized with in-service training.

Keywords: Emergency department, forensic case, medicolegal reports

Table 1. Distribution of forensic cases according to their admission time to the

Admission Time	n	%
00:00-05:00	100	4.0
06:00-11:00	195	7.9
12:00-17:59	1682	67.9
18:00-23:59	501	20.2
Week of the Month		
Monday	442	17.9
Tuesday	398	16.1
Wednesday	354	14.3
Thursday	310	12.5
Friday	266	10.7
Saturday	222	9.0
Sunday	178	7.2
Season		
Spring	771	31.1
Summer	771	31.1
Autumn	771	31.1
Winter	765	30.9
Total	2478	100

Emergency Department

Table 2. Distribution of forensic cases causes of admission to the Emergency Department

Causes of Admission	n	%
Road Accident	862	34.8
Poisoning	359	14.5
Fall from height	274	11.1
Stab Wounds	264	10.7
Blunt Trauma	240	9.7
Beating	212	8.5
Burn	88	3.5
Gunshot Wounds	57	2.3
Agriculture-Related Trauma	48	1.9
Animal-Related Trauma	16	0.6
Freezing	11	0.4
Hanging on	8	0.3
Drowning	5	0.2
Other*	21	0.8
Total	2478	100

*Hunger strike, Ocular foreign body, alcohol intoxication, sexual assault, hospital admission order (psychosis), human bite, foreign body in the rectum, foreign body ingestion

Table 3. The distribution of the missing datas identified In the forensic report

	present		absent	
	n	%	n	%
Patient name	2438	98.4	40	1.6
Patient father's name	410	16.5	2068	83.5
Patient age	442	17.8	2036	82.2
Event date	1937	78.2	541	21.8
Event time	1868	75.5	598	24.1
General situation	2390	96.4	88	3.6
Consciousness	2358	95.2	120	4.8
Cooperation	447	18	2031	82
Physical examination	1288	52.0	1218	48.2
Life-threatening condition	2290	92.4	198	7.9
Simple medical intervention status	2258	91.1	220	8.9
Physician's Name and Surname	2467	99.5	11	0.4
Signature of Physician	2470	99.7	8	0.3
Examination date	1816	73.3	662	26.7
Examination hour	1880	75.8	602	24.2
Date of report	2443	98.6	243	9.8
Report time	1634	66.0	844	34.0
A detailed description of the external lesions	951	38.4	1527	61.6
Diagram showing the external lesions	45	1.8	1718	69.4
Consultation findings	1520	61.4	958	38.6
Acronyms	188	7.6	2329	92.4
Legibility	2018	81.4	462	18.6

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[Diğer]

BILATERAL OBTURATOR HERNIA SEEN APART FROM 45 DAYS

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Introduction: Obturator hernia is seen very rarely (0.073%) and has high morbidity and mortality due to difficulty in diagnosis. 1,2

Case: A 75 year old female was admitted to our emergency department with left groin pain which started 3 hours ago. Her pain was radiating to her left hip and leg and occurs intermittently for 15 days. Her medical history revealed that she had surgery for right obturator hernia 45 days ago. Before surgery, computed tomography with iv opaque showed obturator hernia on the right side without any pathology on the left side. There was a tenderness on the left lower quadrant and a positive Howship-Romberg sign at physical examination. Complete blood count, biochemical

analysis and urine analysis were within normal limits. Abdominal X-ray imaging showed air-fluid levels in lower left quadrant. Abdominal computed tomography with iv opaque was performed due to presence of dilated intestinal segments which had reached up to 38 mm and fluid distensions in ultrasonography. There was herniation of small intestinal segments at left obturator region and dilation of large intestinal segments proximal to herniation at computed tomography. Incarcerated hernia was thought due to decreased opacification at some regions of herniated segments. (Figure 1) Patient was consulted with general surgery team to undergo surgery.

Conclusion: Obturator hernia is more common in females and described as “Little Old Lady’s Hernia”. According to study of Nasir et al. 63% of patients were presented with symptoms of intestinal obstruction and 37% of patients had pathognomonic Howship-Romberg sign. 3 Our patient also had intestinal obstruction symptoms and Howship-Romberg sign was positive. Although there was not a hernia in computed tomography at first admission, a left sided obturator hernia in computed tomography was seen 45 days apart from it.

Keywords: Bilateral, emergency, hernia, obturator

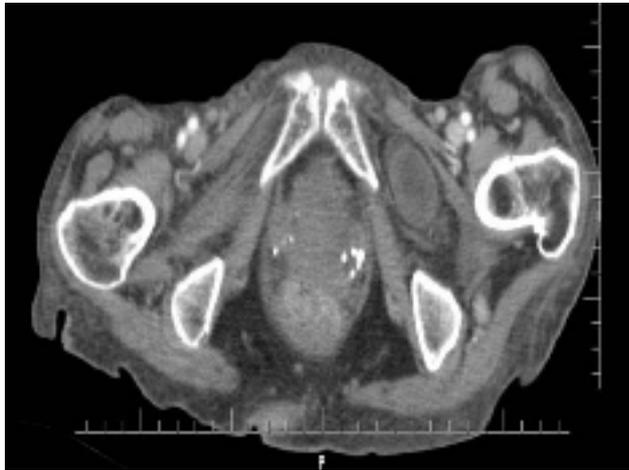


Figure 1. Herniation of small intestinal segments at left obturator region

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[Diğer]

PYLORIC STENOSIS AS A CAUSE OF MASSIVE ABDOMINAL DISTENSION

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Introduction: Pyloric stenosis or pylorostenosis is narrowing of the opening from the stomach to duodenum. This condition causes severe projectile non-bilious vomiting. It most often occurs in the first few months of life and called infantile hypertrophic pyloric stenosis. Pyloric stenosis also occurs in adults, where the cause is usually a narrowed pylorus due to scarring from chronic peptic ulceration, mass effect or stricture.

Case Presentation: A 68-year-old woman with the history of peptic ulcer and pyloric dilatation operation presented to the emergency department (ED) complaining of abdominal pain,

nausea and abdominal distension. On physical examination, the patient had abdominal distention, diffuse abdominal tenderness. On laboratory biochemical parameters are normal except glucose 202 mg/dl, calcium 8,6 mg/dl (8,8-10,2 normal reference range), magnesium 1,31 mg/dl (1,6- 2,4 normal reference range), Radiography was obtained and revealed huge gastric dilatation. Performed tomography scan was showed the massive dilatation (fig1-2). Nasogastric tube was inserted and the patient was transferred to general surgery ward. The patient was underwent partial gastrectomy, cholecystectomy and incisional hernia repair.

Conclusion: Pyloric stenosis which is one of the late complications of peptic ulcer can be the cause of huge abdominal mass and distention. Plain radiography is helpful in the diagnosis of gastric distention. Computed tomography can correct the diagnosis.

Keywords: Pyloric stenosis; Massive Abdominal Distension;Diagnosis



Figur 1. Pyloric Stenosis As A Cause of Massive Abdominal Distension



Figur 2. Pyloric Stenosis As A Cause of Massive Abdominal Distension

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[Diğer]

A RARE CAUSE OF ABDOMINAL PAIN:PARAESOPHAGEAL HIATAL HERNIA

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Introduction: Hiatal Hernia is a herniation of any abdominal structure to thoracic cavity through diaphragm. 95% of hiatal hernias are type 1 (Sliding type). Although type-2 hernia (paraesophageal type) can be seen rare, this type of hernia can cause gastric valvulus and this leads a wide spectrum of problem

through an acute abdominal emergency to chronic recurrency. In this report, we want to present the patient who came with an abdominal pain and diagnosed with paraesophageal hernia.

Case: A 84 year-old man presented at our emergency department with 4 days of abdominal pain and constipation complaints. His vital signs were stable. There was more sensitivity on upper abdomen rather than other quadrants, however there was no rebound and defence in physical examination. Other physical examination findings were normal.

Complete blood count was involved WBC:19.800/mm³, Hb:8.3 gr/dl, Hct:28%, PLT:195.000/mm³ as laboratory parameters, withal there was no significant or special biochemical finding. There was a structure containing air-fluid level and smooth bordered with parenchyma in chest radiography.(Figure 1,2) On abdominal computed tomography revealed paraözefagal hernia. The patient was discharged after consulting with general surgery department with recommendation of policlinic control.

Conclusion: Although hiatal hernia is rare in patients presenting with abdominal pain, chest radiography should be taken for all patients coming with abdominal pain complaints.

Keywords: Abdominal Pain;Paraesophageal Hiatal Hernia;Diagnosis



Figure 1. Paraesophageal Hiatal Hernia



Figure 2. Paraesophageal Hiatal Hernia

IS DIARRHEA ALWAYS INFECTIOUS IN EMERGENCY DEPARTMENT

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Purpose: Volvulus is the 3rd common reason of colonic obstructions. Sigmoid volvulus is the most common type of volvulus. Transverse colon and caecal volvulus cases are 3% of all colonic volvulus cases combined. Most common causes at etiology are; long sigmoid colon, narrow mesenteric root, chronic constipation, high fibrous food intake in less development countries. The beginning of the complaints to diagnose time is mostly 3-4 days and only 17% of the patients are diagnosed in the first 48 hours. If the rotation is complete, the decreased blood stream causes mesenteric ischemia and hematochezia can be seen. Transverse colonic volvulus progress more fatal and often need surgery. We aimed to present the patient that admitted to emergency department with diarrhea and developed sigmoid volvulus on follow-up.

Case: 57 years-old male patient admitted to emergency department with bloody diarrhea that started a couple of hours ago. There were chronic renal failure, hypertension, and diabetes at the medical history of the patient. At the examination, the patients bowel movements were increased and there was abdominal tenderness. There was fresh blood at rectal examination. Omega sign was seen at the upper left quadrant at abdominal radiography. The patients general condition was stable, there was no sign of perforation or septicemia, therefore endoscopic detortion performed and the patient discharged with recovery.

Conclusion: The possibility of development of volvulus of the patients that admitted to emergency department with diarrhea must be considered by emergency room physicians and it should be noted that every diarrhea is not as innocent as it seems.

Keywords: Diarrhea, emergency department, volvulus

THE EFFECT OF MPV IN DECIDING SURGERY IN PATIENTS DIAGNOSED WITH ILEUS

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Aim: İleus is the partial or nearly complete lack of gastrointestinal tract passage because of the mechanical or paralytic reasons. The problem in patients diagnosed with ileus is the difficulty of deciding the location of the bowel obstruction and the treatment despite the new current diagnostic methods. In such a case, the potential delays of the treatment in patients lead to high mortality and morbidity rates and also unnecessary laparotomy. Also bowel obstruction can be treated conventionally, surgical treatment ranging in size from bridectomy to massive resections may require. The aim is not to delay the timing of

the surgery, before ischemia and necrosis occurs depending on obstruction in patients which are not improve with medical treatment. In our study we aimed to show the effect of the age, sex, comorbidities and the mean platelet volume (MPV), in additional to the clinical findings in deciding the need of surgery in patients diagnosed with ileus.

Materials and methods: Age, gender, MPV and WBC values which is viewed in the preoperative routine blood tests, the treatment methods and intraoperative findings and surgical procedures if patients had surgical treatment were recorded from the records of the patients diagnosed with ileus who admitted to our hospital emergency department with abdominal pain, nausea, vomiting and lack of defecation. Patients who were operated emergency and patients who were treated with medical therapy were compared in terms of age, sex, WBC and MPV values.

Results: For the 165 patients included in the study median age was 58 (18–83). And female to male ratio was 1 / 2. When the age and sex distribution between the groups were analyzed, both two parameters were found to be homogeneously distributed. (age p:0.277 and sex p:0.907). MPV values were significantly higher in patients who were operated emergency (p:0.002). WBC values were lower in patients who were operated emergency, but there was no significantly difference (p:0.077). When the combined effects of age, sex, comorbidities and MPV value to surgical treatment protocol were examined, only MPV values were found effective in a positive correlation and independently of all other parameters, in predicting the need for surgical procedure.

Conclusion: We believe that; preoperative viewed MPV value in patients diagnosed with ileus could have an effect in predicting the need for surgery in the direction of treatment.

Keywords: Mean platelet volume, treatment, ileus, surgery

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[Diğer]

EVALUATION OF THE COMPLAINTS AND THE INCIDENCE OF RECURRENT PATIENT PRESENTATION WITHIN 10 DAYS AFTER THE INITIAL VISIT TO THE EMERGENCY DEPARTMENT OF THE ESKİŞEHİR OSMANGAZI UNIVERSITY HOSPITAL:A ONE YEAR STUDY

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Introduction: The emergency department is the first place where patients present when they have medical needs. Emergency department visits make up 5-8% of all patient visits in the developed world. But in Turkey this ratio rises to 28-30%. 2-11% of the patients presenting to the emergency units come back with the same complaints in a short period of time. In this study, we aim to evaluate the frequency the patients present again to the emergency units and the complaints of their visits. And we aim to put future plans for emergency services so as to be able to provide faster and more efficient medical help.

Material and Methods: This study included patients older than 18 years, who presented again within 10 days of their first visit to the Emergency Unit at The Eskişehir Osmangazi University Hospital, between 01.11.2012 to 30.10.2013. The patients' demographic characteristics, complaints in the first and

second visits, number of times they came back and the results of these visits were recorded.

Findings: 1832 patients who presented twice within 10 days were included in this study. The mean age of the patients was 43.54 ± 19.43 years (18-91). Most of the patients who presented again were in the young age group (18-25,25.8%). 1029 (56.2%) patients were male, and 803 (43.8%) were female. The patients were classified in groups 1, 2, 3 and 4 according to the frequency they presented again. The number of patients presenting one time within 10 days was 1627 (88.8%), which was prominently high. The most common complaints for recurrent presentations were musculoskeletal complaints (288, 15.7%), followed by complaints not specified to an organ system, like vaccination or changing the dressings (254, 14.1%), and gastrointestinal complaints (253, 13.8%). The majority of patients presenting again were discharged after their first visit (1668, 91%). The most common cause of recurrent presentation to the emergency unit was the inability to reach outpatient clinic help or the delay in acquiring such care (993, 54.2%). Among the 1832 patients included in this study, 1599 (87.3%) were discharged again, 114 (6.2%) were admitted to the ward, 80 (4.4%) were admitted to the ICU. 8 (0.4%) were lost, 29 (1.6%) refused the treatment with their own will and 2 (0.1%) were referred to another medical facility.

Results: Recurrent visits make the emergency units busier and increase the workload on the staff. Interventions that facilitate the ability of patients to reach outpatient clinic care may reduce the frequency patients visit the emergency unit again. Physicians should be careful in the recurrent visits, and they should carefully reevaluate the patients to avoid putting a wrong diagnosis and to admit them if indicated.

Keywords: Emergency Department, Recurrent presentation

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[Diğer]

FISH: THE CAUSE OF ALLERGIC MYOCARDIAL INFARCTION

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Introduction: Kounis syndrome described as a coronary syndrome which can show itself as an unstable vasospastic or nonvasospastic angina an sometimes myocardial infarction. And also it is known as allergic angina or allergic myocardial infarction. In this case we present two sisters who had allergic complaints and than chest pain with electrocardiographic changes after eating fish.

Case: 60 and 62 years old sisters referred from an another hospital because of pruritus and urticarial lesions which began 1 and half an hour after eating fish in the diner. At the other hospital they had, metilprednisolon, dexametason and feniramine medication intravenously. When they came to our emergency department, they have no dispne, only pruritus. Both of the patients' TA and oxigen saturation levels were normal and their heart rates were between 110 – 120 per minute. GCS were both 15 and they have no uvula edema neither broncospasm. We started giving IV hidration and placed them into the observation unit. Approximately 45 minutes later eruption on their skin was

increased and chest pain started. On their ECGs there were no ischemic changes (Figure 1). They underwent monitoring and we gave them metilprednisolon and ranitidine IV and asetylsalisilic acide per orally. On the second ECGs which had taken 10 minutes later, we determined negative t waves on I,aVL, ST segment depression on II, aVF, V4-6 and ST segment elevation on aVR (Figure 2). IV nitrate and subcutaneous enoxaparin treatment was began and the patients were referred to coronary intensive unit (ICU) for invasive intervention. In their coronary angiographies there was no evidence of coronary diseases. After their observation in coronary ICU they discharged with ranitidine, loratidine and corticostreoid treatment orally and follow up recommendations.

Conclusion: We have to keep in mind that anafylaxi can cause acute coronary syndrome. In the literature there are examples of drugs (antibiotics and analgesics), insect bites. we have to be careful that foods can lead to Kounis syndrome. In the emergency department, the patients which applied with allergic complaints has to be evaluated more attentive and early discharging decision can be delayed.

Keywords: Allergy, acute coronary syndrome, kounis syndrome

Figure 1a,b



Figure 1a,b: ECGs after the start of chest pain

Figure 2a,b



Figure 2a,b: ECGs taken 10 minutes after

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[Diğer]

AN UNUSUAL DIAGNOSIS IN THE EMERGENCY DEPARTMENT: HOIGNÉ'S SYNDROME

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Introduction: The Hoigne's syndrome is described as a group of neuropsychiatric symptoms following the administration of penicillin. Although case reports mainly point reactions to intravenously or intramuscularly administered penicillin, it has also been described in individuals on oral medication. The symptoms of Hoigne's syndrome include psychomotor agitation, panic-like anxiety, fear of death, seizures, confusion, depersonalization or derealization. The hallucinations usually are visual and auditory in nature. However, olfactorial and somatosensorial hallucinations have been pointed out as well. Hoigne's syndrome has some systemic symptoms such as tachycardia, hypertension, dyspnea, and numbness. These symptoms generally shows themselves within the first few seconds after the injection of a procaine penicillin agent. Pathophysiologically, when the syndrome was

first encountered, it was explained by the microembolization of small vessels in the lungs and brain by the microcrystals of procaine penicillin. Nowadays it is associated primarily with a pseudoanaphylactic or pseudoallergic reaction to penicillin. The neuropsychiatric symptoms are explained by the dysregulation of temporolimbic structures of the brain. Here we present a case of Hoigne's syndrome which was caused by Benzathine Penicillin. This form of penicillin agent has an even rarer chance to cause this syndrome.

Case: 55 year old male admitted to emergency room with fear of impending death, screaming and visual hallucinations. Patient history was unremarkable except for routine monthly intramuscular benzathine penicillin injections for unknown reasons. He had an elevated blood pressure of 170/110 mmHg, had a heart rate of 155 bpm, other vital signs were normal. He was confused and in a panic-like anxiety state. His physical examination was normal but he was uncooperative at the time. Laboratory tests were unremarkable. He was started on intravenous diazepam infusion. After the initial stabilisation of the patient a CT-Scan, a MRI-Diffusion and a Cranial MRI were performed. None showed any abnormal findings. Hoigne's syndrome was called as a diagnosis and he was admitted to Neurology Intensive Care Unit for observation. After 3 days his condition become stable, all examination findings ceased and he was discharged.

Conclusion: Emergency doctors should be consider Hoigne's syndrome in patients with a history of penicilline use to properly manage disease and avoid unnecessary imaging.

Keywords: Hoigne's syndrome, penicilline, emergency department

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[Diğer]

CLINICAL FEATURES OF CANCER PATIENTS PRESENTING TO EMERGENCY DEPARTMENT

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Aim: Prolongation of lifetime and aging of general population encompasses an increase of cancer incidence. More conscious attitudes of general population toward health issues, easier access to health services compared to past and newer therapeutic modalities give rise to prolonged follow up periods of cancer patients and increased number of emergency department visits by them. In this study we aimed to define clinical and demographic properties of cancer patients admitted to our emergency department, significance of emergency department for cancer patients and diagnosing recent cases.

Patients and Methods: This prospective study was conducted in Emergency Medicine Department of Erciyes University and School of Medicine between February 15, 2012 and August 15, 2012. Non-traumatic cancer patients over 18 years old, diagnosed soon or previously are included in this study. Clinical and demographic properties of the patients were evaluated. The evaluation included age, gender, complaints, vital signs, laboratory findings, types and stages of cancer, co-morbid diseases, treatments, length of stay in the emergency department, invasive procedures, and disposition.

Statistical analyses were performed with SPSS (Statistical Package for Social Sciences 18,00), using chi-square test and percentage-frequency distribution in form of “mean±standard deviation” (p < 0,05: statistically significant).

Results: 395 patients met inclusion criteria. A total of 468 applications (admittence) were detected. A total of 30 patients (6.4%) received a preliminary diagnosis of cancer (newly diagnosed cancers in the emergency department). The male patients constituted 61.5% of the patients (243 patients). The mean age of the patients were 60.86±13.88 years. The most frequent complaint was difficulty in breathing (17.5 %) while the most frequent cancer was lung cancer, (18.7%). The most frequently involved system was the gastrointestinal system (28.8%).

The lung and intestinal cancers constituted the most frequent preliminary diagnosis of cancer in the emergency department (16.7 % each). The most common complaint in newly diagnosed cancers were abdominal pain (33.3 %).

Metastasis were present in 153 patients (38.7%) and was determined mostly in the bones (28.8%). Almost half of the patients (51.1 %) were hospitalized and 43.6 % were discharged from the emergency department. Mean length of stay in the emergency department was 9.57 ± 25.6 hours. The most frequent co-morbid disease was hypertension (39.4 %) and the most frequent diagnosis was anemia (21.1 %).

Conclusion: Almost half of the cancer patients admitted to the emergency department were hospitalized in our study period. Emergency departments are the health facilities where cancer patients can directly apply in the case of an acute problem. Consequently, emergency physicians should have sufficient skill, knowledge and experience to meet immediate treatment and care needs of cancer patients.

Keywords: Cancer, clinical feature, emergency

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[Diğer]

A FAMILIAR ALLERGEN: POMEGRANATE

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Introduction: Pomegranate is the fruit of Pomegranate tree (*Punica granatum*) from Lythraceae family. IgE mediated allergic reactions have been reported. 1,2

Case: A 61-year-old man was presented to emergency department with lip swelling and sorthness off breath. His symptoms were started 30 minutes after drinking one glass of pomegranate juice. He had a history of red beet allergy.

At admission his vital signs were blood pressure 169/84 mmHg, pulse 98, respiratory rate 24/min, temperature 36,5°C and %95 oxygen saturation. At physical examination there was an upper lip edema and minimal uvula edema. Other system examination was unremarkable.

His symptoms were evaluated as an allergic reaction and 45,5 mg/2ml feniramyne maleate and 2mg/kg methylprednisolone were administered. After medical therapy the uvula edema was regressed but lip swelling was not decreased. After 6 hours additional 3 dose 1 mg/kg methylprednisolone was applied to the patient. After additional medication angioneurotic edema was

regressed and the patient was discharged on the watch of vital signs stable.

Conclusion: Gaig and colleagues reported 3 cases of pomegranate, sensitivity were found against as well as nuts, fruit, pollen, and mayta. In our case report, the patient was also known allergic to red beet. After eating or drinking pomegranate juice allergic reactions may be caused. In the patients complained with urticarial rash, angioedema or anaphylaxis symptoms, pomegranate must come to mind as a potential allergen.

Keywords: Allergy, emergency, pomegranate



Figure 1.



Figure 2.

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[Diğer]

A TRADITIONAL MEDICAL METHOD:HIJAMA

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Objective: traditional medical methods have been used recently and commonly. Hijama, one of these methods, has nearly

5000 years past. It is known that it was used in china,egypt and mesopotamia. Hijama,also known as “Bottle vacuum” “cup vacuum”, has two ways of use,bloody and bloodyless.

Case: in our case,74years old male patient come to emergency service with complain of weakness and fatigue. He was diagnosed as anemia caused by bloody hacamat.

Conclusion in this case,we purpose to emphasize complications and side effects of traditional medical methods

Keywords: emergency department,hijama,traditional medical



Figure 1.



Figure 2.

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[Diğer]

TOURNIQUET SYNDROME; A RARE CASE CONNECTED WITH HAIR STRAND

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Introduction: Hair tourniquet syndrome is a rare clinical phenomenon. This syndrome is caused by hair strand encircling child’s appendage (toe, finger, external genitals etc.) thus resulting in ischemic changes and loss of appendage. In this case we aimed to highlight the importance of detailed examination of young children. Awareness of the tourniquet syndrome and early intervention is important for child’s wellness.

Case Report: 7 months old boy was brought to hospital with restlessness and being unable to sleep for 8 hours. Firstly, the parents brought the patient to children’s hospital but they could not find any explanation for the situation. With the suspicion of trauma the patient was referred to our emergency service. His medical history was insignificant. The parents denied drug

use and trauma. On his physical examination no abnormalities were present. His vitals and laboratory test ran by children’s hospital were normal. After full exposure of the body we noted erythema and edema on the first digit of the right foot. Further detailed examination of the digit we noticed a hair strand circling and tightening it. His digit’s capillary refill time was more than 4 seconds. An 11-number surgical blade was used to cut the strand of hair wound around the digit. After a few minutes the child became comfortable. Within 6 hours erythema and edema disappeared and capillary refill time was normal. The patient discharged from the hospital with recommendations.

Result: Hair tourniquet syndrome is a rare syndrome mostly affects toes, external genitalia and fingers. While the hair strand is the reason of circling toe and external genitalia commonly, the syndrome occurs mostly due to fibers and clothing on fingers. For treatment the offending material should be removed completely. Hair tourniquet syndrome is a relatively rare and dangerous, but preventable on infants. Physician must be aware of child abuse/negligence when a young child diagnosed with tourniquet syndrome. With early awareness of the condition, unnecessary complications and surgery could be prevented.

Keywords: tourniquet syndrome, hair strand, physical examination

1- Hair Tourniquet Syndrome



2- Hair Tourniquet Syndrome



3- Hair Tourniquet Syndrome



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[Diğer]

TRAUMA INDUCED HEREDITARY ANGIOEDEMA

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Introduction: Hereditary angioedema (HAE) is due to deficiency of C1 esterase inhibitor, inherited as an autosomal dominant trait, manifested by attacks of swelling of the extremities, face, trunk, airway and abdominal viscera. The angioedema of HAE most often involves the upper extremities and oropharynx. The trunk and lower extremities are less often involved. Laryngeal edema is the major source of HAE related mortality. Hormonal fluctuations play a role in HAE and trauma precipitates about half of the attacks. Androgen steroids, fresh frozen plasma, C1 inhibitor concentrates are used in treatment.

Case: 20 year old male patient was admitted to the emergency department with complaints of vertigo, dizziness and facial swelling for a week. He was admitted with the same complaints to another hospital. His head CT and head MRG were normal. He had a motorcycle accident 1 week ago. Because of his dizziness and vertigo, his dialysis session was not completed. His all vital signs were normal. He had a lesion on the right sided frontal bone secondary to the trauma; he had an edema on face, eye lids and lips (image 1). He didn't have any uvula edema and dispnea. Neurological examination except ataxia were all normal. All lab tests were done. Cranial CT and temporal CT were normal. He completed his dialysis session after nephrology consultation. Neurology and ENT consultation were normal. Because of his ongoing complaints, we diagnosed hereditary angioedema and treated patient with 2 unite TDP. After treatment, his edema was

regressed, ataxia was recovered (image 2). He was discharged after offering to visit allergy immunology policlinics.

Conclusion: Hereditary angioedema (HAE) is an autosomal dominant genetic disorder associated with a deficiency in C1 inhibitor. Disease incidence is reported in the frequency of ranging from 10,000 to 150,000. Although HAE is often inherited, 20-25% of cases are from new spontaneous mutations and they have no family history of swelling. Decreased C1 inhibitor activity leads to inappropriate activation of multiple pathways, including the complement and contact systems and the fibrinolysis and coagulation systems. Bradykinin is felt to be the main mediator of symptoms in HAE. Bradykinin levels were acutely increased in the cases of HAE. Bradykinin leads to edema, swelling and asssite after increasing vascular permeability and leads to hypotension because of vasodilatation and spasm because of smooth muscle contraction. Unlike other angioneurotic edema types, histamine don't have any role. Patients with HAE have recurrent episodes of swelling of the extremities, abdomen, face, and upper airway. Angioedema involving the gastrointestinal tract can lead to intestinal wall edema, which results in abdominal pain, nausea, vomiting, and diarrhea. Laryngeal swelling is life-threatening and may lead to asphyxia. Common triggers of an attack include trauma, stress, infection, menstruation, oral contraceptives, hormone replacement therapy, and angiotensin-converting enzyme inhibitors. In our case, trigger factors were trauma and trauma induced stress. Corticosteroids, antihistaminics and adrenaline don't have any place in the treatment of HAE. Protection, acute attack treatment and prophylaxis are all important for treatment. TDP applying for replacement of deficiency of C1 inhibitor recovers attacks in 45 minutes.

Keywords: trauma, hereditary angioedema, C1 inhibitor

Hereditary angioedema



Figure 1. Before TDP

Hereditary angioedema 2



Figure 2. After 2 Unite TDP

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[Diğer]

THERE IS NO ILLNESS, THERE IS ILL

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Pnomatosis intestinalis is a case which is characterized with cysts with full of lots of gases at the gastrointestinal canal that make submucosal and subserosal placement. Pnomatosis intestinalis is usually asymptomatic. Patient rarely apply to the hospital with complaints such as stomachache, abdominal distention, diarrhea, constipation. We will present a case who came with nonspecific complaints but we identified pnomatosis intestinalis.

Case Report: An 87 year old male patient applied to our services with complaints of three days of fatigue and common body pain. The patient had a coronary artery problem previously. His arrival vital functions were TA:110/80, temperature: 36,5, pulse 98, the patient didn't show any sign of pathological diagnosis in the general physical examination. His performed ECG was a normal sinus rhythm. In laboratory it was observed as WBC 15.30, HGB13, PLT7.1, CR 1.7, BUN 50 and NA 132. TIT and lung radiograph demanded to explain the patient's WBC level. At TIT, there wasn't evidence but in his PAAC radiograph an image of penetration-like loose air was monitored under the diaphragm. At his abdominal CT (computed tomography) scan, it was viewed loose air in abdomen and a view diffuse air was present at intestine wall. Evaluated by the general surgery, the patient was hospitalized with diagnosis of pnomatosis intestinalis. The patient who is monitored in general surgery service, was discharged by recovery after WBC levels going normal and decline of the pathological symptoms.

Discussion: Pnomatosis intestinalis is encountered more at men than women and it makes peak at the ages of 30-50s. The illnesses accompanying pnomatosis intestinalis accompanying

pnomatosis intestinalis can be counted as pyloric stenosis, appendicitis, crohn's disease, ulcerative colitis, diverticulitis, necrotising enterocolitis, gastroduodenal ulcer, sigmoid volvulus, chronic pulmonary disease, connective tissue disorders, nephrotic syndrome and AIDS.

Pnomatosis intestinalis is generally asymptomatic but in some incidents, we can see constipation, distention, rectal bleeding, tenesmus, weight loss and stomachache. In about 3% of the patients intestinal obstruction, perforation and pneumothorax may occur. Although standing- abdominal-radiograph works for diagnosis in 2/3 of the patients, CT is the ideal diagnostic method. Pnomatosis intestinalis treatment is not specific but it is towards improving the current clinical situation. Intestinal bleeding, obstruction, peritonic and perforation are such cases that requires surgical intervention. Even is the case of an asymptomatic patient who applied with nonspecific complaints. It is interesting that his abdominal examination was completely normal but in his lung radiograph pnomatosis intestinalis was determined incidentally. Systematic and attentive patient monitoring is very important during the intensive

Keywords: Pnomatosis intestinalis, intestinal obstruction, perforation



Figure 1. Free air under the diaphragm on chest radiograph PA view

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[Diğer]

SERIAL PHYSICAL EXAMINATION HAS HIGHER PRIORITY THAN IMAGING

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Introduction: Evaluation of the emergency department patient with acute abdominal pain is sometimes difficult. Besides a thorough medical history taking, abdominal physical examination is the main key assistance in establishing the diagnosis. It can represent a wide spectrum of conditions, ranging from a benign and self-limiting disease to a surgical emergency. Today, the integrated imaging, and in particular the use of multidetector Computed Tomography (MDCT) has revolutionised the clinical approach to the evaluation of the acute abdomen. This case describes a patient with peptic ulcer perforation who had an initially normal computer tomography imaging.

Case: A 34 years old male patient presented to the emergency department with sudden onset of severe abdominal pain. He reported that he did not previously have such a pain, he reported no previous medication and illness. Upon the physical examination, widespread stinging tenderness on the abdomen which had a pain effect on the left breast. Patient had a regular, usual electrokardiogram. His blood pressure was 120/70 pulse: 90/min, WBC 12900. Due to his abdominal tenderness, we completed an iv-contrast abdominal CT scan. Radiologist did not report any important reason or abnormality which could explain this situation. Despite analgesic treatment, there was a recurrence on the patient's pain. The patient was examined by the general surgeons and observed along with the assessed monitoring and a control radiograph was planned for later hours. In the follow-up period of four hours, there was periods of the patient's pain was decreased and he was painfull. However we did not discharge the patient and kept under observation. Following this, four hours later we completed an abdominal and plain chest X-rays, which demonstrated free gas under the both hemidiaphragms. Directly after this imaging the patient underwent surgery and surgeons performed a Graham patch operation without any complication. Two days later he was discharged and after a week of outpatient stitches were taken in control.

Discussion: Perforated peptic ulcer (PPU) is relatively rare, but life-threatening with the mortality varying from 10% to 40%. We suggest erect chest and abdominal radiographs (CXR) as initial routine diagnostic assessment in case of acute abdomen from suspected free perforation of Peptic Ulcus. CT scan has higher sensitivity in detecting intra-abdominal free air.(1) In this case we could not see a definitive free air in the CT scan and we follow up the patient with a control radiogram. An unexpected negative test result should prompt a reassessment of the patient and consideration for observation and repeat examination for disease progression. When a patient is discharged home after an evaluation for abdominal pain, the authors recommend instructions to return if the pain worsens, new vomiting or fever occurs, or if the pain persists beyond 8–12 hours. In conclusion physician should rely on their pyhsical examination and follow up the patient accordingly.

Keywords: Acute abdomen, Perforation, Imaging



Figure 1. Batin BT

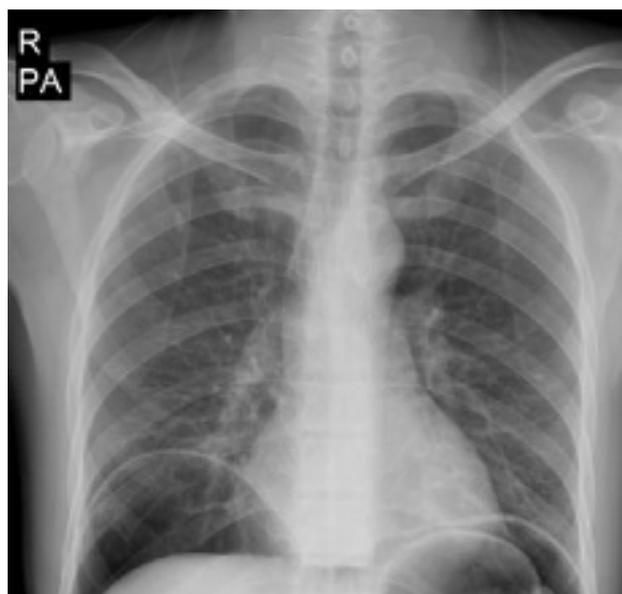


Figure 2. Chest radiograph



Figure 3. CT1



Figure 4. CT2

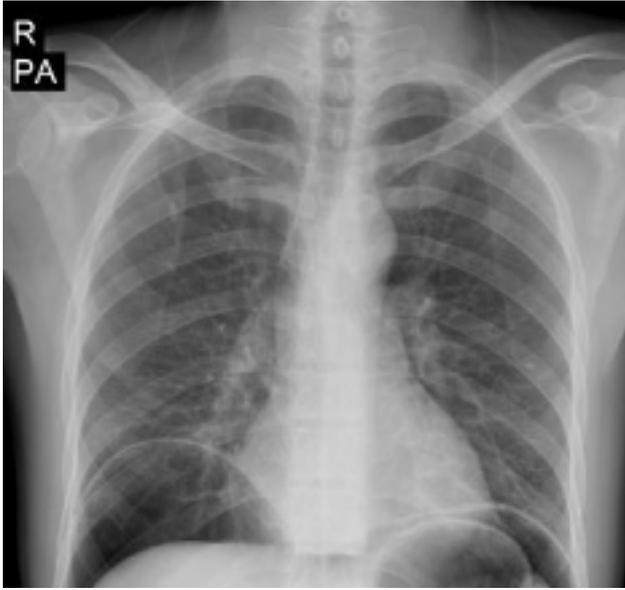


Figure 5. CXR

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[Diğer]

BOERHAVE'S SYNDROME PRESENTING WITH CHEST PAIN

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Introduction: Boerhaave syndrome is rare disease and described as spontaneous rupture of the esophagus. Most patients are in sixties age and more common in males. Syndrome occurs suddenly. Three-quarters of cases occurs after forceful emesis. Diagnosis of boerhaave syndrome may be delayed because spontaneous esophageal perforation is often unsuspected or misdiagnosed. The mortality rate is high especially with delayed diagnosis. We describe a case of 47 year old woman presenting in the emergency room with back and left side pain. The patient was diagnosed with spontaneous esophageal rupture and died after surgery.

Case: 47 year old female patient with a history of heart rhythm disorder presented to our emergency department with left side chest pain after vomiting. General condition of the patient was moderate, conscious clear, cooperative and oriented. Initial blood pressure 100/60 mm/Hg, pulse 76 beats per a minute, temperature 36,6 OC, the oxygen saturation measured from the finger tip in the air room was %96. On physical examination; breath sounds in the left hemithorax decreased; the heart was rhythmic, normocardic; abdominal examination was normal. Acute cardiac pathology was not seen on the electrocardiogram (EKG), in the way of the etiology of the chest pain. Chest X-ray was planned, because the breath sounds in the left hemithorax on auscultation decreased. Pleural effusion and pneumothorax in the left hemithorax was appeared on the chest radiograph. Whereupon; thorax computed tomography was scanned to the patient. Left pneumothorax, pneumomediastinum, the distal paraözefajal liquid and air density (esophageal perforation?), especially those on the left, bilateral pleural effusion, focal areas

of consolidation in the left lung and right mediastinal shift was observed on thorax CT (Figure 1). Any pathological values were not determined in the blood test results. Tube thoracostomy was inserted to the patient consulted with thoracic surgery department, in the emergency room. Stomach contents were observed in the tube thoracostomy (Figure 2). Due to the suspicion of esophageal rupture, the patient was consulted with general surgery department. Fluoroscopy was planned to the patient. The patient whose general condition worsened was rushed into surgery by general surgery and thoracic surgery department, after fluoroscopy. Owing to esophageal perforation, the patient was operated distal esophagus resection and she was followed in the intensive care unit by postoperative respiratory failure diagnosis. The patient who was monitored with high fever values, died after 22 days from the date of admission.

Conclusion: Esophageal rupture should be suspected, especially in patients presenting to the emergency department with chest pain after vomiting. Multidisciplinary approach, rapid radiographic verification, aggressive resuscitation, and surgical intervention are the best chances for survival with high mortality in esophageal rupture.

Key words: chest pain, early diagnosis, esophagus perforation, Boerhaave's syndrome, chest pain, early diagnosis,



Figure 1. Thorax computed tomography shows plural effusion and pneumothorax



Figure 2. The stomach contents in tube thoracostomy

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[Diğer]

DIAGNOSIS AND TREATMENT FOLLOWING ONLY PHYSICAL EXAMINATION

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Introduction: Primary urethral stones are rare, but secondary stones are usually associated with urethral strictures, posterior urethral valve, or a diverticula. Urethral stone frequently originated from the upper urinary tract or the urinary bladder and was commonly found in either the anterior or posterior urethra where it often presented with acute urinary retention. Penile urethral stones are rare occurrence with an incidence of less than 0.3%.

Case: A 38 year old man was admitted to our emergency department with an eight hours history of urinary retention and have not complaint of colic pain or dysuria. He described colic pain a week ago. On physical examination, vesicale globe was determined after that hardness was palpated at the level of the penile urethra and stone were seen in ostium urethrae externa (Figure 1). Stone was removed with the help of forceps.

Discussion: Primary urethral stones are a rare form of urolithiasis. Patients may present with acute urinary retention, interrupted or weak stream, gross haematuria, or pain affecting the penis, urethra, or perineum. Long-term management of benign urethral strictures is challenging with a high incidence of recurrence. Retrograde urethrography is considered the best initial study for anterior urethral and periurethral imaging in men for the evaluation of urethral injury, stricture, and fistula formation. It is also the best imaging study to detect urethral stones, usually seen as rounded filling defects. The treatment of urethral stones changed of the endoscopic or open surgical methods are applied according to the stones placement and size. As in this case of some urethral stone can be detected only by physical examination without need for testing or imaging and can be treated in emergency department

Keywords: Urethral stones, Physical examination, Emergency department



Figure 1. It was seen that stone removed with the help of forceps.

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[Diğer]

A RARE CAUSE OF ABDOMINAL PAIN: CHILIADITI SYNDROME

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Chiliaditi syndrome is a rare and usually asymptomatic condition. It can be found an anatomical anomaly or coincidentally with the displacement of the small intestine between the liver and the diaphragm. It can be asymptomatic or can cause abdominal pain, nausea, vomiting, constipation or dyspnea. The diagnosis can be made with direct radiography or computed tomography. We present two cases with hepatodiaphragmatic colonic interposition diagnosed with direct radiography and tomography. Both cases were treated conservatively.

Case 1: A 67-year-old male patient presented to emergency service with a abdominal pain. The physical examination revealed widespread abdominal distention and tenderness. White blood cell count was 13100/ μ L while no pathology was seen on whole abdomen USG. Abdomen CT with contrast revealed marked intraluminal gas content at the level of the transverse colon. The right diaphragm was high with the hepatic flexure underneath. A diagnosis of Chiliaditi syndrome was made. The patient was hospitalized following general surgery consultation.

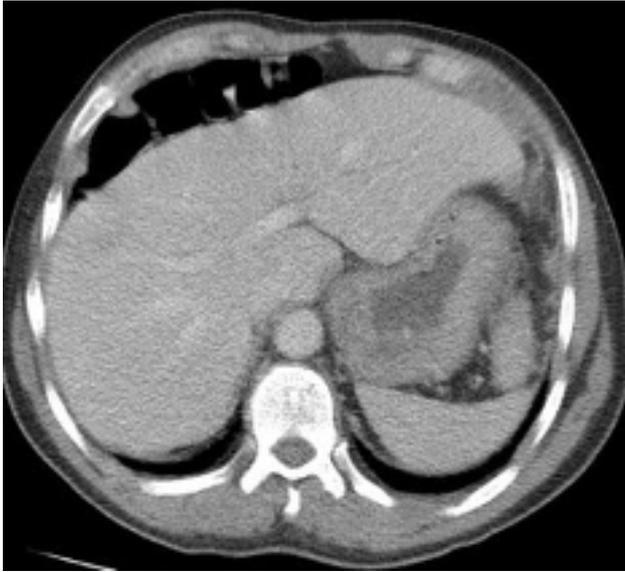
Case 2: A 53-year-old male presented to the emergency department with abdominal pain. The patient had experienced watery defecation 3 times and had epigastric tenderness on examination. Other physical examination results were normal. The findings continued during follow-up. The white blood cell count was 13000/ μ L. Abdomen CT with contrast was obtained. An appearance consistent with colonic interposition was observed in the right subdiaphragmatic region, indicating Chiliaditi syndrome. The patient was hospitalized following general surgery consultation.

The syndrome can be associated with transverse and sigmoid colon volvulus, abdominal trauma, obesity, congenital hypothyroidism, salmonellosis, scleroderma, gastrointestinal malignancies, ascites, postnecrotic cirrhosis, hypertension, ischemic heart disease and chronic lung disease. The main symptoms are abdominal pain, bloating, nausea, vomiting and constipation. The diagnosis is usually made coincidentally on routine chest radiography and direct abdominal radiography. Tomography and ultrasonography are required for the differential diagnosis. The treatment is conservative. The symptoms improve with bed rest, nasogastric decompression, soft juicy foods, fluid replacement and enema. Surgical intervention is rarely required.

In conclusion, Chiliaditi syndrome should be considered in the differential diagnosis in cases with symptoms of abdominal pain, nausea, vomiting, chronic constipation and whose direct graphs reveal a gas shadow at the right subdiaphragmatic area.

Keywords: Abdominal pain, Chiliaditi syndrome, emergency medicine

Case 2: Abdomen computed tomography



The right diaphragm was high with the hepatic flexure underneath.

Case 1: Abdomen computed tomography



The right diaphragm was high with the hepatic flexure underneath.

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[Diğer]

HEPATIC HYDATID CYST RUPTURE WITHOUT ABDOMINAL PAIN

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Introduction: Hydatid cyst(HC) is still a common problem in our country and geographical area. The most common organs which HC settled in are lungs and liver. HC is generally asymptomatic till a complication develops and the diagnosis is made by radiology. The most frequent and important complication is rupture of the cyst. In this case we present a ruptured HC with vomiting and nausea without abdominal pain.

Case: 38 years old male patient had nausea which started one day before and nearly 10 times vomiting started at the same day. He described no pain. He had no property in his medical history. He denied using any medications. In his physical examination; GCS:15, general condition was good and had a tenderness on epigastric area without defences or rebound. 0.09% NaCl, famotidine and metchloropamide was started by intravenously. The results of the blood laboratory tests were; WBC:13400/mm³, Hb:14.6 g/dl, Plt:120000/mm³, ALT:33 U/L, AST:27U/L, Total bilirubin:2.9 mg/dl, Direct bilirubin:0.5 mg/dl. Despite the medication, the patient's complaints did not get well and in control physical examination he had tenderness and also rebound in epigastric area. The patient underwent abdominal computerized tomography (CT). CT revealed 17x13 cm sized, thickened wall cystic lesion which effects all the right lobe and significant part of the left lobe. And also at the anteroinferior part of the cyst, disconformity interpreted as a rupture of the cyst (Figure 1). The patient was consulted with general surgery and admitted to the hospital.

Conclusion: The rupture of hepatic hydatid cyst was seen generally with acute abdomen signs but sometimes it can express itself with non specific findings like nausea, vomiting or minimal tenderness. In emergency department in spite of medication, if the complaints still exists there will be repetitious physical examinations and additional radiological or laboratory tests has to be done. HC has to be kept in mind in abdominal pain in the emergency department.

Keywords: Hydatid cyst, rupture, tomography

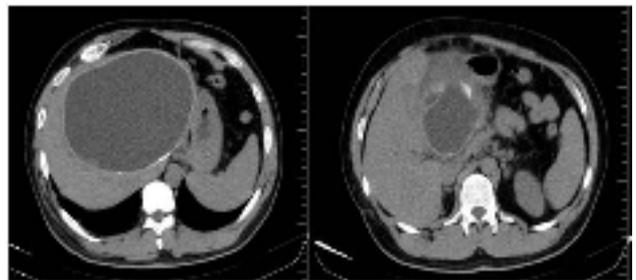


Figure 1. Tomography scan views

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[Diğer]

GALLSTONE; A VISUAL CASE

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Introduction: Emergency services are the most common application places due to complications after invasive procedures. In our case, gall stone was drained to skin due to fistula after percutaneous cholecystostomy (PC).

Case: A eighty-five year old female admitted to emergency service because of abdominal pain and wound discharge for three days. The patient hadn't any comorbidities in her past. But two years ago cholecystostomy was performed two times due to cholecystitis. In abdominal examination, there were two drain scars on right upper quadrant. There was hyperemia and purulent drainage at the first scar. At the other scar, there was an image of gallstone (Figure 1). There wasn't any abnormality on the other systemic examinations. Gallstone was removed with manual

maneuver (Figure 2). On abdominal tomography, gallbladder was contracted and fluid collection (abscess) which was extending to the skin from the gallbladder region was seen in the right subhepatic area. The patient was hospitalized for antibiotic therapy and follow-up.

Conclusion: Percutaneous cholecystostomy is particularly beneficial in patients with acalculous cholecystitis, whereas in cases of calculous cholecystitis it should be limited to critically ill patients on whom surgery cannot be performed. PC is associated with longer hospital stays, and higher readmission rate. Therefore, PC should be reserved for patients with prohibitive risks for surgery. Recurrence of cholecystitis due to residual stone is well known complication of percutaneous cholecystostomy. The case described is an unusual complication of percutaneous cholecystostomy. In case of different complications of invasive procedures patients can apply to emergency services. Complication occurred in this case is a visual fact.

Keywords: Percutaneous cholecystostomy, gallstone, cholecystitis.



Figure 1.



Figure 2.

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[Diğer]

SWEET'S SYNDROME IN EMERGENCY ROOM

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Introduction: Sweet's syndrome was originally described by Robert Douglas Sweet in 1964 as an acute febrile neutrophilic dermatosis. It is an infrequent skin disease characterized by sudden onset of fever, leucocytosis and painful erythematous plaques or nodules infiltrated by neutrophils. Although Sweet's syndrome is not exactly an acute life threatening illness it's important for the association with other systemic illnesses like malignancies. We report a case of Sweet syndrome associated with newly diagnosed Crohn's disease.

Case: A 31 years old woman presented to our hospital emergency department with the chief complaint of painful skin lesions, and fever. The lesions initially developed on her lower legs approximately 1 day before her presentation. Additional symptoms included abdominal pain, intermittent diarrhea, and 3 kilograms weight loss over the past 3–4 weeks. On physical examination, the patient appeared well and comfortable. Her vital signs were as follows: blood pressure, 105/65 mmHg; heart rate, 72 beats/min; respiratory rate, 18 breaths/min; and temperature 38.2°C. The remainder of the patient's examination was unremarkable with the exception of her skin. She had multiple painful, palpable petechial rash on her lower legs (Figure 1). Laboratory values were as follows: white blood cell count, $13.5 \times 10^9/L$; differential of 85.3% segmented neutrophils; D-dimer 587 ng/mL and c-reactive protein 72.4 mg/L. All other laboratory parameters were within the normal range. A bilateral lower extremity echodoppler ultrasound investigation did not demonstrate any deep vein thrombosis. A skin biopsy specimen showed neutrophilic dermal infiltrate into the upper dermis. Based on the clinical presentation, the working diagnosis was Sweet's syndrome. Oral prednisone therapy was started. Significant improvement was observed since the start of treatment with disappearance of fever within 24 hours and gradual involution of skin lesions. Lower gastrointestinal endoscopy confirmed the diagnosis of Crohn's disease.

Discussion: Cases of Sweet's syndrome in emergency medicine have been reported rarely. Although Sweet's syndrome is not exactly an acute life threatening illness it's important for the association with other systemic illnesses like malignancies. Emergency physicians should be aware of this unusual disease and its frequent association with systemic illnesses.

Keywords: Sweet's Syndrome, Crohn's Disease, Emergency



Figure 1. Palpable petechial rash on lower legs

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[Diğer]

INTESTINAL NEURONAL DYSPLASIA: A CASE OF MISDIAGNOSIS

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Introduction: Constipation is a very common clinical problem which can result in a large spectrum of diagnosis. The clinical presentation of intestinal neuronal dysplasia (IND) type B is variable, ranging from intestinal obstruction in the neonatal period to acute or chronic constipation in childhood. We report a case of IND of the small intestine in a 20-year-old man who has been misdiagnosed for 6 years.

Case Report: 20 year-old-male patient was admitted to our emergency department with abdominal pain and inability to remove gas-stool for five days. Vital signs were unrelavant. His medical history included an admission to the hospital 6 years ago with same symptoms, a presumptive diagnosis of acute appendicitis leded to appendectomy. Thereby, he had been hospitalised three times for episodes of ileus, and once went under surgery for bridectomy. Palpation of the abdomen revealed distention and rebound guarding. Supine view of the abdomen showed multiple air-fluid levels in loops of small bowel and colon. CT scan was performed and showed distended small bowell filled with fluid and air, collapsed loops of colon but no no mechanical obstruction was distinguished. During follow-up, patient's latest biopsies from bridectomy were accessed and re-diagnosed for further immunohistochemistry investigations. On the fifth day, the patient symptoms were completely gone and ileus was resolved, the patient was discharged. In the pathology department, biopsy samples showing the colon wall revealed intramuscular nerve plexus hypertrophy and hyperplasia and those showing small bowel wall demonstrated degenerative changes in the muscle fibers of the muscularis propria. Protein S-100 and synaptophysin revealed an increase in ganglion cells, and glial fibrillary acidic protein staining showed increased nerve plexus around blood vessels. The diagnosis of IND was established.

Discussion: Intestinal neuronal dysplasia (IND) is classified into two types: A and B. Type B constitutes nearly 95% of cases of IND and is caused by malformation of the parasympathetic submucous and myenteric plexus. It requires high clinical suspicion and should include differential diagnosis of patients with repeated subocclusive manifestations in order to make an early and correct diagnosis and avoid complications derived from unnecessary surgery that worsens the prognosis. In more than half of the cases, medical treatment is given with the use of laxatives, enemas, or colonic irrigation. Surgery is used in case of complications or in patients who do not respond to medical treatment. IND histopathological findings and age relation is a matter of debate. 52% of patients were older than 1 year old, admission age of patients diagnosed with IND was ranging from 1 day to 10 years old. In our case; the patient was 20 year old at admission and was misdiagnosed for 6 years and probably went under unnecessary surgery. Our case is also different by its histological presentation since mainly described as a colonic disorder mimicking Hirschsprung's disease in the paediatric population, involvement of the ileum is rare.

Conclusion: In conclusion, constipation in patients presenting to the emergency department can show a wide spectrum of diagnosis. Although it is a rare entity, physicians should consider IND in young adults when symptoms are recurrent and unresolved.

Keywords: Constipation, Ileus, Intestinal neuronal dysplasia

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[Diğer]

B-HCG TEST POSITIVITY IN WOMEN OF CHILDBEARING AGE WHO PRESENTED TO THE EMERGENCY DEPARTMENT

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Aim: We investigated the β -HCG test positivity in women of childbearing age who presented to the emergency department in this study.

Materials and Methods: All nonpregnant women between the ages of 15 and 49 years who presented to Ankara Training and Research Hospital's Emergency Medical Clinic Adult Emergency Department between on 01-20.04.2014 due to a disease and where β -HCG had been tested made up the sample of the study. The study was retrospective. A previously prepared data form was used to obtain the age, health insurance, diagnosis, treatment outcome, consultation and β -HCG result of the patient. The findings were evaluated using the SPSS 15.0 software.

Results: We found that 46.8% of the cases in our study were within the age range of 20-29 years, 95.8% had health insurance, 98.6% had presented with internal symptoms, 53.5% were treated for abdominal pain and 94% were discharged. Although β -HCG was requested from a mean number of 31.83 ± 6.98 cases per day and found positive in 1.46 ± 1.27 cases (min=0, max.=5).

Conclusion: The β -HCG test was requested from 11.6% of a total of 8208 females patients of childbearing age who presented to the emergency department within one month and only 4.6% of these patients had a positive result. This percentage indicates a significant cost. We believe that larger prospective studies are needed to determine if the data that can be obtained from the history and physical examination can decrease the number of such requests to decrease the cost and use the β -HCG test more selectively at the emergency department.

Keywords: Emergency service, women, β -HCG

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[Diğer]

THE EVALUATION OF THE DIABETES MANAGEMENT OF DIABETIC PATIENTS WHO PRESENT TO THE EMERGENCY DEPARTMENT WITH ABNORMAL BLOOD GLUCOSE LEVELS

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Aim: This study was conducted to evaluate the diabetes management of diabetes patients who presented to the emergency department with abnormal levels of blood glucose.

Materials and Methods: The sample of the study consisted of 350 patients who presented to the Ankara Training and Research Hospital's Emergency Medical Clinic Adult Emergency

Department during 01-31.08.2011 and accepted to participate in the study, was previously diagnosed with diabetes, and found to have hypoglycemia or hyperglycemia as a result of the tests performed. This was a cross-sectional and descriptive epidemiological study. A questionnaire form including questions regarding sociodemographic characteristics and diabetes management of the cases that was prepared by using the literature information was used as the data source. The findings were evaluated using the SPSS 15.0 software.

Results: We found that 34.9% of the cases were aged 65 years and over and the mean age was 58.40 ± 15.36 (min=18, max=96) years. Evaluation of the patients revealed that 68.6% were female and 31.4% male, 98.6% had health insurance, 65.1% were housewives, 28.9% were literate and 46.6% were primary school graduates. Among the subjects, 82% were diagnosed with hyperglycaemia, 73.1% had at least one chronic disease in addition to diabetes, 66.3% had presented to the emergency department due to diabetes, 50.3% used insulin, 53.4% had diabetes training but 84% of this group did not use it in their daily lives, 70.3% did not measure their blood glucose, 87.1% did not exercise, 54% did not go to regular physician follow-up for their diabetes, 81.4% had been prescribed a diet but 87.7% of this group did not comply with this diet, 54.6% did not know the harms of diabetes and 66.3% expressed that the reason for their abnormal blood glucose level was not fully complying with the given diet or treatment.

Conclusion: Diabetic patients should be educated on the side effects of the diabetes and more information should be provided on future complications to improve the quality of life and decrease the emergency department use due to diabetes of these patients. We also think that increasing the awareness of the patients on these issues will increase compliance with the medication and diet.

Keywords: Emergency department, diabetes, hyperglycemia, hypoglycemia

electrocardiogram and echocardiography were normal. In upper extremity arterial system doppler ultrasound: in the left hand 4th finger, the proper palmar digital artery lumen vascularity could not be obtained. The patient was administered clexane 0.6 cc 2x1 SC and analgesic therapy was started. We consulted the patient with cardiovascular surgery and plastic surgery as a result of the consultation, the patient's finger was decided to be amputated. Outpatient control was recommended 7 days later for following the line of demarcation by plastic surgery. 7 days after discharge of the patient, the patient was consulted with rheumatology outpatient clinic by plastic surgery outpatient clinic. Then, the patient was hospitalized with a diagnosis of scleroderma, secondary vasculitis.

Conclusion: Although digital artery emboli is not common, it can cause serious situations such as finger loss. If this diagnosis is suspected by physician, frequent follow-up is important.

Keywords: Necrosis; Digital artery; Embolism



Figure 1. Necrosis area on her left hand 4th finger pulp

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[Diğer]

DIGITAL ARTERY EMBOLISM: A CASE REPORT: GULLU ERCAN HAYDAR¹, SELCUK COSKUN¹, ERKAN AYDIN¹, GULHAN KURTOĞLU CELIK¹, GUL PAMUKCU GUNAYDIN¹, SERVAN GOKHAN²

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Introduction: Digital artery embolism is a rare condition that can be caused by various factors such as; heart, vascular lesions due to trauma, thoracic outlet syndrome and iatrogenic. In this report, we want to present the patient who we determine digital artery embolism.

Case presentation: A 47 year old female patient was admitted to ED with progressive pain and bruises that started 7 days before, on 4th finger of her left hand. (Figure 1) It was learned that she referred to another center with these complaints was recommended to use pregabalin, acetyl salicylic acid and clinical follow-up. Her history was unremarkable. The patient's vital signs were normal. On physical examination, there was necrosis area of approximately 2 cm in diameter on her left hand 4th finger pulp, the finger was cold and pale, with no capillary refill. Other physical examination findings were normal. The patient's

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[Diğer]

ADULT ONSET HENOCH-SCHÖNLEIN PURPURA IN EMERGENCY SERVICES: CASE REPORT

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Henoch-Schonlein purpura (HSP) is a leukocytoclastic vasculitis that characterized with the deposition of immun complexis on the small vessels' wall that contain IgA. Generally it emerges during childhood and rarely affect the adults.

Case: 32-year-old woman admitted to the emergency room (ER) with the complaint of pain and rashes on her ankles that started 2 days ago. The patient's pulse rate was 72/minute, respiratory rate was 16/min. and oxygen saturation was 97%. She gave birth two months ago, and used antibiotics and paracetamol two weeks ago with the indication of tonsillitis. In physical examination patient had pain on her ankles during movement and palpation as well purpuric rashes were did not get pale by palpation and consolidated together especially on the medial side of ankles. There was no abnormal sign of any other systems. Patient's vital signs' were stabil as well there was no abnormality in biochemical

parameters. Patient was consulted by dermatologist with the differential diagnosis of vasculitis and erythema multiforme after the increase of rashes and was admitted to dermatology clinic. Patient was started to treat by corticosteroids, PPI and antihistaminics. Skin biopsy and DIF was implemented. In the DIF IgA accumulation was seen in perivascular area which was diagnostic for HSP. Patient's clinic was getting better in two weeks by treatment and she was discharged after she totally felt well.

Conclusion: Patients with rashes generally apply to emergency room, and sometimes expeditious diagnosis and treatment can be life-saving therefore it has been to keep in mind that childhood disease may effect the adults. In this case, by presenting a patient with HSP, we want to remind that in ER despite it is very rare still we can see adult patients with rashes.

Keywords: Purpura, Henoch-shönlein purpura, vasculitis, emergency



Figure 1. Purpuric rashes

P-569

[Diğer]

CAN EOSINOPENIA BE A PREDICTOR OF PERFORATION IN ACUTE APPENDICITIS

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Introduction: Perforation is the most common complication of acute appendicitis (AA) and a cause of infertility in women. Although previous studies had concluded hyperbilirubinemia is a marker for perforation, value of eosinopenia is not studied before. Aim of this study is to study the value eosinopenia as well as hyperbilirubinemia, mean platelet volume, platelet, neutrophil and platelet counts with neutrophil/leucocyte ratio for predicting perforation for AA patients.

Materials and Methods: We retrospectively evaluated patients admitted to our hospital between 1 January 2012 to 31 December 2013 with histopathologically proven appendicitis. Bilirubin levels, mean platelet volume, eosinophil, platelet, neutrophil and platelet counts with neutrophil/leucocyte ratio were compared for non-perforated and perforated AA patients. For comparison of groups Mann-Whitney-U test is used for analysis of non-parametric continuous variables and receiver operating characteristics (ROC) test is used for accuracy. $p < 0.05$ is considered statistically significant.

Results: For the 658 patients with pathologically proven appendicitis, %10.8 had perforation. Significant differences

between leucocyte, neutrophil, eosinophil counts, bilirubin level and neutrophil/leucocyte ratios were found. Area under curve for each value was 0.64, 0.63, 0.66, 0.62 and 0.60 respectively. Neutrophil/leucocyte ratio $\geq 72.2\%$ had highest sensitivity (84.4%) and eosinophil count $\leq 20/\text{mcl}$ and highest specificity (76.8%).

Conclusion: Eosinopenia with higher neutrophil, leucocyte counts, bilirubin levels with neutrophil/leucocyte ratios are valuable for predicting perforation of AA. As eosinopenia is not marker for perforation, it can be used as a predictor.

Keywords: perforated appendicitis, eosinopenia, hyperbilirubinemia, leucocyte, neutrophil,

P-570

[Diğer]

HOW MUCH INNOCENT ANTITUSSIVE

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Introduction: Blurred vision is a frightening symptom both for patients and physicians. It can be due to organical causes of ocular or cranial pathologies, psychiatric or as a drug adverse effect. Here we described a case of blurred vision due to adverse effect of "Levodropropizin" presented to our emergency department.

Case: A 58-year-old woman was presented to our emergency department with a complaint of blurred vision in an increasing pattern for the last 2-3 days and headache. There was no any comorbid disease, use of medications or illicit drug use in her history except a prescription of pharmaceutical agent containing "Levodropropizin" for her flu-like symptoms 5 days ago by her general physician.

She was conscious, cooperated and oriented; had no any pathological finding on neurological and other organ systems physical examination. Cranial tomography and diffusion magnetic resonance imaging (MRI) was planned for exclusion of intracranial parenchymal or vascular pathology and the patient was consulted to neurology and ophtalmatology departments. She had a normal ophtalmatological examination. A cranial MR angiography was offered by neurologist for exclusion of cavernous sinus thrombosis. As there were no any abnormal results on laboratory and imaging studies with the knowledge of the "Levodropropizin" has an adverse effect of blurred vision, patient's complaints were attributed to the pharmaceutical agent containing "Levodropropizin" and the patient was discharged.

Conclusion: Emergency department physicians must consider the patient's symptoms can arise from adverse effects of chronically or single use of drugs by them.

Keywords: blurred vision, midriasis, adverse effect

P-571

[Diğer]

BE CAREFUL: THE PATIENTS WITH REFERRAL FROM OTHER HOSPITAL

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Introduction: Gastrointestinal bleeding and acute mesenteric ischemia(AMI) are conditions that usually require an urgent and accurate diagnosis. AMI is a vascular emergency that it is primarily a condition of the elderly associated with significant morbidity and mortality. We have presented here a case who has been referred from an outsource with bleeding diagnosis and endoscopy request and turned out to be AMI by detailed analysis.

Case: A 35-year-old male patient was admitted to the emergency department (ED) with rectal bleeding. He had been admitted to another hospital with the same complaint 3-4 hours ago. He was transferred from this hospital to our center for endoscopy with the diagnosis of gastrointestinal bleeding. On admission to our emergency department, his general status was moderate, oriented and cooperative. He was seem sick and faint. His vital signs were tension arterial (TA) of 90/60 mmHg; heart beat (HB) of 110 beats/min; body, temperature of 36°C. Upon physical examination nonspecific abdominal tenderness was found. There was melena mixed with hematochezia on rectal examination. His medical history was unremarkable. He was taken to the observation room. Intravenous (iv) line was obtained. Iv fluid and omeprazole infusion were started. Nasogastric tube was performed. His laboratory results were as follows: creatinine:1.44, leukocyte: 14000/mm³, hemoglobin:7.5 g/dl, Hematocrit:% 22. Electrocardiography showed normal sinus rhythm. Two unit erythrocyte suspension were obtained and given to patient. The patient has been consulted to gastroenterology department with gastrointestinal bleeding prediagnosis. Gastrointestinal endoscopy was immediately performed. There was no active bleeding. The patient was hospitalized in the gastroenterology department. Then, on the control physical examination, severe abdominal tenderness, involuntary defense and rebound emerged. Computerized abdominal tomography with contrast was achieved. It showed mesenteric artery occlusion and acute mesenteric ischemia. The patients were transferred to general surgery.

Conclusion: Gastrointestinal bleeding cases appeal on the ED frequently. In the meantime rectal bleeding may be a symptom of acute mesentery ischemia. For true and early diagnosis, the emergency physician should evaluate the patient well and should not hold on to the primary diagnosis made when the patient referred.

Keywords: acute mesenteric ischemia, gastrointestinal bleeding, referral

P-572

[Diğer]

ACUTE CHOLANGITIS CAUSED BY HYDATID CYST OF THE LIVER: A CASE REPORT

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Hydatid cyst is a parasitic infection caused by the larva of Echinococcus Granulosus. Disease, although rare, is still endemic in eastern Turkey, representing an important public health problem. The most affected organ is the liver. Among the complications of liver hydatid disease, one of the most common and important one is cyst rupture into the biliary tract. Clinic

situation of the cyst rupture into the biliary tract can vary from asymptomatic state to jaundice, cholecystitis, cholangitis, liver abscess, pancreatitis and septicemia. The incidence of cholangitis is 4%. We present a young adult with liver hydatid cyst induces cholangitis who presented and a case of acute abdomen in emergency department.

A 20-years-old man was admitted to Emergency Department with upper abdominal pain. He was not having constipation, obstipation, diarrhea and history of trauma. On his physical examination revealed mild, right, upper quadrant abdominal tenderness. The laboratory work-up showed white blood cell count 6300 m³/mL (normal range 4000- 11000 m³/mL) with eosinophilia (8.7), aspartate aminotransferase levels of 189 U/L (normal range: 0-37 U/L), alanine aminotransferase levels of 378 U/L (normal range: 0-41 U/L), lactate dehydrogenase levels of 354U/L (normal range: 125-220 U/L), total bilirubin levels of 5.3 mg/dL (normal range: 0.2-1.2 mg/dL) and direct bilirubin levels of 3.8 mg/dL (normal range: 0-0.5 mg/dL). Abdominal ultrasonographic scan revealed 10 cm in diameter, an cystic mass in right lobe liver suggestive of hydatid cyst. The abdominal Computed Tomography (CT) scan showed a huge multisegmented hydatid cyst of the right lobe occupying the segments V, VII, and VIII. The intrahepatic biliary trees of around the cysts lesion were dilated (Fig. 1). The large axial dimension: 11X8 cm. The medial wall of cystic lesion there were irregularities. From cyst lesion extending to the portal hilum about 9 mm measured dilated at the widest part of the contents of the cyst lesion look similar the bile duct is noteworthy.

Thus, acute cholangitis was diagnosed and intrabiliary rupture of a hydatid cyst. Because of its rare occurrence and tendency to be misdiagnosed as other acut abdomen causes, we considered to present this case. Hydatid cysts in patients admitted to the emergency department with abdominal pain should be considered in the differential diagnosis.

Keywords: Hydatid cysts, Echinococcal Cyst Rupture, cholangitis.

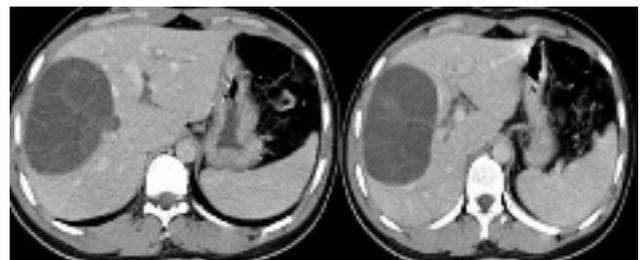


Figure 1. CT scan image showing a huge multisegmented hydatid cyst of the right lobe occupying the segments V, VII, and VIII. The intrahepatic biliary trees of around the cysts lesion were dilated

P-573

[Diğer]

HORNER'S SYNDROME SECONDARY TO CHEST TUBE INSERTION FOR PNEUMOTHORAX

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Introduction: Horner's syndrome is a rare complication of tube thoracostomy. Our patient's situation is thought to be an

early complication of Horner's syndrome, represented with left sided miosis, because of the compression of cervical ganglion.

Case: A 36 year old man, presented to Emergency Department with shortness of breath and chest pain lasting for 10-15 minutes

He had no medical history and he was not using any medications. His blood pressure was 110/70 mmHg, pulse 100 beats per minute, and pulse oximeter saturations of 96%, ECG was normal sinus rhythm. Clinical examination revealed decreased breath sounds in the left side of chest. Chest radiography confirmed the presence of spontaneous left pneumothorax.

Tube thoracostomy was performed from left fifth intercostal space.

The patient began taking oxygen at 2 liters per minute, sefazol 1 gr iv twice a day, combivent nebulas inhaler three times a day. In the night of the second day of treatment, the patient's anisocoria was noticed. Other neurological examination was normal. An intracranial pathology was excluded with computed tomography scan of the brain.

The chest tube was withdrawn 2 cm and was repositioned to the lung apex. The patient was treated in Emergency Department and consulted to Ophthalmology and Neurology Departments. The diagnosis was partial Horner's Syndrome. Without any special treatments, on day 5 the patient's anisocoria had resolved.

Conclusion: Horner's syndrome consists of ipsilateral pupillary miosis, eyelid ptosis, enophthalmos, and facial anhidrosis. Horner's syndrome has been reported in up to 1.3% of thoracic surgical procedures. Only a few patients with Horner's syndrome associated with tube thoracostomy for the management of spontaneous pneumothorax have been reported. The duration to onset of Horner's syndrome after tube thoracostomy varies considerably from 12 hours to 12 days after the removal of the thoracostomy tube. This finding can be explained by the anatomical features of the upper chest cage.

Keywords: Chest Tube, Horner's Syndrome, Anisocoria



Figure 1. The patient developed anisocoria

THE PROGNOSTIC EFFICIENCIES OF MODIFIED EARLY WARNING SCORE AND MAINZ EMERGENCY EVALUATION SCORE FOR EMERGENCY DEPARTMENT PATIENTS

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Background: Recently, there is an increasing interest for scoring systems to evaluate the serious patients by means of the severity of the disease and their availability for discharge in the emergency departments and intensive care units. Our aim in this study is to evaluate the efficiency of the mEWS and MEES systems in assessing the severity of the disease and foreseeing the midterm prognosis of the patients hospitalized following their emergency care in our emergency room.

Materials and Methods: Patients attending to Inonu University Turgut Ozal Medical Center Department of Emergency Medicine and hospitalized following their emergency care (1051 patients) between January 1st and February 15th 2011 were included to our study. The effects of age, sex, triage categories, ED check in times, mEWS and MEES scores on the area of hospitalization and mortality was evaluated (Table 1 and Table 2). Statistical analyses were performed by SPSS for windows version 16.0. The data were summarized as means, standard deviation and percent's. Univariate and multivariate analyses were performed for risk factor calculations.

Results: The mean age of the patients was 58±19 and 584 (56%) were male. Triage group 1 patients accounted for 21 of all (2%) while 646 (61%) was group 2 and 384 (37%) was triage group 3. Of all patients, 341 (32%) was hospitalized to ICU. While discharged patients were 89% (935 patients) of the study group, 116 patients (11%) were dead at the hospital. The GCS, AVPU and mEWS values were statistically significant by means of patient mortality ($p < 0.0001$), but the delta MEES value was not 54 ($p < 0.127$). The multivariate analysis showed that age clusters, GCS and mEWS values were risk factors for mortality, while age clusters, GCS and AVPU values were risk factors for ICU hospitalizations.

Conclusion: The results of our study suggest that mEWS evaluation is an effective and reliable tool for predicting outcome and hospitalization units of ED patients. Our results also displayed that the easily available GCS and AVPU scales are reliable guides in patient management. MEES values, on the other hand, are not convenient for ED use.

Keywords: Emergency department, AVPU, GCS, MEES, mEWS

Table 2. Mainz Emergency Evaluation Score

Score	4	3	2	1
GCS	15	12-14	8-11	≤7
Pulse rate	60-100	50-59/101-130	40-49/131-160	≤39/≥161
Respiratory rate	12-18	8-11/19-24	5-7/25-30	≤4/≥31
ECG	NSR	SVES/VES	Arrhythmia	VT, VF, Asystole
Systolic blood pressure	120-140	100-119/141-159	80-99/160-229	≤79/≥230
SPO2	≥96	91-95	86-90	≤85
Pain	None	Mild	Severe	-

Table 1. Modified Early Warning Score

Score	3	2	1	0	1	2	3
Pulse rate	-	<40	41-50	51-100	101-110	111-130	>130*
Respiratory rate	-	<8	-	9-14	15-20	21-29	>30
Temperature	-	<35.0	35.1-36	36.1-38.0	38.1-38.5	>38.6	-
Systolic Blood pressure	<70	71-80	81-100	101-199	-	>200	-
AVPU score	-	-	-	A	V	P	U

P-575 [Diğer]

LATE PRESENTING GASTROINTESTINAL PERFORATION POSING DIAGNOSTIC DIFFICULTY

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Introduction: Peptic ulcer perforation (PUP) is one of the most important and widespread complications of peptic ulcer. PUP represents a significant part of causes of acute abdomen presenting to the emergency department and is one of the most common causes of emergency surgery. Early diagnosis and treatment of PUP is important in reducing mortality and morbidity rates.

Case: A 36-year-old woman was brought to our emergency department already intubated with a preliminary diagnosis of intoxication. The patient was intubated there since she was unconscious and due to cyanosis. Intoxication was suspected, and gastric lavage and activated charcoal were administered. The patient was referred with a preliminary diagnosis of intoxication and admitted to our emergency department. We learned that the patient used carbamazepine and valproic acid due to epilepsy, and seizure could not be excluded since she was alone when she was unconscious. We learned that no empty drug packages had been found in her home. The patient's general condition was average/poor, and she was intubated and sedated. Body temperature was 36.5 C, heart rate 116 beats/min, BP 110/60 mmHg and O2 saturation 98. Sinus tachycardia was present at ECG. No signs of violence were observed. The abdomen appeared distended. Defense was positive and abdominal sounds were hypoactive. No characteristic was present at PA imaging. Widespread fluid was observed in the abdomen at FAST. Laboratory analysis revealed elevated creatinine, amylase and acute phase reactants. Paracentesis fluid was compatible with exudate. Non-contrast abdominal CT revealed widespread fluid-air (perforation) in the

abdomen. The patient was started on antibiotic therapy and taken for surgery.

Conclusion: Early diagnosis and treatment in cases of PUP is very important in terms of mortality and morbidity. Although PUP typically presents as severe, sudden onset epigastric pain, physicians should be aware that it may sometimes exhibit different clinical findings.

Keywords: Peptic ulcer, perforation, intoxication,

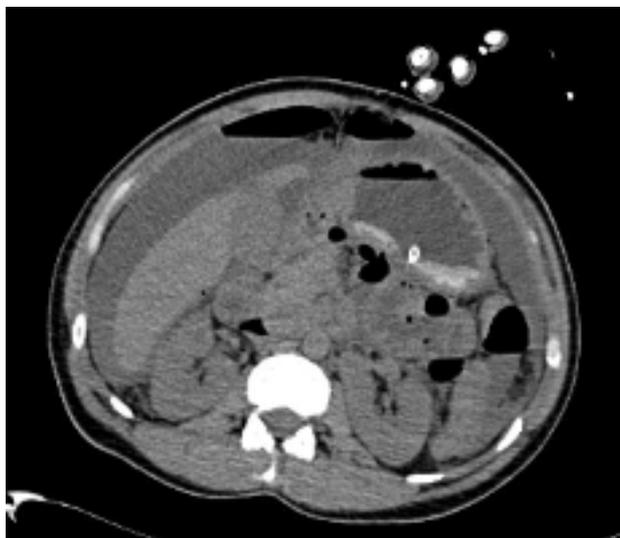


Figure 1. Non-contrast abdominal CT revealed widespread fluid-air (perforation) in the abdomen

P-576 [Diğer]

SEVERE HYPONATREMIA, EPISTAXIS, AND FLUOXETINE: CASE REPORT: TEZCAN KAYA¹, MURAT YÜCEL², ÖZDEN ERASLAN³, ALI TAMER¹

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Introduction: Fluoxetine is one of the most widely used selective serotonin reuptake inhibitor (SSRI) indicated for treatment of depression. Hyponatremia, one of the most common electrolyte abnormality when severe (<120 meq/L), has poor prognosis and fatal outcome. Patients may be admitted to the emergency unit with symptoms of hyponatremia such as anorexia, headache, cramping, nausea, vomiting, disorientation, irritability, confusion, weakness, mental status changes, lethargy, hallucination, syncope, seizure, coma, respiratory arrest, and death. Rarely, fluoxetine may cause hyponatremia due to a syndrome of inappropriate antidiuretic hormone (SIADH), especially in elderly patients. Furthermore, SSRIs, including fluoxetine, may increase the risk of bleeding reactions. We report a case of a woman presenting with severe hyponatremia and nasal bleeding associated with the use of fluoxetine.

Case: This is a 66 years old female who presented to the emergency department with anorexia, nausea, weakness, and nasal bleeding. Past medical history included hypertension and type 2 diabetes. She was taking diltiazem, doxazosin, aspirin, insulin glargine, and fluoxetine. 3 weeks before admission, she was started on fluoxetine 20 mg tablets once a day for depression. The family

history was non-contributory. On physical examination she was afebrile, oriented and cooperative. Heart rate was 76/minute and blood pressure was 150/85mmHg. There was no dehydration and edema and she was euvoletic. Lungs were clear and cardiac examination was unremarkable. Neurological examination showed no focal neurological deficit. The patient was hospitalized and a nose pack was applied. Aspirin was discontinued. Serum sodium was 116 mmol/L while serum and urine osmolality were 210 mosm/kg and 370 mmol/L, respectively. Urinary sodium on spot sample was 35 mEq/L. Other laboratory parameters including complete blood count, renal and liver function tests, lipid profile, thyroid hormones were within normal limits. Chest X-ray was normal. We concluded that her hyponatremia was associated with fluoxetine which seemed to cause SIADH. After consultation with psychiatry department, we discontinued fluoxetine and also started fluid restriction. Her hyponatremia resolved and serum sodium was within normal limits on the fourth day of admission. She was discharged to be followed up on the outpatient basis. She remained to have normal serum sodium during one month follow-up.

Conclusion: SSRIs should be kept in mind as a cause of hyponatremia especially in the emergency department setting. Furthermore, they might impose a significant risk of bleeding when there is concomitant use of drugs affecting hemostasis, like nonsteroidal anti-inflammatory drugs, aspirin and warfarin.

Keywords: Hyponatremia, epistaxis, fluoxetine.

P-577

[Diğer]

A COMPLETE GUIDEWIRE RETENTION AFTER FEMORAL VEIN CATHETERIZATION

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Introduction: Central venous catheters (CVCs) are essential for a significant number of patients and allow for intravenous administration of specific drugs, hemodialysis, continuous invasive hemodynamic monitoring, rapid fluid delivery when peripheral catheters can not be achieved, and parenteral nutrition. CVCs has been associated with a 14% to 15% adverse event rate; the most commonly reported complications include arterial injury, hematoma, pneumothorax, and related infections. We reported a young female patient who underwent left femoral vein catheterization 6 months ago and who was diagnosed with complete guidewire retention in our emergency department (ED). To our knowledge, this is the first case in the literature with a diagnosis of retained CVC guidewire in the femoral vein.

Case Presentation: A 23-year-old female patient admitted to the ED with a complaint of release of end of a metallic wire from the nail bed of left big toe. The patient stated that there was discharge and swelling in her nail bed of left big toe in the last 3-4 days and she had squeezed that region thinking of it was a common acne. After she had pulled the wire somewhat, she was frightened and admitted to the ED. She had a medical history of type 1 diabetes mellitus and use insulin. The patient was admitted to intensive care unit of another hospital with a diagnosis of diabetic ketoacidosis 6 months ago and at that time was inserted CVC in the left femoral vein. She denied any complaint since then. Physical examination revealed normal vital signs. Systemic

examination revealed no pathology except for metallic wire hanging down the left big toe (Figure 1). AP and lateral X-rays of the left foot revealed metallic wire extending along the tibia to the knee joint (Figure 2). We considered that the metallic wire is a retained guidewire of CVC procedure performed 6 months ago. Cardiovascular surgery was consulted and the patient was admitted for surgical retrieval of the wire. The patient then underwent uneventful endovascular guidewire retrieval by cardiovascular surgery. This surgical procedure revealed that retained guidewire in the anterior tibial vein with its proximal tip extending to the popliteal vein. On postoperative day 3, the patient was discharged with oral antibiotics and without any complication.

Discussion: Guidewires are universally used in the Seldinger technique that facilitates catheter placement into vascular lumens during CVC placement. Reported complications related to CVC insertions are more commonly associated with these vessels because of the femoral vein is not preferred vascular access. Complications of CVC generally include mechanical and immediate complications, delayed (catheter migration, embolization), septic, and thrombotic complications. Mechanical complications are mainly operator dependent. Misplaced or retained guidewires during CVC placement is a rare complication and usually related with intra or post-operative processes in the operating room. Operator experience, fewer insertion attempts, and ultrasound guidance are factors associated with fewer mechanical complications. Surprisingly, the presented case had not developed any late complication despite a period of 6 months and she is the first case of retention of a complete CVC guidewire presented in the literature. In conclusion, even if retained guidewire of CVCs is a rare clinical condition in the ED, it should be considered especially in patients who have a history of CVC insertion.

Keywords: Central venous catheters, complications, femoral vein, popliteal vein



Figure 1. Macroscopic images shows metallic wire hanging down the nail bed of the patient's left big toe.



Figure 2. AP and lateral X-ray images of the left foot shows metallic wire extending along the tibia to the knee joint.

P-578

[Diğer]

HERBAL SMOOTHIE WITH A KICK

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Introduction: Digitalis is a purified cardiac glycoside found in the foxglove plant, *Digitalis purpurea*. Toxic exposure to plants containing cardiac glycosides is rare. Cardiac glycoside exposure from plants accounted for approximately 3% of plant exposures in a 2011 report in the US.

Case: A 22 year old male presented to the ED with one day history of ongoing vomiting, abdominal discomfort, drowsiness, light-headedness, blurred vision and numbness of the lips. He had plucked 2 big leaves of a plant growing wild in his garden and blended this with apple, cucumber and lettuce to make a juice on the previous day. He developed symptoms 2 hours after ingestion of the juice. He later realised he had ingested foxglove after discussion with his parents. At presentation, he was conscious and alert. He was noticed to be bradycardic with a heart rate of 40 bpm, BP=117/58, RR=16, SaO₂=97%. Other vital signs were within normal limits. ECG showed complete heart block with a rate of 38 beats/min and widespread T wave inversion in inferior and anterolateral leads (fig 1). His digoxin level was 0.6 µg/L. He was given intravenous atropine 0.6mg with good response. He had 3 further doses of atropine and was later given activated charcoal. He was transferred to CCU, where he had a dose of Digibind and commenced on telemetry. There were further changes in ECG but they improved overtime. His serum digoxin levels progressively decreased to 0.2 µg/L. He remained stable and was discharged home 10 days post admission for follow-up in cardiology outpatients' clinic.

Discussion: Conclusion: This case illustrates the unusual presentation of toxicity after ingestion of agents which might be unknown to patients. The general public should be enlightened not to take any agent or plant which is unknown to them. Emergency physicians should consider the possibility of digitalis poisoning in anybody presenting with abdominal pain and vomiting following ingestion of an unidentified plant.

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Keywords: Digitalis, cardiac glycoside, foxglove, juice, bradycardia, heart block,

P-579

[Diğer]

A RARE COMPLICATION VENTRICULOPERITONEAL SHUNTING; SPONTANEOUS PROTRUSION FROM THE ANUS

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Introduction: Ventriculoperitoneal (VP) shunt placement is an effective method in the treatment of hydrocephalus which diverts the cerebrospinal fluid (CSF) into the peritoneal cavity. Several complications after the insertion of VP shunt have been previously reported such as occlusion of the tube, shunt infection, intestinal obstruction, migration of the shunt, and visceral perforation which may occur at any time after shunt placement (from 1 week to several years). The incidence of intestinal perforation is between 1 to 7%.

Case: 69 year old women was admitted to the Emergency Department for anal foreign body. She had a VP shunt because of secondary hydrocephalus. Her VP shunt had been placed at 5 month ago. On examination, the catheter was protruded from the anus for a length of 5 cm. On physical examination, her general conditions was well. His vital signs were also normal. Abdominal examination revealed no significant findings, Also, on examination of the central nervous system (CNS), no signs of meningitis or any other unusual findings were detected. Plain abdominal graphy showed the distal part of the catheter within gastrointestinal (GI) tract (Figure 1) and VP shunt protruded from the anus (Figure 2). In brain computed tomography (CT) scan, showed normal position of shunt in the brain ventricle (Figure 3). The catheter was extruded from the anus, because it was protruded through the intestinal lumen without any obvious complications.

Discussion: Several cases of catheter related intestinal perforation have been reported. If a definitive diagnosis of peritonitis is established, performing an urgent laparotomy is mandatory. But if catheter protrusion through the intestinal wall causes a partial intestinal obstruction, it can be managed with catheter extrusion. Laparotomy should be performed if there is any sign of complete obstruction. Neither peritonitis nor intestinal obstruction was identified in this patient, so the catheter was extruded. In 2009, Birbilis et al. reported a 54-year old man with spontaneous perforation of sigmoid colon as a complication of distal ventriculoperitoneal shunt displacement. The patient was received antibiotics who showed no response to medical treatment, so he underwent intestinal resection and anastomosis. Nakahara et al. described an obese 64-year old woman with secondary hydrocephalus and subarachnoid hemorrhage who underwent VP shunt placement. The abdominal wall was perforated by the distal end of the VP shunt and a subcutaneous cyst filled with CSF was formed around the catheter. Finally, the distal catheter was surgically replaced in the peritoneal

cavity. A rare case of catheter protrusion from the mouth was also reported that the patient was treated with removal of the catheter and laparotomy was not needed. The evaluation of CSF regarding infection is an important step in management of such patients with intestinal perforation, because there is possibility of retrograde contamination of CSF and high probable incidence of meningitis.

In conclusion, in cases of catheter protrusion from the intestinal lumen leading to intestinal perforation, if a definitive diagnosis of peritonitis is established, an urgent laparotomy is required. But, if peritonitis does not occur or it results in partial obstruction of the intestine, it is enough to extrude the catheter through the anus, then institute antibiotic therapy and observe the patient carefully.

Keywords: Complications of Ventriculoperitoneal Shunting, Spontaneous Protrusion, Protrusion From The Anus



Figure 1. CT scan of the brain



Figure 2. Radiography of the abdomen



Figure 3. Radiography of the pelvis

P-580

[Diğer]

GIANT LIPOMA OF MESENTERIC TISSUE: AN UNEXPECTED REASON FOR MECHANICAL INTESTINAL OBSTRUCTION

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Colonic lipomas are benign adipose tumors which are usually submucosal. While small lipomas do not generally give symptoms, it seems that the symptoms of larger lipomas are mainly due to mechanical interference in colonic passage or ulceration of the mucosa that covers the lipoma. We report a case of symptomatic giant mesenteric origin colonic lipoma.

A 77-year-old male patient was presented with abdominal pain and obstipation symptoms. History of Alzheimer's disease was present in and donepezil were taking 10mg/day. Systolic / diastolic blood pressure: 130 / 80 mmHg, pulse: 90 / minute, respiratory rate 16 / min, and temperature: 36°C; satO₂:% 97, general condition was good, had time disorientation. Upon physical examination a 4x5cm solid, mobil, painless mass was palpated in the left side of the umbilicus. In rectal examination there was no gaita contamination. Laboratory showed C-reactive protein:2.50, D-Dimer: 1950, urine ketone: 50, lactic acid:2,04. All the other laboratory tests were within normal limits. In abdominal plain radiography: there was multiple wide based air-fluid levels. Considering the intestinal obstruction with surgery department was consulted. Abdominal CT were taken. Computer Tomography showed mechanical obstruction at the point of distal ileal section caused by a low-density 22x8 cm homogenous massive mass. Patient, to emergency operation, was admitted to the surgery service.

Lipoma of the colon is an uncommon tumor of the gastrointestinal tract, and belongs to the group of benign non-epithelial tumors. As reported at autopsy, the incidence of colonic

lipoma ranges from 0.035 to 4.4%. In general, colonic lipomas do not cause symptoms and, therefore, are usually detected incidentally during colonoscopy, surgery and autopsy. However, a minority of lipomas can cause symptoms when the lesion is large, especially for those with a diameter > 2 cm. To the best of our knowledge, colonic lipoma with a maximum diameter of 8.5 cm, associated with significant symptoms, has not been previously reported. The commonest site for symptomatic solitary large bowel lipoma is the ascending colon, including the caecum, followed by the transverse colon, including both hepatic and splenic flexure, descending colon, sigmoid colon and rectum. The peak incidence for lipoma of the large bowel is in fifth-sixth decade. Colonic lipomas are generally asymptomatic but occasionally patients may have intermittent crampy abdominal pain secondary to intussusception of a pedunculated lipoma or with intermittent fresh rectal bleeding.

In our case massive intra abdominal mass cause mechanical intestinal obstruction which unexpectedly extraluminal and had mesenteric origin. Therefore patients with acute abdominal pain, constipation, obstipation should suggest that intra abdominal space occupying lesion.

Keywords: Mechanical Intestinal Obstruction, Giant Lipoma, Emergency Department



Figure 1. Multiple Wide Based Air- Fluid Levels



Figure 2. CT Scan of the Lipoma

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[Diğer]

AN ENTEROCUTENOUS FISTULA CASE BECAUSE OF AN UNKNOWN CAUSE

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Introduction: Most of fistulas are external fistulas developed by iatrogenic causes because of an operation (85%). However they also can occur because of inflammatory bowel diseases, cancer, radiotherapy (5-25%). Fistulas opening to the skin are easily diagnosed and treated compared to the internal fistulas. In this article, a fistula with an unknown cause will be discussed.

Case: Sixtyfour year old male patient admitted to our emergency service with a complaint of redness for a week at his right lower quadrant and a drainage from the lesion for 3 to 4 days. there were not any significance with his medical history. His vital signs: blood pressure: 100/65 mm/hg, pulse: 96 beat per minute and rhythmic, respiration rate: 18 breaths per minute. pulse oxymetry oxygen saturation measured as 96%. In physical examination: He had a soft abdomen with no defence, no direct and rebound tenderness. It is observed that gastrointestinal content were draining from the lesion with an opening of 3x4 cm at right lower quadrant. At left lower quadrant there was an operation scar (Figure 1). A colonic operation performed 30 years before is revealed by further investigation.

He is scanned with oral and IV contrasted abdominal CT. Scanning revealed an image compatible with a fistula between ileal loops and abdominal wall. There were no significant sign of intraabdominal extravasation and of solid organ pathology. There were no significant laboratory test abnormality except for a leucocytosis with 13000 white blood count. Patient is transported to the general surgery ward with diagnosis of enterocutaneous fistula.

Results: Small intestinal fistulas are usually caused by surgical operations (75-85%). These operations might have been performed because of abdominal malignancies, inflammatory bowel diseases and to relieve abdominal adhesions. Diagnosing the cause of a fistula is important because the cause of fistula will vary the further treatment and the treatment of underlying disease.

Keywords: Enterocutaneous fistula, Intestinal, Abdominal wall, Emergency Department



Figure 1. Outside view of the enterocutaneous fistula at the patient.

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[Diğer]

UMBILICAL HERNIA THAT SEEN IN YOUNG PATIENTS

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Introduction: A hernia is the protrusion of an organ or fascia of an organ through the wall of the cavity that normally contains it. Hernies have about %75 inguinal hernia and %3 umbilical hernia. Umbilical hernia usually seem older persons, but we sometimes see it young person with symptoms.

Case: 21 age male patient, who had nousea and vomiting for 5 days, visit our hospital after going to the other three hospital. When we examine the patient; blood pressure: 120/80 mmHg, heart rate 98 beats per minute, oxygen saturation level was % 97, respirotary rate 18/min and fever 36,7 C. He has got notting medical speacialty in his background. He has never done operataions and he has never used drugs. The patient's physical examination; he had an epigastrik sensitivite and didn't has defans and rebound. Breath sounds, cardiac examinations and bowel sounds was normal. His neurological examination was normal. And also other part of body examination was normal. Biochemical tests were normal however in hematolojic test WBC: 13,4, Hb:14,2, HCT: 42,3, PLT: 275. CRP: 0,49 were detected. The PA Lung XRay was shown gas that extending abdominal midline to mediastinum (FIGURE-1). On this image we think that was an umbilical hernia. After that we looked his abdomen with ultrasound, and we didnt see intestinal strangulation. We gave treatment and suggested to patient must go to gastroenterology polyclinic.

Discussion: Our patient is only 21 years old and he has never an property from his resume. We want emphasize that PA lung XRay is still so important about basic diagnosis. And also umbilical hernia that is much less common in young patients, can be easily diagnosed in emergency service with PA lung Xray.

Keywords: Umbilical hernia in young patient, Hernia on PA lung Xray



Figure 1. Umbilical Hernia

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[Diğer]

ATTENTION TO BILATERAL STONES

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Renal colic is a common condition that usually presents with intense pain and benefits from urgent analgesic treatment in the emergency department (ED). Renal and ureteral stones are a common problem in primary care practice. Stone size is the major determinant of the likelihood of spontaneous stone passage, although stone location is also important. Most stones ≤ 4 mm in diameter pass spontaneously. Indications for urgent decompression include bilateral obstruction with acute kidney injury and unilateral obstruction with acute kidney injury in a solitary kidney. We aim to remind ureteral stone management with a case report who had bilateral ureteral stone.

Case: A 31 year old man admitted to our emergency service complaints of flank pain. At his history we learned that he had nephrolitiasis. At physical examination costovertebral angle tenderness was positive on the left flank. Defensive and rebound was negative. Other physical examination was normal. At laboratory analysis white blood cell count of $8.6 \times 10^3/UL$, urea 36 mg/dl, creatinin 1.2 mg/dl. At urine microscopy there was plenty of red cells. At non-contrast abdominal computerized tomography there was hyperdense lesion at bilateral distal ureter. Patient referred to university hospital for ureterorenoscopic pneumatic lithotripsy.

Conclusion: Renal colic is common reason for admission of emergency department and during the management of these patients required emergency procedures patients should be kept in mind. Especially anuria should be monitored and patients with bilateral ureteral stone should be referred to center that can be done emergency intervention.

Keywords: Renal colic, bilateral stones, ureter calculi



Figure 1. Noncontrast CT of Bilateral Ureter Calculi

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[Diğer]

ATTENTION TO HINT

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Kehr's sign is the occurrence of acute pain in the tip of the shoulder. Kehr's sign is pain referred to the left shoulder that worsens with inspiration and is due to irritation of the phrenic nerve from blood adjacent to the left hemidiaphragm. Kehr's sign in the left shoulder is considered a classical symptom of a ruptured spleen. We aim to remind a forgotten sign with a case report who had left shoulder pain.

Case: A 54 year old man admitted to our emergency service complaints of chest pain, sweating, chills, pain in the left shoulder style astringent, nausea and vomiting. He had a short-term contraction with nausea. At his medical history he was sing corticosteroid for rheumatoid arthritis. At his physical examination blood pressure was, 120/60 mm Hg; pulse rate, 68 beats/min, temperature, 36°C, SpO₂ 98%. Cardiac, pulmonary, abdominal, Musculoskeletal examination was normal. Laboratory analysis, electrocardiogram was normal. Thorax tomography was normal and than cranial tomography and diffusion MR was taken and there wasn't abnormalities. Electroencephalography was normal. At control laboratory analysis hemoglobin was decreased and control physical examination there was diffuse abdominal tenderness and defense. Ultrasonography and contrast computed tomography were taken. There was subcapsular hematoma at spleen. Patient admitted to general surgery and operated. After one week follow up patient discharged with full recovery.

Conclusion: Some of the findings are specific in terms of disease, these findings need to keep in mind during an emergency

patient examination. Kehr's sign is specific to splenic disorders which was occur with irritation of diaphragm.

Keywords: Kehr sign, shoulder pain, emergency imaging

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[Diğer]

PATIENTS PROFILES WITH TRANSFERRED BY HELICOPTER: EXPERIENCES OF SHORT PERIOD

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Introduction: Helicopter transport has become an increasingly utilized resource in the delivery of specialized, time sensitive treatment of diseases. The safety, cost efficiency and potential time to treatment benefit of air transport of patients with stroke, acute myocardial infarction, aort dissecting or leaking aneurysm, or multiple traumatic injuries, major burns, penetrating injury, premature infants, pediatric and organ transplantation etc. Therefore, it was considered as a predictor of higher survival compared with ground transport.

Materials and Methods: This study focused on patients who were transported to our emergency unit from other institutions by helicopter from April 2014 to October 2014. We excluded transport which were goals of military training. This study focused on patients who were transported to our emergency unit from other institutions by helicopter from April 2014 to October 2014. We excluded transport which were goals of military training.

A retrospective review was conducted of all patients transferred by helicopter. Data collected included patient demographics, classification of trauma or non-trauma, mechanism of trauma, pre-transport initial diagnosis, cause of transport, region of transporting, final diagnosis in emergency room, concordant of between initial and final diagnosis, clinical outcomes and name of transferred intensive care.

Results: April 2014 to October 2014 through 31 patients with various disease were transferred to emergency department of Ege University Medical Hospital. According to region, the most transferred patients with rural public hospitals which are towns close to Izmir. Fifty four point eight percent of patients were men, 45.2% were women. Mean of ages of adult patients $X=52,3\pm 4,45$. According to the classification of air transport reason that 54.8% of patients were transferred due to trauma and the most mechanism of trauma is traffic accident by vehicle. Thirty eight point seven percent of patients were consulted by neurosurgery due to head trauma. Non-traumatic patients was 45.2% and the most main cause of transportation acute cardiovascular disease 25.7%. The pediatric cases were about the total tranfers were 12.9% and all of them required advanced pediatric intensive unit. The main reason of transport were lack of specialist physicians and intensive care unit. Twenty nine point percent of the patients have a referral diagnosis were not concordance with definitive diagnosis, the concordance between referral diagnosis and definitive diagnosis of those patients were 54.8%, 16.1% diagnosis of patients weren't match with the referral diagnosis. Majority of the patients (54.8%) were of patients were transferred to intensive care unit from the ED, and also 38.7% of patients were discharged from emergency department and 6.5% of patients died in the ED that this ration was total of mortality.

Discussion, Conclusion: Despite the higher cost and limited availability of a helicopter transport, recent studies have supported the use of helicopters for the rapid transfer of patients that are experiencing a time-sensitive emergency such as trauma or myocardial infarction. In conclusion, our results shows most of the air transport cases have a appropriate transfer reason, and the use of helicopters for the rapid transfer of patients and the collaborative team approach may improve not only transportation safety, but also patient outcomes.

Keywords: Helicopter transport, emergency unit, rapid transfer of patients

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[Diğer]

A RARE CAUSE OF URINOMA; URETER CALCULI

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Urinoma is defined as an encapsulated collection of extravasated urine in the perirenal space. Urinomas may be unilateral, bilateral, symptomatic, or asymptomatic, and can manifest as a confined or encapsulated collection, or as free fluid mimicking ascites.

Urinomas most often due to urinary obstruction secondary to calculus, ureteropelvic junction obstruction, retroperitoneal fibrosis and malignancy or non obstructive causes like trauma, surgery and diagnostic instrumentation. Urine leakage is usually directly demonstrated on contrast-enhanced CT or T1-weighted imaging, seen as enhancement of the fluid during the excretory phase of enhancement due to contrast extravasation from the lumen of the genitourinary system. We aimed to report a case who was diagnosed urinoma due to urinary obstruction.

Case: A 62 year old man admitted to emergency department complains of nausea, vomiting, flank pain for two days. At his medical history he has not chronic disease. At his physical examination blood pressure was, 140/110 mm Hg; pulse rate, 108 beats/min, temperature, 36.9°C. There was tenderness at right lower quadrant and voluntary defense. Rebound was negative. Other physical examination was normal. Abdominal tomography was planned to assess the acute abdomen. At abdominal tomography there was hypodense appearance around the right kidney extending to the anterior of abdominal aorta (urinoma?) and there was hyperdense lesion (calculi?) at right distal ureter. Patient hospitalized with the diagnose of urinoma seconder to distal ureter stone. Ureteral stone removed with ureterorenoscopic pneumatic lithotripsy and double J catheter was placed. Patient followed for two days and discharged.

Conclusion: Ureter stone is a rare cause of urinoma. These patients may be admitted to the emergency department with abdominal pain. Computerized tomography in the management of these patients is important and at emergency department tomography should be used for these patients.

Keywords: urinoma, ureter calculi, flank pain

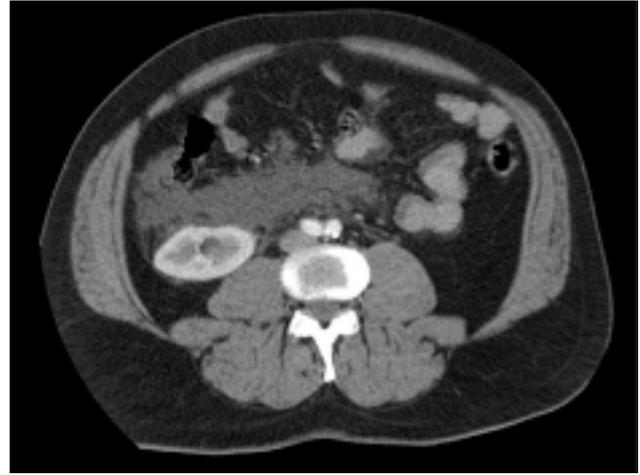


Figure 1. CT view of Urinoma

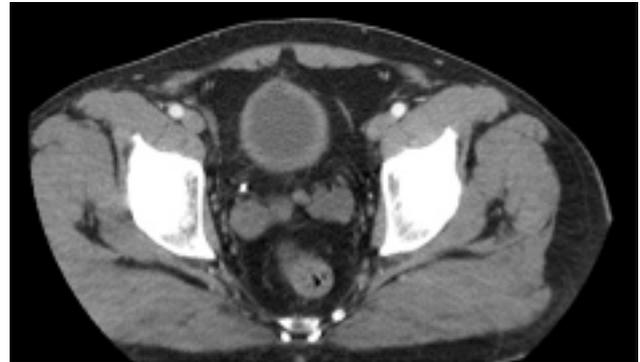


Figure 2. Ureter calculi

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[Diğer]

ASSESSMENT OF THE CONSULTATION TIMES OF THE PATIENTS PRESENTED TO A UNIVERSITY HOSPITAL

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Background: The crowd in the emergency departments that serve continual, effects the patients' health and public health adversely in whole world, especially in the big cities in our country (1). Extended hours of waiting of the patients in the emergency services, could be counted as one of the reasons which increases the crowd (2). Similarly, long staying hours, causes various security problems and decrease in the work performance of the staff secondly to decrease of the patient care quality (3). It's shown in the studies that the elapsed time to reply to the consultations and correspondingly admittance of the patients from emergency service to the related departments, extends the patients' stay in the emergency departments and contributes to the crowd of the emergency (2). In this study, we analysed the time for the consultation replies and admittance of the patients' to the related departments.

Materials Method: The study was planned as a retrospective study and conducted between 01 January 2013 and 31 December 2013 at Marmara University Medical School Pendik Training and

Research Hospital Emergency Unit and was based on determining the replying time of consultants.

Results: During the study period, we consulted 6207 patients from yellow area, 5256 from red area, 4021 from green area and a total of 6884 patients to the cardiology, general surgery, internal medicine, orthopedics, neurology and neurosurgery services. As these consultations are analysed according to their distribution to the specialties; it was consulted 2699 patients to cardiology, 1614 patients to neurosurgery, 1508 patients to internal medicine, 6806 patients Orthopedics and 1143 patients to general surgery. As the time of replying to these consultations are analysed according to their distribution to the specialties, it was estimated that the mean reply time to the consultation of neurosurgery is 233,2 minutes, mean reply time to the consultation of internal medicine is 184,5 minutes, mean reply time to the consultation of general surgery is 179,5 minutes, mean reply time to the consultation of neurology is 311,6 minutes and mean reply time to the consultation of cardiology is 139,6 minutes.

Discussion: The length of stay of the patients in the emergency services, varies between the hospitals as consultation reply time and admittance time is closely related to the hospitals' facilities, their city and situation of the hospital in the city, and closely related to the occupancy rate of the hospital. Long consultation reply times and admittance times in our hospital could improve and patients' staying time in emergency services can be diminished by coordination between clinics, standart policies that hospital management can follow.

Keywords: Consultation, Emergency Department, waiting time

Department	Red Area	Yellow Area	Green Area
Neurosurgery	552	644	6207
Internal Medicine	463	643	322
General Surgery	337	510	296
Cardiology	1052	1125	522
Orthopedics	2177	2531	2098
Neurology	675	754	365
Total	5256	6207	4021

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[Diğer]

DIEULAFOY LESION: A RARE AND DIFFICULT-TO-DIAGNOSE REASON OF ACUTE UPPER GASTROINTESTINAL BLEEDING

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Purpose: Dieulafoy lesion mostly represents an arterial vascular lesion with submucosal localization. It can be localized at any region in the gastrointestinal system; however it is most frequently seen in the proximal of the stomach. Since it is a rare condition, it is generally not one of the initial diagnoses considered in case of acute bleedings.

Case Presentation: An 82 years old male patient was brought to the emergency unit with sudden-onset hematemesis and fatigue. At admission, the patient was conscious and cooperated,

he had hypotension (65/40 mmHg) and tachycardia (130 bpm), and he was pale and sweating. Parenteral fluid replacement was initiated and 1700 cc non-coagulated blood was aspirated from the nasogastric catheter. Laboratory findings were as follows: Hb:5.5, Hct: 16.9, Plt: 136000. The patient had no known systemic disease and chronic drug use, except for 150 mg acetylsalicylic acid taken for the last 2 days, and he was taken into emergency operation as endoscopic examination could not be performed due to technical reasons. The patient had fibrotic alterations at the pilor localization, and gastrotomy was performed over the pilor considering gastroduodenal artery bleeding possibly associated with peptic ulceration. As there was no site of bleeding in this region, gastrotomy incision was extended towards the stomach antrum but no bleeding site was observed. Considering Dieulafoy lesion, gastrotomy incision was extended towards the proximal and active pulsatile bleeding was seen at the small curvature side of the 3-4 cm distal of gastroesophageal intersection. Homeostasis was achieved by suturing the primer. Due to the pilor narrowness and relatively large gastrotomy, the operation was concluded with antrectomy instead of primary repair. Five units of perioperative erythrocyte transfusion were given to the patient and he did not need further transfusion on the subsequent days. He was discharged without any problem on the post-operative 6th day.

Discussion: Dieulafoy lesion is a rare and difficult-to-diagnose reason of acute upper gastrointestinal bleedings and it may lead to recurrent bleedings. Age of onset is variable, however its frequency increases by age and the lesion is generally localized at the small curvature side of the proximal stomach. Its etiology is not clear, but use of NSAIDs, alcohol, anticoagulant drugs as well as stress is held responsible. Complaints at admission generally include hematemesis and melana, abdominal bleeding may rarely be present as well. Endoscopic intervention is recommended as the initial procedure to be carried-out, and it is effective for both diagnosis and treatment. Angiographic embolization represents another treatment option. Surgical intervention becomes the only possible treatment option in cases of shock due to uncontrolled bleeding.

Keywords: Dieulafoy Lesion, Gastrointestinal Bleeding, Acute Bleeding

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[Diğer]

A RARE CAUSE OF SMALL INTESTINE OBSTRUCTION: CONGENITAL MESENTERIC BAND

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Introduction Purpose: Small intestine obstructions are frequently encountered in the emergency units and the most common etiologic cause is adhesion due to previous abdominal interventions. Obstruction due to intraabdominal congenital band on the other hand is a less frequent condition encountered in patients with no history of previous abdominal intervention.

Case Presentation: A 28 years old female patient referred to emergency unit with abdominal pain, nausea and vomiting that were present for 3 days. Physical examination showed extensive tenderness, defense and distention in the abdomen. She had no history of previous abdominal intervention but she

had been intermittently experiencing the same complaints for many years. Laboratory analysis showed leucocytosis (12,000/mm³). Abdominal graphy showed small intestine-like air-fluid levels and computerized tomography confirmed small intestine obstruction, without any specific etiology (Figure 1). The patient was taken into emergency operation with pre-diagnosis of acute mechanical intestinal obstruction and abdominal exploration showed a congenital mesenteric band that infolded the jejunum segment at 140 cm from tritez ligament by 3600 and obstructed passage to the distal (Figure 2). Small intestine passage returned to normal upon surgical loosening of the band.

Discussion Conclusion: The most common cause of small intestine obstruction is intraabdominal lesions that develop due to previous abdominal interventions. The other causes may include malignancies, inflammatory diseases, hernia and intussusceptions. One of the rarest causes of intestinal obstructions is congenital band, which is not associated with any kind of intraabdominal pathology and generally encountered during childhood. It is a rare condition which can only be surgically treated, and it should be considered in patients who refer with the clinical findings of intestinal obstruction in the absence of a history of abdominal interventions, trauma or peritonitis.

Keywords: small intestine obstruction, congenital mesenteric band, adhesion

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[Diğer]

A RARE CASE REPORT: İLEUS DEPENDING ON GOSSYPIBOMA AFTER 15 YEARS

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Objective: Presenting an ileus case as a result of gossypiboma after 15 years of operation

Case: A 52-years-old male patient consulted to emergency service with abdominal pain, bloating, nausea, vomiting and inability to defecate for three days. He had no chronic diseases but an abdominal operation for sigmoid diverticulitis perforation 15 years ago. In physical examination he had tenderness, guarding, and rebound tenderness in all abdominal quadrants. Laboratory tests revealed a WBC of 11,000/mm³; other parameters were in the normal range. Intravenous contrast enhanced abdominal computed tomography demonstrated a uniform bounded cystic or tumoral obstructive mass causing proximal intestinal dilatation in a dimension of 13x6 cm between intestine and abomen wall (Fig 1a and b). He was taken to the operation room with a preliminary diagnosis of acute abdomen syndrome by probable tumoral ileus. Upon exploration, it's seen that the reason of the ileus was cotton fabric sponge forgotten in previous operation

Discussion: Gossypiboma (Latin 'gossipium'-cotton, Swahili 'boma' hiding) is a nightmare of a surgeon defined as "foreign body forgotten in operation area". It obtains in a frequency of 1/1000-1/15000 despite developments in surgical technic and conditions of operation rooms. On account of being a medicolegal problem it's estimated that frequency is much more than declared. Gossypiboma is a reaction to a foreign body based phsiopathologic process in two ways: First one is aseptic fibrinous response that causes adhesions and incapsulations. It's a sessile,

chronic process characterized with granulomas around the forign body. Body may have calcific transformation and translocate in abdomen, also may migrate to rectum and be extruded spontaneously. Second way is exudative response characterized with inflammatory reaction that causes abscess formation. Host tissue responses to inflammatory process by removing the foreign body to lumens or out of abdomen. External fistulas, erosion or organ perforations are the complications caused by this process. Even symptoms are seen earlier than first process, complications may occur in months to years. Radiological methods play the vital role in diagnosis. Even x-ray-graph could be helpful only if sponge used is x-ray-marked. Ultrasound graphy, computed tomography, magnetic resonance screening are subsidiary methods for scanning gossypibomas that can not be visualised by x-ray-graph because of non-marked sponges or fragmented marks in progress of time. Strong acustic posterior shadowing by inorganic atipic mass could be seen by ultrasound graphy.

Conclusion: In this report an ileus case that has an abdominal operation many years ago was handled. In ileus ethiology, besides tumor and bezoar also brid and gossypiboma were thought in differential diagnosis because of surgery history. Laparotomy leaded to definitive diagnosis and treatment. As a result; even gossypiboma is a rare reason of acute abdominal syndrome, a patient who has an abdominal operation consulted with non-specific, repetitive abdominal pain and obstruction symptoms should make the awareness about gossypiboma- operation time independently. A fast diagnosis is provided by radiological consultancy. Pre and post-operational compreative counting of the operation material is the most efficient way of treatment, prevention of gossypiboma.

Keywords: ileus, gossypiboma, sigmoid diverticulitis

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[Diğer]

TORSION OF MECKEL'S DIVERTICULUM IN LATE AGE

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Introduction: Abdominal pain as a symptom of many surgical and internal disease composes a significant portion of emergency cases. Wide spectrum in differential diagnosis, excess in the number of diseases that have the same characteristics and physical examination and usually generating need for advanced imaging often leads to delays in diagnosing. Findings in patients with appropriate localization may result in rare seen diseases.

Case: A 17-year-old male suffering from abdominal pain lasting for 4-5 hours was admitted to emergency department. According to his statement, originating from the center of his tummy, his pain finally localized on right inferior quadrant. On admission his vital signs were within normal limits. Physical examination revealed rebound tenderness and rigidity in right lower quadrant. Laboratory findings were within normal range except white blood cell count (WBC:10,4 x 10.e3/μL). Abdominal ultrasound revealed free fluid and suprapubic localized nested bowel loops

2cm in diameter in the midline abdomen. Due to invisible appendix via abdominal ultrasound, abdominal tomography was planned. Abdominal tomography demonstrated normal appendix and proximal torsion of Meckel diverticulitis 28mm in diameter at its widest point, extending anteriorly from distal ileal loops. He was referred to the general surgery.

Conclusion: Meckel's diverticulum is one of the common congenital gastrointestinal anomalies. Often seen in men and gives evidence in childhood. Rarely seen in the older age. Advancing age also increases the complication rate. As symptoms vary with the age, while bleeding may present in early ages and obstruction should be noted in the foreground among older ages.

Keywords: abdominal pain, Meckel's Diverticulum, torsion



Figure 1.



Figure 2.



Figure 3.

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[Diğer]

TRAUMATIC ABDOMINAL WALL HERNIA AND SMALL BOWEL AVULSION (SEVERANCE)

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Objective: Accidents of motor vehicles are a kind of woundings that encountered frequently in emergency services. Wide range and degree of organ wounds may attend depending upon severity of the trauma. Despite high energy traumatic abdominal wall hernia is rare, it may be isolated or attended by intraabdominal organ woundings.

Case: 40 year-old female was taken to the emergency service after in-vehicle traffic accident. Consciousness was clear in appliance moment and she had tachycardia (110/bpm). Linear abrasion and ecchymose line were inspected between iliac spines on projection of seat belts trace. Bilateral traumatic abdominal hernia and intraabdominal minimal free air were determined in computerized tomography of abdomen. In physical examination, peritoneal irritation symptoms were detected and the patient was taken to the operation room. Intestinal content was specified in abdomen exploration. By further exploration, total avulsion of nearly 80 centimeters of free intestine in abdomen detected. Muscle structure of bilateral lateral abdomen walls were fragmentized and colon segments were subcutaneous located. Defects of abdomen wall were primarily repaired by bilateral omentoplasty, double-barrel ileostomy was implemented after seperated segments' removal. The patient was re-operated due to anastomotic leakage on 7th day of the operation. And the patient had vacuum assisted wound care was discharged on 42nd day of operation with no problem.

Discussion Conclusion: Traumatic abdominal wall hernia (TAWH) is a rarely seen trauma type and constitutes less than 1% of all traumas. It develops after being exposed to rapid and high pressure. Watchful physical examination and investigation of emerging of trauma are very important. Attending intestinal wounding rate is high as 30-40% since it is a high energy trauma. Elective surgical operation could be scheduled unless emergent surgical operations like intraabdominal haemorrhage or organ injury needed.

Keywords: trauma, wall hernia, small bowel avulsion

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[Diğer]

RICHTER HERNIA- A CASE REPORT

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Objective: Richter hernia is a sort of hernia that develops by squeezing of only antimesenteric part of intestinal wall inside anatomic defects. Usually seen on 6-7. decades and frequently attends with inguinal hernias.

Case: Thirty five year-old male patient applied to emergency service with stomachache for 8 hours, nausea and vomiting complaints. The patient had no surgical abdominal operation, haemodynamic parameters were normal and had peritoneal irritation symptoms in abdominal physical examination. In abdominal graphy, air-liquid levels detected and dilatation detected in intestinal segments in computerized tomography of abdomen. The patient was taken to operation room urgently. In exploration of abdomen, antimesenteric side of terminal ileum segment was entered in right inguinal channel and intestinal wall was dark coloured but not ischemic. After observing the normalizing of intestinal color and peristaltism, internal hernia repair was performed. Post operation phase was unproblematic and the patient was discharged in 3rd day of operation.

Discussion: Richter hernia is an unusual case between all hernias. High mortality clinic scenes like intestinal perforation and sepsis could be prevented by early diagnosis and in time operation. It should be minded that in physical examination no significant hernia symptoms may be seen. Richter hernias should be remembered in cases applies with intestinal obstruction symptoms but no abdominal operation history.

Keywords: Richter hernia, İleus, Abdominal Pain

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A RARE CAUSE OF ACUTE PANCREATITIS - ANNULAR PANCREAS: A CASE REPORT

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Annular pancreas (AP) is a rare congenital anomaly of the pancreas that is characterized by the presence of duodenum that encircled by pancreatic tissue. The treatment of pancreatitis due to annular pancreas is usually surgical. In this case report we present a patient with pancreatitis due to AP who has treated without surgical procedure.

Case: A 41-year-old man was admitted to emergency department with complaint of epigastric pain for 2 days. He did not complain of vomiting and nausea. The arterial hypertension was noted in his medical history and he was taking perindopril 5 mg/day (PO). On the medical examination; his fever was 36 °C and the other vital signs were stable. Abdominal examination revealed epigastric tenderness but no defense and rebound. In

the biochemical analyse of the blood; the level of amylase and lipase were both elevated [1399 U/L (normal range 28-100 U/L) and 1383 U/L (Normal range: 13-60 U/L) respectively]. An abdominal contrast enhanced CT scan revealed an annular pancreas encircling the second part of the duodenum and confirmed the diagnosis of acute pancreatitis (Figure). Fluid replacement, analgesics and nutritional therapy was initiated in the treatment of acute pancreatitis. Stenosis in the distal common bile duct and minimal dilatation in the intrahepatic bile ducts was observed in linear Endoscopic Ultrasound (EUS) examination. Endoscopic Retrograde Cholangiopancreatography demonstrated a significant stricture in the area of approximately 2 cm of common bile duct (Figure). Biliary balloon dilatation was performed and metallic stent was placed into the choledoc duct and plastic stent was placed into the wirsung duct (Figure). Double-contrast UGI examination showed that the second part of the duodenum is narrowed (Figure). The diagnosis of pancreatitis due to AP was confirmed by the light of these findings. The patient's symptoms were resolved completely on the day of 3rd of his medical therapy which consisted of fluid replacement, analgesics and nutrition. A surgical procedure was not preferred in the treatment of our case because of the following conditions; It was one of the rare cases that were treated as medically instead of surgical procedure in the acute pancreatitis (localized, not widespread) due to annular pancreas. The patient discharged from hospital after 3 days. The follow up period of the patient still continues and he visits the outpatient clinic regularly.

Discussion: The treatment of annular pancreas is surgical and the aim of surgery is to relieve duodenal or gastric outlet obstruction. The preferred surgery approach is bypass surgery of the annulus. Endoscopic sphincterotomy or biliary stenting can be made in patients with obstructive jaundice due to annular pancreas. In our case, endoscopic sphincterotomy and biliary stent placement in addition to medical treatment was therapeutic, such as intravenous fluid replasman and opiad(fentanyl).

Conclusion: We think that, patients with mild acute pancreatitis due to annular pancreas, without serious complications, can be followed up with medical treatment and/or endoscopic treatment without need of surgical procedures. In the treatment of the complications due to AP, it must be considered by emergency physicians; there are other alternatives such as medical procedures except surgical proceures

Keywords: Annular pancreas, congenital anomaly, emergency medicine

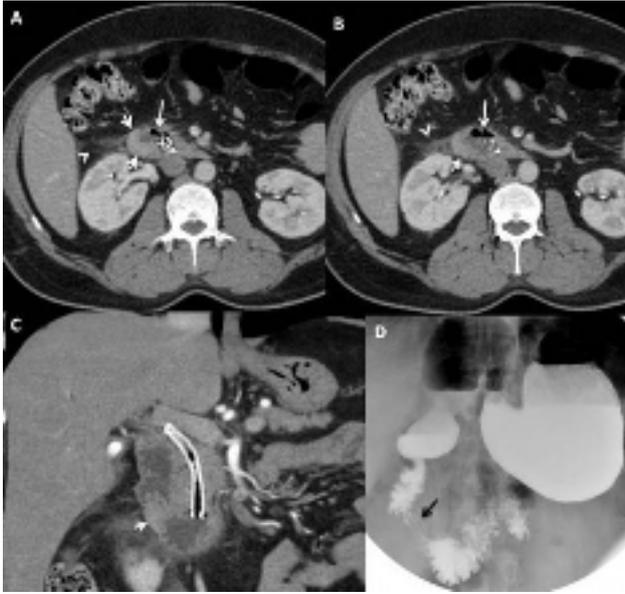


Figure 1. Contrast enhanced CT consecutive axial (A, B) and coronal images (C) shows 2nd part of duodenum (A, B, long arrows) completely surrounded by pancreatic tissue (A,B, C, small arrows) consistent with annular pancreas causing peripancreatic str

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A SURPRISE DIAGNOSIS IN ANGINA: LATE RIB FRACTURE

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Introduction: Chest pain and numbness in the arms are the symptoms that can be encountered in various clinic cases from considerably innocent causes to causes with high mortality as coroner syndrome. Unexpected final diagnosis can be encountered in patients with vital cases that must be excluded primarily.

We aimed to inform emergency physician through sharing a patient with rib fracture applied to emergency department with complaint of numbness in right arm and chest pain.

Case: A 54 years old male patient applied to the emergency department with complaint of numbness in right arm and chest pain began before a few hours. The patient stated that he has a chest pain for a long time and pain rise at intervals. There is also no disease story in the patient's history. Except decrease of breath sound in right ac, no pathologic findings determined in the physical examination of patient that can't be tariffing in a known trauma. The patient had EKG with normal sinus rhythm and had cardiac enzymes with normal values in arrival and tracings. The fracture was determined in right 8. ribin thoracic computerized tomography that planned to patient. The patient was discharged from hospital by prescribed.

Results: While blunt chest trauma often cause minor injury, it can also cause pathologies regarding muscle and bone tissue. Especially when the recovery time of rib fracture is long, it can be caused to complaints as paresthesia with regard to chest pain and localization. Even trauma story not remembered in patients applied with chest pain, chest radiography must be planned, tomography should be planned for future evaluation in selected cases, rib fractures should be remembered in differential diagnosis.

Keywords: chest pain, numbness, pain, rib

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