

Found 162 Abstracts

ABSTRACT FINAL ID: T-01;

TITLE: Procalcitonin in Decompensation of Chronic Obstructive Pulmonary Disease in Intensive Care Unit: Experience of Medical Intensive Care Unit of the CHU Ibn Rushd, Casablanca – Morocco

ABSTRACT BODY:

Abstract Body: **OBJECTIVE:** Procalcitonin is a biomarker of bacterial infection. During the decompensation of chronic obstructive pulmonary disease, prescription of antibiotics sometimes is unfair and unjustified. It also contributes in intensive care unit to antibiotic resistance adding to its cost. Therefore, using procalcitonin for diagnosis of bacterial infection but also in monitoring antibiotic therapy in chronic obstructive respiratory insufficiency may be helpful. The aim of our study was to evaluate the contribution of this marker in intensive care unit in the decompensation of COPD.

METHODS: A prospective study was conducted in the medical intensive care unit of the CHU Ibn Rushd in Casablanca spread over 2 years (January 2008-January 2010). It included all patients admitted to the ICU for decompensation of chronic pulmonary obstructive. Rate of procalcitonin is systematically applied to the admission of these patients. If procalcitonin (PCT) is <0.5 ng/ml no antibiotic is introduced. If the PCT was > 1ng/ml, an antibiotic treatment is decided. The PCT is performed routinely on day 5 of antibiotic therapy, even if it is negative down the antibiotic is effective. **RESULTS:** Our study included 32 patients admitted with decompensated severe chronic pulmonary obstructive. Sex ratio M / F is 2.2 and the average age is 45 years. Admitted patients required mechanical ventilation (NIV 67%, intubation and assisted ventilation 23% of cases). Procalcitonin was performed routinely for all patients. It was negative in 63% of cases of decompensation of COPD, antibiotic therapy was not started then. When procalcitonin was > 1ng/ml, an appropriate antibiotic therapy was instituted and the 5th day of antibiotic therapy, control of procalcitonin was measured, and it fell or was negative in 85% of cases. **CONCLUSION:** Antibiotic abuse is a major problem in the therapeutic management of decompensation of COPD. Procalcitonin helps clinicians guide and think about antibiotic therapy and also to monitor its effectiveness.

AUTHORS/INSTITUTIONS: H. Ezzouine, B. Malajati, A. Benslama, B. Charra, S. Motaouakkil, , university teaching hospital Ibn Rochd.Casablanca.MOROCCO, Casablanca, MOROCCO;

ABSTRACT FINAL ID: T-02;

TITLE: Cases of Thyrotoxicosis with Elevated Troponins

ABSTRACT BODY:

Abstract Body: CASE REPORTS: Case 1 - 28 yr old female subject had been hospitalized in our department for palpitations and chest pain; biohumoral exams showed an increase in troponin values (0,34 ng/ml). The electrocardiogram displayed sinus tachycardia (135 bpm). At the medical examination she had exophthalmos. An echocardiogram didn't show any important alterations of cardiac kinetic. It was decided to proceed with the TSH, FT3 and FT4 exams, which turned out altered with FT3 >25 ps/ml, FT4 > 56 pg/ml and TSH<0,1 micro UI/ml. She started beta-blockers and benzodiazepine, together with tiamazol, which produced a fast improvement both in symptomatology and clinical signs of the patient. Thyroid ultrasound confirmed the pathology of thyroid enlargement. The troponin value remained high for the whole following month, after which it came back to normal. Case 2 - 33 yr old female subject, recent remote pathological anamnesis due to previous pregnancy. She had been hospitalized in our department for trafictive pains in the retrosternal area increased by coughing and movement, without dyspnea or perspiration. Exams showed an increase in troponin values (0,26 ng/ml) and glycaemia (296 mg/dl); at the medical examination she had an exophthalmos, goiter and cardiac systolic puff, sinus tachycardia (120 bpm). An echocardiogram displayed a light mitral regurgitation with little hemodynamic significance, EF 65%. It was decided to proceed with the TSH, FT3 and FT4 exams, which turned out altered with FT3 >32 ps/ml, FT4 > 77 pg/ml and TSH<0,1 micro UI/ml. The symptomatic therapy with beta-blockers and tranquilizers, together with a proper therapy with tiamazol, allowed a very rapid improvement of patient's clinical exam. The troponin reached 0,94 ng/ml values but further decreased, the glycaemia went back to normal. The thyroid ultrasound confirmed an acute thyroiditis.

DISCUSSION: In conclusion young girls who arrive in the ED with these symptoms and elevated troponins could have thyrotoxicosis. Thyroid hormone value examination and thyroid ultrasound should be performed in the Emergency Department to help diagnosis and treatment.

AUTHORS/INSTITUTIONS: L. Brugioni, C. Gozzi, S. Rosi, M. Baraldi, D. Vivoli, F. Donati, , Medicina Interna ed Area Critica Policlinico di Modena, Modena, Modena, ITALY;

ABSTRACT FINAL ID: T-03;

TITLE: Diagnostic and mortality predictive value of Neutrophil Gelatinase Associated Lipocalin for Acute Kidney Injury in patients hospitalized due to critical illness from Emergency Department.

ABSTRACT BODY:

Abstract Body: Neutrophil Gelatinase Associated Lipocalin(NGAL)is a protein derived from neutrophils.It is considered as a very sensitive marker of acute kidney injury(AKI)in several diseases, in comparison to serum Creatinine that delays AKI diagnosis.Few data are available on NGAL usefulness in an Emergency Department(ED)to evaluate AKI.Objective of this study were:to determine the NGAL utility in the early risk assessment of AKI in patients presenting to the ED,to establish if the combination of NGAL measurements and clinical judgment could improve the early risk assessment for AKI development,and to correlate NGAL levels to patients'outcomes.

METHODS: 665 adults presenting to three EDs in Italy and hospitalized for acute diseases(308F/354M, mean age 74 yrs)were enrolled in this multi-center clinical study. Triage NGAL Test levels were measured by an immunofluorimetric rapid assay(Triage® NGALtest,Alere, USA)in all subjects immediately upon decision to hospitalize(T0),at 6,12 hours,on days 1,2,and 3 after hospitalization,and at discharge.RIFLE criteria were used for AKI diagnosis.

RESULTS: AKI diagnosis based on clinician judgment was preliminarily performed in 218 patients, but confirmed by RIFLE criteria, oliguria and creatinine bump at 48 hours in 48 patients.At T0 mean NGAL plasma level in AKI patients was 346.7 ± 271.6 ng/ml statistically different versus non AKI patients(119.6 ± 106.6 ng/ml)($p < 0.0001$).T0 NGAL levels showed an high ability for identifying “diagnosed AKI”(OR=22.5),and for predicting in-hospital mortality(OR= 8.3).

CONCLUSIONS: In patients presenting to ED and hospitalized for acute diseases , NGAL has strongest correlation with diagnosed AKI (outperforming clinical judgment and creatinine).Clinician judgment alone at presentation was not a good marker in ruling in AKI. NGAL at ED presentation provides a good ability to identify “Injury” of RIFLE criteria, oliguria, 48 hours creatinine bump and to distinguish between Pre-renal Azotemia and AKI. Moreover, it shows a relevant ability to predict in-hospital mortality.

AUTHORS/INSTITUTIONS: S. Di Somma, L. Magrini, G. Gagliano, S. Gramaccini, R. Getuli, , Emergency Department ,Sant Andrea Hospital , Il Faculty of Medicine La Sapienza, Roma, Rome, ITALY; P. Moscatelli, , Emergency Department, San Martino University Hospital, Genova, Genova, ITALY; G. Carpinteri, , Emergency Department, Sant Elia Caltanissetta Hospital , Faculty of Medicine, Catania, Catania, ITALY;

ABSTRACT FINAL ID: T-04;

TITLE: New predictor biomarkers of mortality in acute pulmonary embolism

ABSTRACT BODY:

Abstract Body: Background: Acute pulmonary embolism (APE) is a life threatening disease and one of the main causes of in-hospital mortality. Increased concentrations of plasma lactate dehydrogenase (LDH), indicator of pathological conditions, such as cell damage or inflammation and hyperglycemia secondary to diabetes, impaired glucose tolerance or stress-induced, which are widely available in clinical practice, are potentially useful biomarkers in APE.

Aim: The purpose of this study was to determine the relationship between increased value of plasma LDH and hyperglycemia and in-hospital mortality in patients with APE.

Methods: We conducted a prospective, cohort study, between 1 January 2004 and 31 December 2010. The patients with APE, admitted in the 1st Medical Cardiology Clinic, in "St Spiridon" University Hospital, Iasi were included. The blood samples for LDH and glycemia were collected. Hyperglycemia was defined as an admission or in-hospital fasting glucose level of 126 mg/dl (7 mmol/liter) or more or a random blood glucose level of 200 mg/dl (11.1 mmol/liter) or more on 2 or more determinations.

Results: During the study period, we enrolled 326 patients with APE. Mean age of the patients was 62.3 years (range 16 - 95 years), 197 (60%) were females, 30 (9%) were in shock at admission. The cases were classified in: high-risk APE 89 patients (27%), intermediary-risk APE 40 patients (12%) and low-risk APE 197 subjects (61%). Fifty seven patients died during hospital stay (17%). Multivariable analysis showed that increased plasma LDH and hyperglycemia were independent mortality predictors for in-hospital mortality ($p < 0.05$). Newly discovered hyperglycemia was associated with higher in-hospital mortality rate (29%) compared with those patients with a prior history of diabetes (4%) ($p < 0.05$).

Conclusion: 1. Increased plasma LDH and hyperglycemia are independent predictors for in-hospital mortality in APE. 2. Patients with newly diagnosed hyperglycemia had a significantly higher mortality rate in APE than patients with a known history of diabetes.

AUTHORS/INSTITUTIONS: I. Roca, C.C. Diana, V. Aursulesei, M. Roca, M. Datcu, , University of Medicine and Pharmacy, Iasi, ROMANIA;

ABSTRACT FINAL ID: T-05;

TITLE: Point of Care Cardiac Panels...Catching patients on the way out?

ABSTRACT BODY:

Abstract Body: Introduction: Chest pain is a common Emergency Department (ED) presentation. Differentiating between patients with cardiac vs non-cardiac pain is problematic. To address this, our department devised an accelerated rule in / rule out protocol which includes aspects of the patients' history and National Institute of Health and Clinical Excellence (NICE) guidance on chest pain. In this study we examine how this protocol facilitates the early safe discharge of low risk patients.

Method: Patients with a diagnostic ECG or high-risk features on history were excluded. Low risk patients had point of care biomarker testing of troponin, CKMB and myoglobin levels at 0 and 90 minutes. An initial positive panel or a rise of more than 25% in any of the markers after 90 minutes were considered indicative of possible cardiac disease. For each case, data was recorded regarding age, biomarkers and outcome. Following the study, charts were reviewed to establish if a positive laboratory troponin was measured at any of 3 hospitals in Belfast within 30 days of attendance, as an indicator for admission with cardiac disease.

Results: 361 patients were included. Age range was 16-91 with a mean age of 51. 278 patients were discharged using the protocol. None had a laboratory troponin measured during follow-up. A total of 34 patients had positive panels and were admitted for further investigation. 8 were ultimately discharged with a diagnosis of acute coronary syndrome (ACS, n=7) or myocarditis (n=1).

Conclusion: Recent Quality Indicators in the UK encourage the prompt assessment and disposal of ED patients. However unsafe discharge must be avoided. In this study, the use of the 0 and 90 minute protocol resulted in the identification of 8 patients with cardiac pathology who were initially considered low risk and likely to be discharged but allowed the safe discharge of the majority.

AUTHORS/INSTITUTIONS: N. O'Kane, J. Byrne, D. Tallon, J. Gray, , Mater Hospital, Belfast, UNITED KINGDOM;

ABSTRACT FINAL ID: T-06;

TITLE: The Changes in Biochemical Parameters and The Relationship with Cardiac Damage Before and After Treatment of Carbon Monoxide Poisoning

ABSTRACT BODY:

Abstract Body: Carbon monoxide poisoning is a common cause of toxicologic morbidity and mortality. Carbon monoxide has several impact in the body but the greatest effect exists in brain and heart which in need of high levels of oxygen. The cardiotoxic effect of carbon monoxide has been known for a long period and not only cardiac deficiency but also myocardial ischemia are defined after acute intoxication in humans. In the present study, it was intended to investigate the change in biochemical parameters and cardiac damage before and after treatment of carbon monoxide poisoning

The demographic characteristics of those patients who claimed CO poisoning and who were prescribed normobaric oxygen treatment had been recorded, ECG samples were taken and blood samples were taken in order to study blood gas, CBC, CK, CK-MB, TnT, proBNP, prokalsitonin and ADMA before and after the treatment.

Abnormal ECG results were found among 17(51%) patients. The number of patients who had high levels of biochemical parameters were; 1 (3.3%) patient with CK-MB value before and after the treatment; 1 (3.3%) patient with TnT value before the treatment and 3 (10%) patients after the treatment; 1 (3.3%) patient with proBNP and prokalsitonin values before and after the treatment; 10 (33.3%) patients with ADMA value before the treatment, and 15 (50%) patients after the treatment.

These results indicate that TnT was found to be more efficient in the evaluation of cardiac damage compared to CK-MB. Moreover, ADMA was identified as an influenced parameter in carbon monoxide poisoning, the levels of proBNP and prokalsitonin were not found to be influenced by carbon monoxide poisoning.

AUTHORS/INSTITUTIONS: M. Eroglu, E. Cakir, Y. Eyi, A.O. Yildirim, U. Kaldirim, S. Tuncer, Emergency Department, Gulhane Military Medical Academy, Ankara, TURKEY;

ABSTRACT FINAL ID: T-07;

TITLE: Lumbar x-ray , CT and MRI in athletes:

frequency of degenerative findings

ABSTRACT BODY:

Abstract Body: Aim- The athletic activity of the adult greek population has increased markedly in the last 30 years. To evaluate the possible long-term effects of such activity on the cervical and lumbar spine, we studied a group of asymptomatic currently active lifelong athletes over age 35 (35-65 years old, mean age 55).

Material-Methods- 40 (20 male 50%,20 female 50%), lifelong athletes from Crete were studied with x-ray, CT, MRI and the results compared with previous imaging studies of other populations. An athletic history and a spine history were also taken.

Results - Evidence of asymptomatic degenerative spine disease was similar to that seen in published series of other populations. Degenerative changes including disk protrusion and herniation, spondylosis, and spinal stenosis were present and increased in incidence with increasing patient age. In this group, all findings proved to be asymptomatic and did not limit athletic activity.

Conclusion- The incidence of lumbar degenerative changes in our study population of older male athletes was similar to those seen in other populations.

Key-words- athletic activity, lumbar spine , asymptomatic degenerative spine disease

AUTHORS/INSTITUTIONS: N. Syrmos, , CT Scan Department, Venizeleio General Hospital, Heraklion, Crete, Greece, CT Scan Department, Venizeleio General Hospital, Her, GREECE; A. Mylonas, , Department of Anatomy, School of Sports Science, Aristotle University of Thessaloniki, Macedonia, Greece CT Scan Department, Venizeleio General Hospital, Heraklion, Crete, Greece Neurosurgery Department,, Department of Anatomy, School of Sports Science, A, GREECE; G. Gavridakis, , Department of Anatomy, School of Sports Science, Aristotle University of Thessaloniki, Macedonia, Greece CT Scan Department, Venizeleio General Hospital, Heraklion, Crete, Greece Neurosurgery Department,, Department of Anatomy, School of Sports Science, A, GREECE;

ABSTRACT FINAL ID: T-08;

TITLE: 'Google' Your Missing and Loved Ones Post-disaster?

ABSTRACT BODY:

Abstract Body: In post-disaster situations many traditional avenues for communication are lost and digital channels for communication are often overloaded. Large numbers of people are lost, displaced, or simply trying to get in touch with loved ones in order to ascertain their safety and to let others know that they are alive and well. Google volunteers launched a novel 'Person Finder' application as open source software accessible through a web based interface after the Haitian earthquake in January of 2010. Since that time it has been used for the Chile earthquake, the Yushu earthquake, and the Pakistan floods. The project is a part of the Google Crisis Response division of Google.org and this open source set up allows individuals to post and search for loved ones as well as press agencies, non-governmental agencies, and others to contribute to the system and receive updates. It can be easily translated into other languages and embedded as a link or gadget on their own websites. The system uses the People Finder Interface Format (PFIF) data model which allows for multiple data sources to be integrated and shared across multiple organizations for both import and export. The Google Person Finder has potential to change the way people are tracked post-disaster and disasters are managed. Further investigation into how this project could be expanded to potentially help track displaced persons is needed as well as discussion about privacy and security of information.

AUTHORS/INSTITUTIONS: P.S. Dhillon, F. Cummins, , Retrieval, Emergency and Disaster medicine reSearch and development unit, Limerick, IRELAND;

ABSTRACT FINAL ID: T-09;

TITLE: Baseline Characterization and Focused Performance Assessment of an Emergency Department Patient Monitor Telemetry System

ABSTRACT BODY:

Abstract Body: Introduction: Patient monitor telemetry systems are widespread in acute care environments, yet their performance, utility and value for the care of undifferentiated ED populations remain unexamined. The Accessible Real-time clinical Guidance through Updated Signals (ARGUS) program applied human factors engineering (HFE) and on-site medical simulation techniques to assess the baseline characteristics of ED clinical systems tasked with detecting life-threatening cardiac arrhythmias.

Methods: Two 16-bed urgent care units in the adult ED of a 719-bed regional referral hospital were selected as the study site due to their telemetry system configuration. Investigators conducted a multi-element assessment as the first phase of the ARGUS systems improvement program: 1) HFE-based analyses examined use characteristics of the installed study site system comprising PC hardware, monitor displays, device and network connections, configured software, and input interfaces. 2) A Web-survey queried ED clinical staff on their patient care-related and usability experiences with the existing telemetry system. 3) Unannounced in situ arrhythmia simulations (180 sec of sinus bradycardia [30 bpm] or ventricular tachycardia [150 bpm]) determined system performance at detecting arrhythmias on telemetry (AT's); time elapsed until detection was recorded, along with method of detection and rhythm interpretation. Descriptive and comparative analyses were completed. Institutional Review Board approval was obtained.

Results: HFE examination and staff survey data revealed limited accessibility, suboptimal usability, poor utility and general neglect of the system by its anticipated userbase. Twenty AT simulations were completed over two weeks; none of ten simulated sinus bradycardia episodes was detected, and an MD subject detected one of ten simulated ventricular tachycardia episodes at 70 sec (5% overall detection rate).

Conclusions: Evidence-based HFE and in situ simulation-based assessment methodologies revealed significant weaknesses in the existing implementation of an ED patient monitor telemetry system.

AUTHORS/INSTITUTIONS: L. Kobayashi, N.A. Siegel, F.J. Gibbs, E. Goldlust, J. Monti, D.C. Portelli, G.D. Jay, , Department of Emergency Medicine, Alpert Medical School of Brown University, Providence, RI; L. Kobayashi, , Rhode Island Hospital Medical Simulation Center, Providence, RI; R. Parchuri, , Department of Biomedical Engineering, Rhode Island Hospital, Providence, RI; F.G. Gardiner, N.M. Tomaselli, R.M. Boss, K.S. Bertsch, , Emergency Department, Rhode Island Hospital, Providence, RI; G.D. Jay, , School of Engineering, Brown University, Providence, RI;

ABSTRACT FINAL ID: T-10;

TITLE: Interim Assessment of the Effect of Human Factors Engineering Interventions on Emergency Department Patient Monitor Telemetry System Detection of Simulated Arrhythmias

ABSTRACT BODY:

Abstract Body: Introduction: The Accessible Real-time clinical Guidance through Updated Signals (ARGUS) program applied human factors engineering (HFE) principles to develop research-based interventions for acute care patient monitor telemetry systems improvement. A scheduled interim analysis employed on-site medical simulation to assess intervention safety and effect on arrhythmia detection performance characteristics.

Methods: Investigators employed observational, small group discussion and survey data on the ED telemetry system to 1) increase its accessibility [central display hardware re-positioning for visibility and audibility; keyboard-mouse interface replacement with intuitive touchpads], 2) optimize its relevance for real-world ED practice [alarm parameter customization and monitor pairing to maximize signal:noise ratio], and 3) promote staff awareness of system availability and user familiarity with its features [in-servicing]. Impromptu simulations of 180 sec of sinus bradycardia [SB; 30bpm] and of ventricular tachycardia [VT; 150bpm] tested system performance.

Results: Offline observational and end-user HFE data from 18 physicians (33% of practice group) and 21 nurses (10% of RN staff) were used to re-configure alarm trigger parameters: respiratory (apnea) alarm de-activation; heart rate <40bpm and >130bpm, systolic blood pressure <90mmHg and >200mmHg, pulse oximetry <89%. High priority "red" alarms were restricted to asystole, ventricular fibrillation, VT, bradycardia <40bpm and tachycardia >140bpm. Ten in situ simulations recorded one SB detection out of five episodes (20%; $p=0.5$ for student's t test against pre-intervention data) at 80 sec and three VT detections out of five episodes (60%; $p=0.291$) at 78 ± 54 sec for a 40% overall detection rate ($p=0.031$).

Conclusions: HFE and simulation techniques improved ED telemetry system arrhythmia detection performance at a scheduled interim analysis. The methodology developed may be applied to identify and mitigate telemetry-related patient safety hazards in acute care healthcare settings.

AUTHORS/INSTITUTIONS: L. Kobayashi, G.D. Jay, , Department of Emergency Medicine, Alpert Medical School of Brown University, Providence, RI; L. Kobayashi, , Rhode Island Hospital Medical Simulation Center, Providence, RI; R. Parchuri, , Department of Biomedical Engineering, Rhode Island Hospital, Providence, RI; F.G. Gardiner, N.M. Tomaselli, G.A. Paolucci, K.S. Bertsch, , Emergency Department, Rhode Island Hospital, Providence, RI; G.D. Jay, , School of Engineering, Brown University, Providence, RI;

ABSTRACT FINAL ID: T-100;

TITLE: Chaharshanbe-Soori and Nowruz (Iranian's ceremony) Fireworks and injury of it

ABSTRACT BODY:

Abstract Body: Introduction:

Peoples of Persian culture celebrate the last Wednesday of the year (charshanbe soori) on its eve, the Tuesday night, according to the Persian calendar, these fireworks last from 12 of March up to 1 of April. On that day in Iran, the original ceremony of bonfires has been transformed into a social bedlam in the big cities in which a wide variety of illegal and hand-made firework agents are being used.

The aim of this study is demographic study of injury related to fireworks in Nowruz and Chaharshanbesoori ceremony.

Methods:

All of patients who came to emergency department of Sina Hospital of Tabriz with chief complain of injury due to firework from 12 of March 2011 up to 1 of April 2011 involved in this study and age, gender, kind of employment, place of accident, rural or city resident and the damaged organ and depth of it was documented.

Result:

29 patients involved in this study, 82.8% was men and the mean age was 21.5 (mode=14). 37.9% was student. 96.6% of patients was city residents that 48.3% of accident was happened in house. 65.5% of injury was happened in upper limbs. 72.4% of injury was superficial.

Discussion:

Firework injury mostly happen in teenagers and students in the city residents; As the original ceremony is transformed, the public health organizations must inform this group of peoples about the danger and encourage them to use safe fireworks instead.

AUTHORS/INSTITUTIONS: S. Shams Vahdati, S. Alavi, M. Ghorbanian, emergency, Tabriz University of medical science, Tabriz, IRAN, ISLAMIC REPUBLIC OF; J. Hemmate gadeem, , Tabriz Payam nour University, Tabriz, IRAN, ISLAMIC REPUBLIC OF; S. Shams Vahdati, P. Habibollahi, , Education Development Center and talented students' office, Tabriz University of medical science, Tabriz, IRAN, ISLAMIC REPUBLIC OF; P. Habibollahi, , Pharmacy, Tabriz University of medical science, Tabriz, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: T-101;

TITLE: Clinical Characteristics of Unstable Pelvic Bone Fractures with Intra-abdominal Solid Organ Injury

ABSTRACT BODY:

Abstract Body: Purpose: This study was to analyze the characteristics of unstable pelvic bone fractures with intra-abdominal solid organ injury.

Methods: Medical records were retrospectively collected from January 2000 to December 2010 in patients with unstable pelvic bone fractures. Unstable pelvic bone fracture was defined as lateral compression type 2,3 and antero-posterior compression type 2,3, vertical shear, combined type by Young's classification. Subjects were divided into two groups, with (injured group) and without (non-injured group) intra-abdominal solid organ injury, to evaluate the characteristics depending on whether they had intra-abdominal solid organ injury. Data included demographics, mechanism of injury, initial hemodynamic status, result of laboratory, Revised Trauma Score (RTS), Abbreviated Injury Scale (AIS), Injury Severity Score (ISS), amount of transfusion, admission to intensive care unit (ICU), and mortality were analyzed.

Results: Subjects were 217 patients with mean age of 44 years old and 134 male patients (61.8%). Injured group were 38 patients (16.9%), traffic accident was most common mechanism of injury and lateral compression was mostly affected type of fracture in all groups. Initial blood pressure was lower in the injured group and ISS was greater in the injured group than the non-injured group. Arterial pH was lower in the injured group and shock within 24 hours after arrival at emergency department was more frequent in the injured group. Amount of the transfused packed red blood cells within 24 hours were more in the injured group than the non-injured group. Invasive treatment including operation, angiographic embolization were more performed in the injured group and stay of ICU was longer in the injured group.

Conclusion: There is a need to decide diagnostic and therapeutic plan regarding a possibility of intra-abdominal solid organ injury for hemodynamically unstable or multiple associated injured patients with unstable pelvic bone fracture.

Key Words: pelvic bones, abdominal injuries

AUTHORS/INSTITUTIONS: S. Kim, H. Park, Emergency Medicine, University of Ulsan College of Medicine, Ulsan University Hospital, Ulsan, KOREA, REPUBLIC OF;

ABSTRACT FINAL ID: T-102;

TITLE: UTILITY AND QUALITY OF SIMPLE RADIOGRAPHY IN WHIPLASH SYNDROME (WS)

ABSTRACT BODY:

Abstract Body: Objective: establish the prevalence and profile of patients with WS and the quality of imaging studies performed.

Methodology: Retrospective epidemiological study reviewing of medical histories. The study had two stages: first analysis of the prevalence and profile of patients seen during 2010 and second to analyze the quality of radiographs requested between November to December of 2010. **Field of Study:** General Hospital Universitary Reina Sofía of Murcia (reference to a population of 250,000).

Results: There was 3931 assists (3.57%) with WS. In November-December were reviewed radiology of 716 cases (18.21%). The mean age was 35 years old. The average stay in the EM was 152.52 minutes. 74 cases (10.34%) were discarded due to errors (642 reviewed). In 453 (70.56%) patients a radiological study was performed. The distribution of the sample of patients reviewed was 323 (50.31%) females, mean age 33 years. We didn't found statistically significant differences between the performance or not a correct radiological study. Half the length of stay was 135 minutes. Respect to time were statistically significant differences between the group that had undergone radiological study (157 minutes) and not (84 minutes) $p=0.0004$ no differences in the case of radiological quality (144 minutes) compared to other patients (129 minutes) $p=0.42$

Conclusions: The high number of patients served by WS in our service undertakes to establish appropriate protocols for care. In nearly a third of the patients without any radiographic examination, which added to the patients in whom the radiological study did not meet the basic quality parameters set, makes more than half of patients were discharged without the certainty that there are no radiological abnormalities. The length of stay in the Service are clearly lower in case of ignore the radiological study.

AUTHORS/INSTITUTIONS: J. Bauset, C. Cinesi, S. Galicia, I. Fontes, I. Cerezo, J.M. González, P. Piñera, Emergencies, Hospital Reina Sofía Murcia, Murcia, SPAIN;

ABSTRACT FINAL ID: T-103;

TITLE: A DIFFERENT CAUSE OF TRAUMA: INJURY BY A MOLE GUN

ABSTRACT BODY:

Abstract Body: Although injuries caused by the home-made weapons such as mole guns, which are intended to fight off moles, are rare in Turkey they do still happen. They generally involve minor accidents and cause simple injuries to the hand. In this case we present a patient who involves a trauma to the left hand with fragmental fracture of the first metacarpal caused while checking whether a mole gun had fired or not. This injury is an example of an accident related to primitive, home-made weapons, used particularly in rural areas.

Key words : Mole gun, hand injury

AUTHORS/INSTITUTIONS: S. Türkmen, Y. Karaca, S. Türedi, A. Gunduz, Department of Emergency Medicine, Karadeniz Technical University, Faculty of Medicine, Trabzon, TURKEY; A. Aktas, , Gümüşhane State Hospital, Department of General Surgery, Gümüşhane, TURKEY;

ABSTRACT FINAL ID: T-104;

TITLE: Thoracic aortic dissection in a severe multiple trauma patient in the emergency department

ABSTRACT BODY:

Abstract Body: Introduction: Traumatic aortic dissection is a less common entity in the Emergency Department (ED). It occurs mainly in patients with severe chest trauma caused by acceleration/deceleration mechanism. Case report: a 28-year-old woman, victim of a road accident (frontal impact with the expulsion of victim out of the car) is brought by ambulance to ED. Primary assessment: drowsiness, disoriented, GCS =12 (M6, O3, E3), BP=90/50 mmHg, HR =110/min, RR = 21/min. Secondary: multiple traumatic signs. FAST: fluid in both pleural cavities, small amount of right perirenal fluid. CT scan: right parietal subarachnoid hemorrhage, left maxillary sinus fracture with hemosinus, left C7 transverse apophyses fracture, left rib fractures at R1-R4 and R2 on the right side, bilateral hemothorax, fold aspect of dissection below the isthmus of thoracic aorta 4 cm long, grade IV right kidney injury. X-Ray: displaced fracture of the proximal portion of the left femoral diaphysis. Laboratory: Hb=10,1 g/dl; after one hour Hb=8,2 g/dl. Procedures in the ED: bilateral pleural drainage, endotracheal intubation using rapid sequence intubation, reduction and immobilization of the femoral fracture, blood transfusion, tetanus vaccine. Transfer to ICU: fluid resuscitation, SIMV mechanical ventilation. Evolution: PTCA is performed after 48 hours with stent-graft implant in the aortic isthmus and descending aorta. The left pleural drainage is removed after 72 hours and the right one on the 5th day. On the 7th day the intramedullary nailing for femoral fracture is performed. The subarachnoid hemorrhage and renal injury have evolved without complications and were treated conservatively. In the 8th day she was breathing spontaneously, ventilation is switched to ASB, after that she needed no ventilatory support. After 28 days the patient is discharged and continues mobility recovery. Conclusion: Stanford type A dissection should be considered in any severe trauma patient with hemodynamic instability and associated severe chest trauma. The order of injury resolution depends on the clinical status. The presence of an experienced trauma team is essential.

AUTHORS/INSTITUTIONS: G. Vasile, B. Adriana, K. Kristina, B. Carmen, Emergency Department, County Hospital Emergency of Timisoara, Timisoara, ROMANIA;

ABSTRACT FINAL ID: T-105;

TITLE: Changes in the Incidence of Emergency Department Visits for Hip Fractures in the New York Area from 1996 to 2010

ABSTRACT BODY:

Abstract Body: Objective: Recent advances have been made in the prevention of hip fractures, including the use of bisphosphonates and calcium supplements. A recent USA national database study showed hip fracture rates among persons > 64 years old declined between 1985 and 2005. Our objective was to examine whether a similar decline occurred in our local region through 2005, and whether it continued through 2010.

Methods: Design: Retrospective cohort of emergency department (ED) visits. Setting: Consecutive patients seen by ED physicians in 28 EDs in New Jersey and New York (1/1/1996 to 12/31/10). Protocol: We identified hip fracture patients using ICD9 codes. We calculated the ratio of annual hip fracture visits to total annual ED visits by gender for each of the following age groups: 65-74, 75-84, 85+. We compared the percent change in this ratio from 1996 to 2005 and from 2005 to 2010.

Results: The database contained 9,465,059 total ED visits with 19,585 hip fractures in patients > 64 years old. The percent change in the ratio of annual hip fracture visits to total visits from 1996 to 2005 and from 2005 to 2010 is shown in the table. Averaging all groups in the table yielded a mean decrease from 1996 to 2005 of 42% +/- 12%, and from 2005 to 2010 of 12% +/- 8%.

Conclusion: We found that the ratio of hip fractures to total ED visits in our local region decreased from 1996 to 2005. This is similar to the decline in hip fracture rates in the national database. After 2005, the rate of decline decreased and was approximately half that before 2005. This may reflect a leveling off of utilization of current therapies. Further improvements may require more complete adoption of current therapies and/or discovery and implementation of new ones.

AUTHORS/INSTITUTIONS: A. Tapia , B. Eskin, J.R. Allegra, Emergency Medicine, Morristown Medical Center, Morristown, NJ; B. Eskin, J.R. Allegra, , Emergency Medical Associates Research Foundation, Livingston, NJ;

ABSTRACT FINAL ID: T-106;

TITLE: Simple spine radiographs in patients with low back pain attended in the emergency setting

ABSTRACT BODY:

Abstract Body: Background:Low back pain (LBP) is one of the most frequent diagnoses in the emergency setting. Clinical practice guidelines insist on recognition of red flags (RF) to identify suggestive data of fracture, tumor or infection in order to perform an X-ray (XR) examination in the emergency department.

Objectives:To assess the correct indication of XR examination in patients with LBP in the emergency department.

Methods:All cases of LBP attended at a first-level emergency service during 2007 were reviewed. XR was indicated for LBP of less than 12 weeks duration, if there was one RF, and for chronic LBP if radiological studies had not been performed in the last 3 months. Data collected included the presence of RF, XR ordered in the index visit, previous XR, and changes between previous and current images. A positive RF was considered when this information was present in the medical report or in the patient's computerised medical record of the hospital.

Results: In 335 of 708 cases (47.3%) there were a positive RF, but in 53 (7.5%) RF was not specifically investigated. In table 1 there is the distribution of RF. XR were requested in 501 cases. Of the 457 cases in which some criteria to perform XR were met (64,6% of the total number), in 114 cases (16.1%) the patients was discharged without XR. In contrast, an XR was performed in 158 cases (22.3%) in which XR were not indicated; 53 (33.5%) of these cases corresponded to mild injuries in patients <50 years. Therefore, the decision of XR studies was adequate in only 436 (61.6%) cases. In 58 patients, XR were performed in the index visit although a previous radiograph was available. In 10 cases (17.2%), criteria to perform XR were lacking, and when the previous and current images were compared, in all cases radiological changes were not observed. In the remaining 48 cases (82.8%) in which criteria to perform XR studies were met, radiological changes were observed in 4 (8.3%), although differences were not significant.

Conclusions:

In more than one third of cases of LBP, the indication of XR was inadequate.

In patients with LBP careful anamnesis is indispensable to identify RF.

AUTHORS/INSTITUTIONS: I. Puente Palacios, C. Clemente Rodríguez, L. Lage Ferrer, J. Echarte Pazos, N. León Bertrán, D. Aranda Cárdenas, A. Aguirre Tejedó, A. Supervía Caparrós, M. Puiggalí Ballart, , Servicio de Urgencias. Hospital de l'Esperança. Parc de Salut Mar. Barcelona, Barcelona, Barcelona, SPAIN; A. Molina Ros, , Servicio de Cirugía Ortopédica y Traumatología. Parc de Salut Mar. Barcelona, Barcelona, Barcelona, SPAIN;

ABSTRACT FINAL ID: T-107;

TITLE: Pneumoperitoneum without intra-abdominal organ injury

ABSTRACT BODY:

Abstract Body: Pneumoperitoneum (PP) is frequently the harbinger of serious abdominal pathology or injury.

Case. A 34-year-old woman presented to the emergency department with stuporous mentality due to falling down injury from 20 meters heights.

She was stupor with multiple facial bleeding, flail chest and vital sign shows oral temperature of 36°C, blood pressure of 100/60 mmHg, pulse rate of 112 beats per minute, respirations of 22/min, and room air oxygen saturation of 95%. GCS was 7 (E1+V1+M5) and RTS was 5.9672.

Initial ED treatment included intravenous fluids and trauma team activated. Fast was all negative findings.

After 12mins later ED arrival, she was collapsed and CPR was done 2 minutes.

After close thoracostomy, CT Scan showed EDH with skull fracture, multiple spinal fracture (C7, T1 & T2 spinous process, T3 teardrop fx., T7,8 bursting fx. Lt. 2~8th fx) and Left hemopneumothorax with Rt. 1, 6, 7th fx, and pneumoperitoneum.

She was send operation room and explo-laparoscopic surgery was done. But, No internal adominal organ injury nor diaphragm injury found. We thought the pneumoperitoneum developed from left thoracic injury.

She was discharged to other Hospital 20 days later

Conclusion: Some patients with traumatic abdominal injury can develop pneumoperitoneum.

Most traumatic pneumoperitoneum need surgiacal exploration and intervention.

We experienced a very rare case with pneumoperitoneum from pneomothorax without internal abdominal organ and diaphragm injury.

AUTHORS/INSTITUTIONS: E. Kim, C. Lee, S. Choi, O. Kim, Emergency medine, Bundang CHA Medical Center, Seongnam-si, KOREA, REPUBLIC OF;

ABSTRACT FINAL ID: T-108;

TITLE: Study of average expense in traffic traumatic patients

ABSTRACT BODY:

Abstract Body: **BACKGROUND:** Motor vehicle crashes cause significant morbidity and mortality annually. Goal of this study is to estimate the costs of traffic trauma and identify cost predictors . we aimed to determine relationship between age and sex with this type trauma.

METHODS: The study population consisted of 200 patients (male 89% and female 11%) included in the emergency department for one year (Aug.2008 to Aug.2009). A retrospective study by files performed.

RESULTES: This traumatic patients admitted in orthopedics, neurosurgery and surgery wards. 54% of patintes had 18 to 40 years old, and 9% of them had greater than 60 years old (Age<18 was 15% and 41 to 59 years old was 22%). The most kind of accidents was motor vehicle accident (MCA), 47% and roll over, mechanical problems and the fatigue of drivers was only 6% of reasons. The mean cost of one patient was 16221035 Rials. The highest cost was 21920581 Rials in neurosurgery ward. The orthopedics and surgery wards were in the next levels. The admission rate was 66% in orthopedics, 20% in surgery and 14% in neurosurgery wards.

CONCLUSIONS: The cost of traffic traumatic patient in this study is high, significantly. Our suggestions are aggregation of the data, security instruction, preferment of security design, annoyance of alcohol and drug abuse, first aids, deletion of reasons, intensification of the laws, effective rehabilitation and research in accidents.

AUTHORS/INSTITUTIONS: N. Derakhshandeh, Emergency, ahwaz univercity, Ahwaz, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: T-109;

TITLE: Could the Use of Transcranial Near Infrared Spectroscopic Localization Determine the Indication for Computed Tomographic Examination in Adult and Pediatric Head Trauma Patients Admitted to the Emergency Department?

ABSTRACT BODY:

Abstract Body: Goal:

The traumatic brain injuries are major cause of mortality and morbidity in adult and pediatric patients. In the present study, we aimed to evaluate the efficiency of the "Near Infrared Spectroscopic Localization" method in early diagnosis of the patients with traumatic brain injury and in reducing the need for cranial computed tomography.

Material and Method:

This prospective study was performed on 369 patients aged between 0 and 85 and admitted to the Ankara Training and Research Hospital Emergency Department between 1 April 2011 and 30 September 2011. 244 (66.1%) of the patients were males and 125 (33.9%) were females. All patients in the study group who had traumatic brain injury and planned to have cranial computed tomography (CT) exam were undergone Near Infrared Spectroscopic Localization (NIRS) evaluation. The sensitivity, specificity and the positive and negative predictive values for determining the intracranial bleeding by NIRS method were evaluated and the power analysis was performed. Of all patients, 364 (98.7%) were evaluated to have moderate to high risk for minor traumatic brain injury. 156 (42.3%) patients were determined to have intracranial bleed with NIRS method. The sensitivity of the NIRS method was 91.7% and false positive value was 43%. Only one (8.3%) patient who was evaluated as not to have an intracranial bleed was found to have one in cranial CT.

Result: The use of NIRS for diagnosing intracranial bleeding has promising results. NIRS results could be used as a parameter for determining the indications for cranial CT. NIRS is also thought to reduce the unnecessary radiologic studies and patient exposure and health costs. NIRS could also be used as a triage tool during disasters.

Key Words: Traumatic brain injury, Near Infrared Spectroscopic Localization, cranial computed tomography.

AUTHORS/INSTITUTIONS: K. Vural, Y. Katirci, Y.K. Gunaydin, H.C. Halhalli, D. Ucoz, F. Coskun, , Ankara Education and Research Hospital Department of Emergency Medicine, Ankara, TURKEY;

ABSTRACT FINAL ID: T-11;

TITLE: The implementation and Evolution of a Triage System in the Emergency Department

ABSTRACT BODY:

Abstract Body: Introduction

Justification: With this work we intend to demonstrate the evolution of the Patient Triage System in our Emergency Department, and that how with time and experience we have evolved and have been better able to classify patients, making wait times appropriate to the acuity of patient illness and so improving our own approach to patient care. This supports the hypothesis of proper training of personnel who are to perform the task of triage.

Objective: Analyze the priorities set by the Manchester System of Triage over a period of four years and evaluate the results of this system of classification.

Materials and Methods: A retrospective descriptive study of the triage priorities assigned to Emergency Department patients since implementing the Manchester System of Triage during the period 2007-2010.

Results

Distribution of Triage Priorities in 2007-2010 (graphs)

Conclusions

The triage classification system gives sufficient information about the acuity and complexity of patient illness appropriately prioritizing the time to be attended. The higher the priority level, the higher the hospital admission rate and number of complimentary studies requested

-Assigning a fixed person to perform triage results in progressive improvement of performance in triage, facilitating the healthcare professionals role in providing care, managing resources and resulting in the overall benefit of the patient.

-The experience of the triage personnel is fundamental to the development of the system. This supports the creation of a triage improvement group which reviews the evaluation and adequacy of the triage system.

-The system itself evolves and improves over time with the increase in experience and confidence of the triage personnel. This is evident in the graph that shows a clear decrease in the number of patients triaged as P1, P2 and P3 while an increase in the number of P4 during the last year.

AUTHORS/INSTITUTIONS: J. Minguéz, R.A. Penades, M.J. Cortes, J.D. Gamez, Y. Gomez, P. Garcia, , Hospital Universitario de La Ribera, Alzira, SPAIN;

ABSTRACT FINAL ID: T-110;

TITLE: Emotions and trauma team.

ABSTRACT BODY:

Abstract Body: This study intends to show how emotions are expressed in a trauma team, along with an assessment of their influence and importance.

The term "Team emotion" can be interpreted as the emotions that trauma team members do/do not display in a trauma receiving unit. In health care, the professional personnel are expected to refrain from showing feelings in the presence of patients and colleagues, but at the same time emotions have a provable effect on teamwork.

Method

The study is built upon a qualitative based analysis of trauma team nurses' interpretations of their emotions - and how they were expressed – during trauma receiving situations. Participant observation studies of the trauma team were also completed, along with audits and analysis of the medical records. Interviews were performed as "semi-structured" interviews, followed by a theme-based analysis.

The study took place at a large Danish University Hospital, housing a Level One Trauma Center.

Result

The study substantiated the empirical knowledge that "showing ones emotions" is not widely accepted within a trauma team. Displays of hope and/or happiness are acceptable. On the other hand, emotions like fear, nervousness, sadness and anger are despised. Certain occupational groups have more "approval" to display emotion, than others. According to the interviews, by definition a doctor should not show emotion. In this context, the implicit norms within an organization weigh heavily. In contrast, it is more acceptable for nurses to display emotion, although it should still be adapted to the norms and the team.

Conclusion

The study concludes that there is a tightly knit logical and empirical connection between team emotion and team communication. Strong emotions like pity towards patients and repulsion when faced with severe accidents must be regulated and used communicatively to assess the seriousness of a situation, but at the same time must not be repressed or ignored by a practiced environment where norms have dictated that emotions are avoided. The study shows a need for more information and education, in relation to the effects of emotion on individuals and their work oriented interactions and relations.

AUTHORS/INSTITUTIONS: A. Jakobsen, ED, Aarhus University hospital, Aarhus C, DENMARK;

ABSTRACT FINAL ID: T-111;

TITLE: A meta-analysis to determine the effect on survival of platelet transfusions in patients with either spontaneous or traumatic antiplatelet associated intracranial haemorrhage.

ABSTRACT BODY:

Abstract Body: Introduction

The administration of platelet transfusions is becoming standard practice in some Trauma centres for both spontaneous and traumatic antiplatelet associated intracranial haemorrhage. The evidence for this intervention has not been evaluated by meta-analysis.

Study Aim

The aim of this study was to perform a meta-analysis to determine the effect on survival in the cohort of patients who have received a platelet transfusion compared to those who have not in antiplatelet associated intracranial haemorrhage (traumatic or spontaneous).

Methodology

The Medline database was searched using the Pubmed interface. The following search terms were used:- 1. Head injury AND antiplatelet agents. 2. Intracranial haemorrhage AND platelet transfusion.

Results

214 abstracts were obtained from the Head Injury AND antiplatelet agents search. Twenty-four papers were reviewed in full. Three papers were accepted into the study. 251 abstracts were obtained from the intracranial haemorrhage AND platelet transfusion search. Deduplication produced four new abstracts which were reviewed as full papers. Two were accepted into the study. Significant heterogeneity was present between the studies; $I^2 = 62.389$. Therefore the Random effects model was used, this produced a common odds ratio for survival of 0.826 (95% CI: 0.440 – 1.551).

Conclusion

The results of this meta-analysis has shown based upon five small studies that there was no clear benefit in terms of survival in the administration of a platelet transfusion to patients with antiplatelet associated intracranial haemorrhage.

AUTHORS/INSTITUTIONS: J. Batchelor, A. Grayson, Emergency Medicine, Manchester Royal Infirmary, Manchester, UNITED KINGDOM;

ABSTRACT FINAL ID: T-112;

TITLE: Beware of the 'isolated' medial malleolus or proximal fibula fracture

ABSTRACT BODY:

Abstract Body: Ankle injuries are a common reason for presentation to the accident and emergency department, however it is estimated that only 15-20% constitute bone fractures.

The Ottawa ankle rules have long been recognised as an acceptable method to establish which patients warrant radiographic investigation of the joint. The spectrum of injury may range from a simple ligamentous sprain to major trauma.

With such a strain on resources, it is the responsibility of the treating emergency doctor to clinically assess the patient and arrange for appropriate investigations.

Over the first six months of 2010, almost 700 patients presented to our accident and emergency department with an ankle injury. During this time, 3 patients were diagnosed with isolated medial malleolar fractures. They were placed in casts and sent to fracture clinic a week later.

On review in clinic, examination revealed tenderness over the proximal fibula and radiographs confirmed a Maisonneuve type injury. It usually involves a pronation-external rotation mechanism of the ankle. The foot is planted firmly on the ground and the external rotation is produced by internal rotation of the leg. The resultant force travels to the ankle and causes the talus to externally rotate. This movement creates a strain around the medial aspect of the ankle joint which results in either a fracture of the medial malleolus or a complete or partial rupture of the deltoid ligament. The force then travels proximally leading to rupture or straining of tibiofibular syndesmosis and interosseous ligaments. Finally the force then travels further proximal through the interosseous membrane creating a torque which tends to exit at the proximal fibula resulting in a fracture

This injury results in an unstable ankle joint. It is essential to reduce the ankle joint, following which the tibiofibular syndesmosis is examined under image guidance intraoperatively and then stabilised surgically, most commonly with screw fixation.

We present key radiographic features around both the ankle and knee to help emergency physicians identify this easily missed fracture pattern.

AUTHORS/INSTITUTIONS: P. Pastides, , Royal National Orthopaedic Hospital, London, UNITED KINGDOM; V. Gulati, S. Tibrewal, , The Whittington Hospital, London, UNITED KINGDOM;

ABSTRACT FINAL ID: T-113;

TITLE: A Retrospective Cohort Study To Determine Whether Common Head Injury Symptoms Differ Between Elder patients and Non Elder patients

ABSTRACT BODY:

Abstract Body: Introduction – Vomiting, severe headache, amnesia and loss of consciousness are all well recognized independent risk factors for intracranial injury in patients with minor head injury. Age over 60 years is also recognized as a risk factor for intracranial injury although it may have a more complex interaction with other clinical correlates.

Aim - The aim of the current study was to determine if there was a difference in the frequency of occurrence of symptoms following a minor head injury (defined as Glasgow Come Scale [GCS] 13-15 for this study) in elder patients (age 60 and greater) compared to non elder patients (age less than 60).

Method – A retrospective review was undertaken of the clinical notes of all patients who underwent a head Computed Tomography (CT) for traumatic brain injury at Trafford General Hospital during the period January 2009 – December 2010. The CT findings and clinical correlates were collated. Chi Square analysis was performed on the clinical correlates comparing the elder group with the non elder group.

Results – 218 patients with a GCS 13-15 were identified. 128 patients were less than 60 years and 90 patients were greater than 60 years. The CT abnormality rate in the two groups was 10% in the under 60 and 19% in the 60 and over group. Patients less than 60 years were statistically less likely to report vomiting ($\chi^2(1) = 13.827$, $p < 0.01$) and headache ($\chi^2(1) = 8.111$, $p = 0.004$) following a minor head injury compared to those greater than 59 years. However, there was no statistically significant difference in the reporting of amnesia or loss of consciousness between the two groups.

Discussion – The results of this small pilot cohort study suggest that lack of vomiting and headache are quantitative clinical features of elder patients with minor head injury compared to non elder patients, which should be taken into consideration for future head injury guideline development.

AUTHORS/INSTITUTIONS: J. Batchelor, A. Wigelsworth, Emergency Departement, Trafford General Hospital, Manchester, UNITED KINGDOM; A. Wigelsworth, M. Wigelsworth, , University of Manchester, Manchester, UNITED KINGDOM;

ABSTRACT FINAL ID: T-114;

TITLE: Never use epinephrine in digital anesthesia! An old wives' tale?

ABSTRACT BODY:

Abstract Body: For years the use of epinephrine in digital anesthesia has been linked to impaired wound recovery or gangrene formation, due to vasoconstriction. Reports are from decades ago, from the era of procain and manually prepared epinephrine solutions. There are no recent reports.

Beneficial effects however are reduction in bleeding, with less need for bleeding control measures that bring a risk of complications, like a tourniquet. Also the use of epinephrine enhances and prolongs the effect of lidocain, which improves the comfort of patients. And finally the volume needed to be injected is reduced, thereby minimizing the risk of tissue damage due to volume overload.

Thus the question remains: Never use epinephrine in digital blocks. Is this true, or just an old persistent myth?

PICO:

P: Patients scheduled for digital surgery, with digital block.

I: Use of lidocain with epinephrine.

C: Use of plain lidocain.

O: Necrosis, impaired wound recovery, pain and blood loss.

Search strategy:

Pubmed search: "digital anesthesia" and "epinephrine."

Limits: human, adults, English, randomized clinical trials, clinical trials and reviews.

MeSH terms included.

Search results: 14

Selection: 4

Excluded: 10

Reason for exclusion: articles on other topics.

Included from additional reference search: 2

Results:

(Table)

Conclusion:

The use of epinephrine in digital anesthesia appears to be safe in selected patients. Although we discourage its use in patients with increased risk for vascular complications, the old wives' tale is wrecked by evidence based medicine: there is in general no reason not to use epinephrine in digital anesthesia.

Level of recommendation: 1

AUTHORS/INSTITUTIONS: Y. Blaauw, J.C. ter Maaten, J.J. Ligtenberg, ER, UMCG, Groningen, Groningen, NETHERLANDS;

ABSTRACT FINAL ID: T-115;

TITLE: Indications of Brain CT Scan
for Patients with Minor Head Injury in South Korea

ABSTRACT BODY:

Abstract Body: Purpose: Nearly 85% of patients with head injury revealed a minor head injury (MHI) at emergency department. Most of MHI patients should be discharged home without complication, but small number of them have intracranial lesions on computed tomography (CT) and sometimes neurosurgical interventions required. Selective use of CT-scan for detecting MIH is a critical for reducing radition hezard and saving cost. But there is no guideline of CT scan for MHI in South Korea. We conducted a prospective study to make a set of clinical criteria of CT scan for MHI with intracranial lesion.

Methods: This prospective study was conducted with 1808 patients with minor head injury (GCS score of 15, aged 6 years or older) from January 2009 to December 2010.

According to the literature review, we selected the risk factors associated with the presence of intracranial lesions on cranial CT-scan of MHI. These were including confusion, headache, loss of consciousness (LOC), posttraumatic amnesia (PTA), posttraumatic seizure, focal neurological deficit, vomiting, skull fracture, dangerous mechanisms of head injury, coagulopathy, alcoholic intoxication, facial bone injuries, and age more than 65 years. A need for neurosurgical operation and the presence of intracranial lesions on CT scan were regard to the main clinical outcomes.

Results: 117 (6.5%) cases had intracranial lesions on CT scan. Patients with more than five of the lesions disclosed by CT were required to a neurosurgical intervention. All patients without risk factors showed normal CT-scan findings. As a result of uni- or multivariate analysis, predictive risk factors associated with intracranial lesions on CT-scan were confusion, headache, LOC/PTA, skull fracture, and age more than 65 years. On the basis of these findings, we proposed the indication for CT in MHI: the presence of symptoms (confusion, headache, LOC/PTA), age more than 65 years, and skull fracture.

Conclusion: The proper application of CT scan for patients with MHI is a sufficient approach to detect underlying intracranial abnormalities.

Key Words: Head injury, Computed tomography, Guideline

AUTHORS/INSTITUTIONS: G. Kim, H. Choi, , College of medicine, Dankook university, Cheonan, KOREA, REPUBLIC OF;

ABSTRACT FINAL ID: T-116;

TITLE: Extensive Pneumocephalus After Blunt Head Trauma: A possible neurosurgical emergency.

ABSTRACT BODY:

Abstract Body: A 45-year-old man was admitted to the Emergency Department(ED) after falling down the stairs. On scene there was no respiratory or hemodynamic compromise.

On neurological examination pupils were equal and reactive to light, he had a left sided paresis and a Glasgow Coma Scale (GCS) of 7. He was intubated on scene.

In the ED neurological examination showed a GCS of 3 after sedation, anisocoria, raccoon eyes and a non depressed skull fracture in a frontotemporal wound. There were no signs of other traumatic injuries.

Cranial CT revealed an extensive pneumocephalus with accumulation of air at the frontal lobes. Supra- and infratentorial subdural, subarachnoid and intraventricular air was seen (images 1 and 2). There were multiple fractures of the facial bones and bilateral skull base fractures.

In the ED the patient received Mannitol, prophylactic antibiotics and tetanus toxoid.

The patient was admitted to the ICU for further treatment in supine position. Without signs of neurological deterioration he was extubated on day 4 showing no neurological deficits.

Before discharge the CT showed disappearance of intracranial air.

Discussion:

Pneumocephalus is a potentially serious event, often seen after trauma associated with skull base and facial fractures. Symptoms can include headache, depressed mental status and hemiparesis.

Without neurological deterioration a conservative approach is justified.

There is however a risk of developing a tension pneumocephalus, which needs urgent intervention such as needle aspiration through a burr hole. Change in mental status or signs of raised intracranial pressure should alert to this complication. CT scan might show a peaked appearance of the frontal lobes and interhemispheric separation (Mount Fuji sign) which is suggestive of a tension pneumocephalus.

Conclusion:

This report illustrates the importance of awareness of pneumocephalus in blunt head trauma. It should lead to immediate supine positioning the patient with high flow oxygen and direct referral to a neurosurgeon.

AUTHORS/INSTITUTIONS: S. Hillen, D.H. de Kruijf , P.P. Rood, R. Dammers, , Erasmus MC, Rotterdam, NETHERLANDS;

ABSTRACT FINAL ID: T-117;

TITLE: A Retrospective Cohort Study To Compare The Symptoms In GCS 15 Patients With A Contusional Brain Injury To GCS 15 Patients With Free Intracranial Haemorrhage.

ABSTRACT BODY:

Abstract Body: Aim

The aim of this study was to determine whether patients with purely contusional brain injury present differently from patients with free traumatic intracranial bleeding (i.e. EDH, SDH or subarachnoid {SAH}).

Methods

The computerized CT request notes were reviewed on all patients who underwent a CT head with a minor head injury over a one year period (January 2009 – December 2009). The clinical signs and symptoms at presentation were extracted from the request notes of GCS 15 patients found to have intracranial pathology on CT scan. Statistical analysis was performed using chi square test.

Results

456 patients GCS 15 patients underwent CT scanning during the period January 2009 – December 2009. 55 of the 456 patients had positive CT findings (12%). Seven patients were found to have a purely contusional brain injury, 2 had LOC, 2 had LOC and PTA, 1 had PTA, 1 had headache, 2 had headache and vomiting. Eight patients were found to have free intracranial bleeding (EDH = 3, SDH =4, SAH = 1), 3 had LOC, 2 had seizures, 1 had headache, 2 had headache and vomiting. Chi square test = 5.49 (5 df). P =0.359.

Conclusion

The results of this small study suggest that in patients with GCS 15 mild traumatic brain injury symptoms at presentation does not discriminate between patients with contusional brain injury from patients with free traumatic intracranial bleeding.

AUTHORS/INSTITUTIONS: J. Batchelor, A. Sheehan, Emergency Medicine, Manchester Royal Infirmary, Manchester, UNITED KINGDOM;

ABSTRACT FINAL ID: T-118;

TITLE: A case of Facial dismasking flap repairment for complex fractures in the craniofacial region

ABSTRACT BODY:

Abstract Body: (objective)For the repairment of facial complex fracture, a wide surgical field is necessary . We performed a facial dismasking flap for complex fractures in the craniofacial lesions to provide a better surgical field. (case)A 64-year old suffered craniofacial injury due to be hit his face by large lead pipe accidentally. He was transferred to our hospital, and diagnosed multiple fractures (orbita , facial, frontal, occipital, ethmoidal , zygomatic bone). (methods)On day 8, surgical repairment was performed. A coronal skin incision and a circumpalpebral incision was done. Bilateral frontal nerve(V1)was cut and the skin can be detached from the orbital structures and the coronal skin flap can be elevated more inferiorly together with the facial nerves and muscles. Fracture was connected with titan plates. (course)After surgery, no facial palsy remained . (summary)This flap allows the surgeon to obtain wide exposure of the upper two-thirds of the facial skull. Moreover, damage to the facial skin is minimal and facial movements are well preserved. This technique is recommended to repair fractures in the craniofacial region

AUTHORS/INSTITUTIONS: Y. Maeda, M. Iwase, T. Nakatani, Emergency and critical care, Kansai Medical University, Osaka prefecture, JAPAN; Y. Maeda, H. Nakao, N. Ishii, , Kobe University, Hyogo, JAPAN; Y. Iwasaki, , Iwasaki hospital, Kagawa, JAPAN;

ABSTRACT FINAL ID: T-119;

TITLE: Hyperextension injury of the cervical spine without tenderness on examination; reason for imaging?

ABSTRACT BODY:

Abstract Body: A-13-year-old boy presents to the ED after hitting his head on the bottom surface of the swimming pool. He experienced a hyperextension neck trauma, but didn't experience neck pain. After about 15 minutes, he had a 2-minute-episode in which he experienced numbness and weakness of his arms en legs. He then cycled home, and was taken to the ED by his father.

On arrival, the boy is lucid and cooperative with normal vital sign. Examination of the head, chest and abdomen reveals no abnormalities. Examination of the neck shows no swelling or hematoma, and no tenderness. There is impaired active movement of the neck, due to injury sustained in the first year of life; his neck mobility has since then been impaired. The neurologic examination is normal without loss of sensibility or paralyzes.

Based on the history given by the boy, X-rays of the cervical spine are taken. The X-rays show an abnormal configuration of C7. A CT of the cervical spine shows a 2-pillar fracture of C7 with protrusion into the cervical canal, which is classified as unstable.

Baseline: A normal examination of the neck does not rule out serious spinal injury. Although the Nexus Cervical Spine Criteria are traditionally described as more aggressive in patient imaging, in this case it was the Canadian C-Spine Rule that prompted imaging.

AUTHORS/INSTITUTIONS: A. van der Velden, L. Tempelaars, M. Bink, Emergency Medicine, Albert Schweitzer hospital, Dordrecht, NETHERLANDS;

ABSTRACT FINAL ID: T-12;

TITLE: Restoration of vision by emergency lateral canthotomy aided by internet online video in remote emergency department.

ABSTRACT BODY:

Abstract Body: A 68-year-old presented with right orbital pain following a fall sustained 1 hour ago with right peri-orbital swelling causing marked proptosis of right eye with rapid and progressive deterioration in visual acuity. A diagnosis of orbital compartment syndrome (OCS) was made. Immediate decompression by lateral canthotomy is required to prevent permanent blindness from ischaemic damage to retina and optic nerve. However, the requisite expertise to carry out the procedure was unavailable. Delays incurred during transfer from our emergency unit located in a more remote island to mainland tertiary centre also risked permanent loss of vision. Therefore, a senior clinician with no previous experience in lateral canthotomy performed the procedure with the aid of online videos (youtube) and step-by-step telephonic instructions by an ophthalmologist. Subsequently, patient was transferred to a tertiary centre the vision had fully restored at follow-up.

In recent years, readily viewable online videos have taken surgical procedures from the confines of an operation theatre to the internet, which is a growing resource of such surgical procedures. However, the majority of such procedures are non peer-reviewed and have been uploaded onto public websites such as YouTube. In a previous study of online videos for knee arthrocentesis on the NEJM and YouTube websites, instructional and technical values were found to be of moderate quality only. In our experience the internet video served as convenient, easily accessible and crucial resource in the emergency setting to avert permanent blindness. However there is a need to develop validated, peer-reviewed and readily available open source instructional video journals for emergency life -or - organ saving procedures.

AUTHORS/INSTITUTIONS: F. Kotta, N. Amran, Emergency Medicine, St Mary's Hospital, Isle of Wight, Newport, Isle of Wight, UNITED KINGDOM;

ABSTRACT FINAL ID: T-120;

TITLE: Our experience in shoulder dislocation

ABSTRACT BODY:

Abstract Body: The glenohumeral joint is the main joint of the shoulder, has tremendous mobility, and at the expense of being much easier to dislocate than most other joints in the body. Although traumatic shoulder dislocations have been well-defined, they are rarely seen and incidence of the pathology is still controversial. There are many reports in the literature about treatment and prognosis of traumatic shoulder dislocations, yet reports about basic epidemiological features of the disease are rare.

In the present study, we aimed to determine the etiologies, epidemiological-demographical features, and clinical approaches of traumatic shoulder dislocations retrospectively in patients who admitted to the Emergency Department of Diyarbakir Education and Training Hospital between January 2008 and December 2010.

AUTHORS/INSTITUTIONS: M. Tas, A. Kalkan, , Diyarbakir Education And Research Hospital, Department of Emergency , Diyarbakir, TURKEY; S. Gurcan, , Diyarbakir Education And Research Hospital, Department of Orthopedia And Traumatology, Diyarbakir, TURKEY;

ABSTRACT FINAL ID: T-121;

TITLE: Massive thoracic emphysema

ABSTRACT BODY:

Abstract Body: 65 years old-man to no relevant medical history, who came to hospital after bicycle accident. Being evaluated in the emergency room for chest contusion, no rib fractures and no pneumothorax was observed being discharged from the service. After 24 hours, he comes back to the emergency room for development of thoracic distension. At admission he was conscious and oriented, hemodynamically stable and eupneic. A physical examination revealed marked subcutaneous emphysema in the chest, neck and upper extremities. We performed a chest radiograph (Figure 1) that confirmed subcutaneous emphysema and we decided to perform chest CT showing subcutaneous emphysema and right pneumothorax (Figure 2). The patient improved after percutaneous drainage of emphysema and pleural drainage D

AUTHORS/INSTITUTIONS: A. Almazán, M. Guerrero, Hospital Universitari Sant Joan de Reus, REUS, SPAIN;

ABSTRACT FINAL ID: T-122;

TITLE: Factors predicting traumatic brain injury in patients presenting to emergency department with head injury in an Asian population

ABSTRACT BODY:

Abstract Body: Purpose

To determine factors which were good predicting factors for traumatic brain injury (TBI) in patients presenting with head injury to an emergency department (ED).

Methodology

A retrospective review of head-injured patients who presented to the ED of Alexandra Hospital, Singapore and had Computed Tomography (CT) over a six-month period was carried out. Symptoms like loss of consciousness, vomiting and amnesia, mechanism of injury, signs like facial or base of skull fracture and Glasgow Coma Scale (GCS) level were obtained from the case record.

Main Findings

Four hundred and forty-nine patients presented to the ED and had CT brain. They range in age from 15 to 101 years. Sixty two percent were male. Chinese accounted for the largest racial group of patients (65%). Nine percent of patients had TBI like subdural hematoma, extradural hematoma, subarachnoid hemorrhage and brain contusion.

Twenty percent of patients with amnesia had TBI ($p=0.000$). Thirty-two percent of patients with GCS level of less than 15 had TBI ($p=0.000$). Twenty-nine percent of patients with signs of facial or base of skull fractures had TBI ($p=0.000$). Loss of consciousness or vomiting alone were not good predictors for TBI. When loss of consciousness and vomiting were both present in the same patient, the likelihood of TBI remained low.

Conclusion

We found that amnesia, presence of fractures and depressed level of consciousness were good independent predicting factors for TBI in our patient population.

AUTHORS/INSTITUTIONS: K. Ho, C. Ng, , Alexandra Hospital, Singapore, SINGAPORE;

ABSTRACT FINAL ID: T-123;

TITLE: Whole-Body CT in Major Trauma

ABSTRACT BODY:

Abstract Body: Objective: To compare the survival of patients with blunt trauma who had whole-body CT during resuscitation in the Emergency Department (ED) of the Southern General Hospital (SGH) in Glasgow with those who did not.

Methods: In a retrospective study, the resuscitation room logbook was used to identify all patients who were admitted to the resuscitation room following blunt trauma from 1st June 2009 to 30th June 2010. Patients' hospital records were then located and information obtained relating to their attendance to the ED. In particular, vital signs on admission to the ED, body regions injured, imaging used, and survival were recorded. This information was then used to calculate Injury Severity Scores (ISS), Revised Trauma Scores (RTS) and Trauma-Injury Severity Scores (TRISS), so that the probability of survival could be calculated. The probability of survival was then compared to the actual survival of patients in both the whole-body CT and non-whole-body CT groups. Note: non-whole-body CT refers to no CT or only dedicated CT of one or more body regions.

Results: 31 patients were admitted to the resuscitation room of the SGH ED following blunt trauma between June 2009 and June 2010.

Average ISS in whole-body CT group: 40.

Probability of survival (based on TRISS) in whole-body CT group: 70.6%.

Actual survival: 85.7%.

Average ISS in non-whole-body CT group: 16.6.

Probability of survival (based on TRISS) in non-whole-body CT group: 94.7%.

Actual survival: 100%.

Limitations: The main limitation was the small sample size. Data was collected and analysed retrospectively. Some patients included in the study had an ISS<16 so did not fit the criteria for major trauma. Also, Abbreviated Injury Scale (AIS) scoring (which is the basis of ISS and TRISS) is very subjective.

AUTHORS/INSTITUTIONS: R. Vivian, , NHS, Glasgow, UNITED KINGDOM;

ABSTRACT FINAL ID: T-124;

TITLE: The Practice of Extended Focused Assessment with Sonography for Trauma and Goal Directed Echocardiography in Emergency Department

ABSTRACT BODY:

Abstract Body: Objective: In our study, we aimed to show contribution of the use of Extended Focused Assessment with Sonography for Trauma (E-FAST) included goal directed emergency cardiac ultrasonography (US) performed by emergency physician during emergency diagnosis , treatment, to determine sensitivity and specificity in case of cardiac injury, pneumothorax, hemothorax, intraabdominal bleeding contingent to trauma

.Methods: This study includes 107 patients who had multiple trauma and comorbidity of more than a single organ injury doubt and applied at Department of Emergency . Emergency physician who have no clinical information about the patient performed E-FAST. Findings on a supine chest x-ray, formal US, invasive interventions and the patient outgrowth were added. Further, the results of abdomen and thorax CT were reviewed and then, pneumothorax thorax CT staging with a scoring system, between 0-4, was composed for comparison. Results: For the gold standart of abdominal CT, it is found that sensivity and spesificity of E-FAST is 54.5% and 100% respectively. Pathology was found on abdominal CT for 10 (9.3%) patients having normal E-FAST. These patients were individuals having solid organ pathology but not required emergency surgery. For the diagnosis of hemothorax on chest x-ray sensitivity is 33.3%, spesificity is 97%; E-FAST sensitivity 71%, spesificity 100%. Patients who have hemothorax not assigned to CT but assigned to E-FAST were kept for observation. It could be managed that pneumothorax diagnosis was established on 3 (2.8%) patients with x-ray, 27 (25.2%) patients with E-FAST, through the 33 (%30.8) pneumothorax patients at the degree of 1-4 assigned in thorax CT. E-FAST is positive for all patients performed with tube thoracostomy.

Conclusion: E-FAST performed by an emergency physician can be used with high sensitivity and specificity for assignment of pneumothorax requiring invasive procedure, hemothorax and intraabdominal wounds. After the E-FAST, pre-diagnosis with chest x-ray changes, so that patient administration also changes.

AUTHORS/INSTITUTIONS: I. Uz, B. Boydak, S. Bayraktaroglu, E. Ozcete, O. Cevrim, M. Ersel, S. Kiyan, , Ege University School of Medicine, Izmir, TURKEY; A. Yuruktumen, , Akdeniz University School of Medicine, Izmir, TURKEY;

ABSTRACT FINAL ID: T-125;

TITLE: Traumatic asphyxia and bilateral exophthalmia caused by a tractor accident

ABSTRACT BODY:

Abstract Body: Introduction

Traumatic asphyxia is a rare condition presenting with cervicofacial cyanosis and edema, subconjunctival hemorrhage, and petechial hemorrhages of the face, neck, and upper chest that occurs due to a compressive force to the thoracoabdominal region. We report a case of traumatic asphyxia assessed in our emergency department in this paper.

Case

An 18 year-old man presented to the emergency department after being crushed under a tractor accidentally. He was conscious and tachypneic with a respiratory rate of 30/per minute and oxygen saturation of 89% by pulse oxymeter. Bilateral exophthalmia and limited eye movements were found in the examination. Petechial and purpuric hemorrhages and cyanosis were seen at his neck and face. Head, neck and chest tomography was performed for the patient. The head tomography was normal however orbital screening revealed right retro-bulbar hematoma and chest tomography revealed sternocostal detachment and minimal pneumopericardium. Since his visual acuity was found to be normal, no intervention for retro bulbar hematoma was done. His oxygenation and general appearance returned normal in the emergency department and he was hospitalized to the cardiac surgery clinic for further treatment. He was recovered with medical treatment and did not required invasive surgical intervention. He was discharged from the hospital with good recovery.

Discussion

Severe proptosis can occur due to traumatic displacement of orbital fat or retro bulbar hemorrhages caused by ruptured capillaries and sometimes result in visual loss. Lateral canthotomy for orbital decompression is an effective treatment for regaining the visual function.

Since the presentation is noticeably serious, long term follow-up of patients who have survived traumatic asphyxia is usually good without significant mortality and morbidity with effective treatment. Management of these patients is supportive, and treatment is aimed at associated injuries. Specific treatments such as lateral canthotomy for orbital decompression can be used if necessary for the patient.

AUTHORS/INSTITUTIONS: M. Kartal, E. Goksu, D. Dedeoglu, O. Yigit, emergency medicine, akdeniz university, Antalya, TURKEY;

ABSTRACT FINAL ID: T-126;

TITLE: High-pressure Air Injection Injuries to the Upper Extremity: Case Report

ABSTRACT BODY:

Abstract Body: Introduction

High-pressure air is used in industrial cleaning and cutting. High-pressure injection injuries are uncommon injuries in the emergency department. High-pressure air injection injuries are different from injection injuries that are caused by other agents, in that they are associated with extensive subcutaneous emphysema but only slight soft tissue inflammation or destruction.

Case Report

A 28-year-old woman right-handed worker in a local industrial company was brought to the emergency department 40 minutes after sustaining an injury to his left forearm from the high-pressure air blaster she was operating. On arrival in the emergency department, she complained of severe pain in the hand and forearm, exacerbated by any active movement. She had 1 cm entry marks on his left hand 5th proximal phalanx (Figure 1). Radial, ulnar and brachial pulses were palpable. Sensory function of the hand was intact. Motor function was present, but she experienced severe arm and forearm pain on active and passive flexion of the elbow and on flexion and extension of wrist. The range of movement was restricted. Passive extension of fingers was pain free and unrestricted. Anteroposterior and lateral radiographs of the left forearm, elbow and arm confirmed the presence of subcutaneous emphysema extending from distal forearm to proximal arm (Figure 2-3). No bony injuries were seen. She was treated with adequate pain relief, broad-spectrum antibiotics, tetanus prophylaxis, splinting and elevation and urgent surgical consultation. The swelling gradually resolved and had completely settled by final review, ten days after the injury.

Conclusion

High-pressure air injection injuries can produce an unexpected pattern of severe internal and external injury and infectious complications. Emergency physicians must be aware of the varied deceptive presentations and subsequent complications to deal with injuries effectively.

AUTHORS/INSTITUTIONS: S. Enver Dinç, S. Soyuncu, F. Bektas, Emergency Medicine, Mediterranean University School of Medicine, Antalya, TURKEY;

ABSTRACT FINAL ID: T-127;

TITLE: Comparison between the blind and the ultrasound guided techniques of femoral nerve block for pain relief of patients with femoral bone fractures in the Emergency department

ABSTRACT BODY:

Abstract Body: Seyed Mohammad Hosseini Kasnavieh, MD, Assistant professor of Emergency Medicine, Teheran University of Medical Sciences

Hamed Basir Ghafouri ,MD, Assistant professor of Emergency Medicine, Teheran University of Medical Sciences

Nima tatai

Soudabeh jalali nodoushan

Objective: According to the intractable and severe nature of pain resulting from femoral bone fractures, we decided to evaluate the success rate of femoral nerve block, with and without ultrasound guidance, for pain relief of these patients.

Material and Methods: This study has been accomplished as a uni-blinded randomized clinical trial, in which 80 patients participated and were randomized to two 40 member groups to receive femoral nerve block with either a blind technique or an ultrasound guided technique. All patients were recorded by a pain assessment scale before and after the procedure.

Results: The findings of this study indicated the ultrasound guided technique for femoral nerve block as a simple and safe procedure which could be accomplished by emergency physicians, even more simply than the blind(surface anatomic landmark based) technique. Patients undergoing ultrasound guided femoral nerve block were demonstrating a higher rate of cooperation for diagnostic and interventional modalities, and were tolerating less severe pain during ED stay than the other group. All the differences mentioned above between procedures with and without ultrasound guidance were statistically significant.

Conclusion: This study indicated that the ultrasound guided technique for femoral nerve block is a simple, useful, and safe technique which could be done by emergency physicians more effectively than surface anatomic landmark guided technique. However, it is recommended that a more extensive survey be done on this topic with larger study population and possibly, more centers involved, and comparison be done between these local interventions and systemic ones such as analgesic medications.

Keywords: Pain, Femoral nerve block, femoral bone fracture

AUTHORS/INSTITUTIONS: S. Hosseini Kasnavieh, H. Basir Ghafouri, N. Tataie, S. Jalali Nodoushan, Emergency medicine, Tehran University medical school TUMS, Tehran, Tehran, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: T-128;

TITLE: A Novel Army Training Program Improves National Guard Medics' Combat Trauma Readiness

ABSTRACT BODY:

Abstract Body: Abstract

Background: Nearly 90% of U.S. combat deaths occur on the battlefield before the casualty ever reaches a treatment facility. It is imperative to develop a training program that renders army medics ready for the myriad of traumatic injuries.

Objectives: The objective was to measure the effectiveness of an intensive multi-modality five-day training program in improving the readiness of the military personnel in the setting of acute combat trauma injuries in pre-hospital setting.

Methods: The study took place at an urban tertiary care center from May 2007 to September 2010. The Advanced Trauma Training Program (ATTP) was developed by emergency physicians who are International Trauma Life Support (ITLS) instructors. The program consisted of: didactic ITLS material; special skills training stations; hands-on laboratory sessions; observational trauma experience; ambulance ride-alongs; Basic Disaster Life Support (BDLS) course; and a multiple casualty practicum.

94 military personnel completed pre and post-training tests, along with post-training course evaluations. Evaluations post-deployment to combat zones were also collected from 32 returning participants.

Results: The average pre-training test score of the 94 participants was 65.5%, that increased to 89.14% post-training scores were 89.14% ($p < 0.001$; paired t-test). Of the 94 participants, 49 were deployed to combat zones, of whom 47 found the ATTP course important overall (96%). In addition, 28 out of the 32 participants returning from combat zones reported using the skills learned. The most useful skills were reported to be spine immobilization (24/32), wound care (19/32), bag-valve-mask use (14/32), and suturing (12/32).

Conclusions: Trauma training is an essential area of competence for the military personnel before deployment to conflict zones. Participation in an intensive advanced trauma training program demonstrated a significant increase in trauma readiness among course participants; in addition, course evaluations and self-assessments highlight the importance of such an intensive course for pre-deployment military training.

AUTHORS/INSTITUTIONS: Y. Purim-Shem-Tov, S.N. Ansari, M. Malik, J. Bayram, D. Rumoro, L. Hondros, Emergency Department, Rush Medical Center, Chicago, IL;

ABSTRACT FINAL ID: T-129;

TITLE: Analysis of traumatic brain injury in anticoagulated patients

ABSTRACT BODY:

Abstract Body: **OBJECTIVE:**Traumatic brain injury analysis(TBI) in anticoagulated patients to evaluate health care quality in these processes.

METHODOLOGY:Study these patients admitted in the Observation Unit(OBS) between:January2009-April2011.

Analyzed variables: age, sex, patient history, TBI causes, anticoagulation treated disease, initial symptomatology and Glasgow Coma Score(GCS), initial International Normalised Ratio(INR) value, computerized tomography scan(CT), diagnosis, treatments and final patient admission. The informations are analysed with chi-square test

RESULTS:Anticoagulated patients with TBI from OBS:71(men:44%, women:56%), average age:78 years, previous pathology history:95%. Anticoagulation treated disease: transient ischemic attack:2%, atrial fibrillation:69%, acute pulmonary embolism:5%, venous thromboembolism:10%, mitral valve prosthesis:14%. Admissions reasons: fall:80%, motorcycle accident:3%, car accident:74%, outrage:2% stairs fall:3%, syncope:7%, others:1%. Initial symptomatology: symptomless:37%, headache:17%, dizziness:3% , vomiting:5%, lethargy:2%, loss of consciousness:17%. Initial GCS:12:6%, 14:6%, 15:88%. Complementary tests: INR(normal:5%; out of therapeutic range:49%; Medium: 2,1(min:0,4-max:5.0).Pathological head CT:30%.Diagnosis:hemorrhagic contusion:8%; concussion:68%; subdural hematoma:12%; subarachnoid hemorrhage:3%; death:9%. Associated injuries:75% patients. Nonsurgical treatment:100%; hematologic treatment: prothrombin complex:5%; vitamin-K:9%; low molecular weight heparin:52%; fresh frozen plasma:6%; acenocumarol:4%; untreated hematological:24%.There are noteworthy differences between diagnosis and 1)INRvalue($p=0,0156$), 2)initial symptoms($p=0,0005$), 3)age($p=0,0091$),4)traumatism cause($p=0,0012$).There are not meaningful differences between diagnosis and 1)anticoagulation treated disease($p=0,0634$),2)therapeutical range INR($p=0,4380$).

CONCLUSIONS:1)30% of patients suffering TBI presented pathologic CT.2)The initial GCS results and patient symptomatology of anticoagulated patients suffering TBI undervalue the level of traumatism seriousness.3)High mortality level in spite of receiving initial hematologic treatment

AUTHORS/INSTITUTIONS: P. Conde, A. Moreno, M. Muñoz, Emergency Department and Intensive Care Unit, Traumatology and Rehabilitation Center of Virgen del Rocio University Hospital , Seville, SPAIN; J. Moreno, , Engineering School University of Seville, Seville, SPAIN;

ABSTRACT FINAL ID: T-13;

TITLE: Computer System "DIRAYA" implementation in the Emergency department of Virgen Macarena Hospital Area

Authors: Navarro Bustos C, Gálvez San Román JL, García Sánchez MO, Portillo Cano MM, Oltra Hostalet F. Critical Care and Emergency UGC H.U.V. Macarena. SEVILLA

ABSTRACT BODY:

Abstract Body: INTRODUCTION: Emergency "DIRAYA" implementation was a challenge and a major change in the way of working professionals in this area since its inception.

METHOD: We established a working group with representatives of the Medical Department Directorate, Directorate of Information and Evaluation System, SAS (Andalusian Health System) Support Service, the INDRA company and Emergency Department and became a full implementation including electronic prescribing module . Was planned implementation schedule.

RESULTS: First, we performed emergency implementation of General Queries with templates prescription dose of the drugs most used. Second, in pediatrics and obstetricians emergencies. Finally, General Emergency Observation introduced a complete development module templates by prescription drugs available, general measures, fluid, application procedures and infusions tailored to our usual way of working. This work has been exported to the emergency room of Primary Care and others Community Hospitals. Has also been introduced in early 2010, electronic "XXI prescriptions" in the emergency department and outpatient prescription improving and facilitating the public the entire prescription, avoiding unnecessary visits to primary care, being more comfortable and safe for the patient.

CONCLUSIONS: A good planning and good training result: 1.A safe implementation. 2.The possibility to develop electronic prescribing module as a pioneer and has served for emergency use in primary care and others hospitals. 3.The training of all professionals at all levels who work in the ER, makes all the information is recorded in "DIRAYA". 5.The "XXI prescription" implementation has made to improve the prescription.

AUTHORS/INSTITUTIONS: J. Gálvez San Román, C. Navarro Bustos, M. Garcia Sanchez, M. Portillo Cano, F. Oltra Hostalet, , Hospital Virgen Macarena, Sevilla, Sevilla, SPAIN;

ABSTRACT FINAL ID: T-130;

TITLE: ISS, TRISS, Δ BE, BISS

ABSTRACT BODY:

Abstract Body: A major trauma is an event that is able to cause localised or generalised injuries such as to cause in at least one sector an immediate or potential risk for the patient's survival. Such conditions are established on the basis of a value in excess of 15 points on the ISS. Considering Major Traumas as only those that have an ISS in excess of 15 leads us to isolate the causal trauma event, perhaps correlating it more closely with the dynamics of the incident and overlooking the biological effect. In reality, ISS has no recognised predictive value: in order to have such, it must be combined with a clinical assessment of the traumatised individual which will quantify, in some way, the subjective biological response to the event: in this sense, ISS and RTS (Revised Trauma Score) are brought together in TRISS. Only the latter can be used to calculate the probability of survival (PS). If the traumas are analysed, in a medical and social perspective of organising and strengthening the care regime, the definition of Major Trauma implies a serious prognosis. It therefore appears very reductive to base it upon a mere anatomical injury without considering the physiological parameters, the co-morbidity and the age of the patient. Even TRISS is not always objective, however; just think of the calculation of the GCS and the respiratory frequency (RF), data used to calculate the RTS, which, together with the ISS goes towards calculating the TRISS. GCS cannot always be considered as objective data and the RF is often missing from reports; confirmed data by international literature. It is necessary to find data which is as objective as possible and, above all, easy to locate. Conclusion: the authors suggest the use of the Δ BE which, in a more objective way compared to the other systems of calculation, links to the quoad vitam and quoad valitudinem prognoses of the patient, and the combination of this value with the ISS to calculate the BISS (BE+ISS). This proposal, in order to be confirmed and supported, given the scant presence of literature in this regard, obviously requires further data, which the authors are collecting and analysing with the aim of obtaining some statistical significance

AUTHORS/INSTITUTIONS: L. Trabucco, A. Iori, M. Raballo, A. Ferrari, , Dipartimento Emergenza- Urgenza, ASMN, Reggio Emilia, ITALY;

ABSTRACT FINAL ID: T-131;

TITLE: Post-traumatic valve rupture: rare or unrecognised event

ABSTRACT BODY:

Abstract Body: Traumatic injury to cardiac valves remains a rare event, often silent or unrecognised during the initial hours of the trauma. The clinic is not always able to suspect traumatic valve lesions. An early echocardiographic examination, possibly transesophageal, would seem extremely useful, both for diagnostic and therapeutic purposes. In the two cases presented below, the clinical signs of severe respiratory insufficiency were exaggerated compared to the injuries involving the pulmonary parenchyma, which led to the suspicion of an acute cardiac deficit, which was in fact confirmed thanks to the use of the transesophageal echocardiogram.

CASE 1: 18 y.o. patient hit by a car while jogging.

On arrival in shock room, the patient presented with thoracic-abdominal and skeletal trauma. The CT scan led to a diagnosis of left diaphragmatic hernia with gastric visceral perforation in the thoracic cavity. Significant retroperitoneal haematoma. While in intensive care following the operation, hypotension continued without justifiable losses (chest drain with modest re-filling) and progressive worsening of respiratory exchanges with episodes of recurring desaturation.

Transthoracic and transesophageal echocardiograms conducted: flail of the posterior mitral leaflet with severe mitral valve failure from traumatic rupture.

CASE 2: 20 y.o. patient, bike accident hitting a pole involving cranial concussion trauma, mild cervical trauma, thoracic trauma, lung contusions, haemoperitoneal. In the subsequent time spent in intensive care, respiratory exchanges appeared to be poor; in particular, the clinical picture worsened in parallel with the ventilation conditions with high PEEPs. This fact led to the suspicion of a valvular pathology confirmed immediately by transesophageal echocardiogram: traumatic rupture of the tricuspid valve from the papillary muscle with valve failure. Conclusion: It must be queried whether traumatic valve rupture is a rare or unrecognised event. It is important to highlight the significance of the dynamics of the trauma. As a diagnostic investigation, the transesophageal echocardiogram must be the gold standard to reduce the risk of missed-diagnosis.

AUTHORS/INSTITUTIONS: L. Trabucco, A. Iori, A. Ferrari, , Dipartimento Emergenza- Urgenza, ASMN, Reggio Emilia, ITALY; E. Becchi, , Anestesia e Rianimazione, ASMN, Reggio Emilia, ITALY;

ABSTRACT FINAL ID: T-132;

TITLE: Major Trauma in Reggio Emilia: 2010 data

ABSTRACT BODY:

Abstract Body: Our DEA admits all trauma victims across the city and those from the provincial area who demonstrate criteria indicative of major trauma. The analysis has been conducted from the trauma with red and yellow DEA discharge codes; in 2010, 500 traumas were recorded of which 24% were code red and 76% code yellow; of these, 378 were hospitalised. The use of the exit code results in closer adherence to the true toll of injuries which can only be made for discharged patients (ISS)

The number of serious injuries (ISS above 15) managed by our DEA in 2010 was 134. As regards distribution by age and sex, the male sex was the most represented (74.79% M and 25.21% F) and the age bracket between 30 and 50 years old alone represented 40%; there were more incidents at weekends and in the months of May, June and September; 95.5% of closed injuries were due primarily to road accidents while penetrative injuries (4.5%) were primarily cold steel injuries. The rescue vehicle used in the territory was the medic-car in 94% of cases; the average rescue time was 43 minutes against the regional average of 49.7 minutes. The admission department was, for 49 patients, resuscitation; for 27 patients it was emergency care and for the remaining patients it was the surgery departments. Anatomical injuries in order of frequency: AIS head (66.4%), chest (59%), abdomen (41.8%), limbs (60.4%), body surface (17.4%). Correlating the AISs with the severity of the trauma: the most serious injuries (AIS above 3) were found to be to the head and chest; mortality at 30 days was 16%, with a percentage of 10.1% within a period under 24 hours and 6.8% in a period over 24 hours. Results and conclusions: by crossing the age brackets with the ISS value, the highest ISS values related to the age bracket included between 15-44 years; comparing the outcome of patients with the type of injuries, an increase was evidenced in the deaths of patients with multiple injuries in various areas of the body and with the presence of skull/brain injuries and/or haemodynamic instability; two patients died in DEA, only one of our patients was transferred to another hospital, the remaining patients were all treated at our hospital.

AUTHORS/INSTITUTIONS: L. Trabucco, A. Iori, A. Ferrari, , Dipartimento Emergenza- Urgenza, ASMN, Reggio Emilia, ITALY; E. Becchi, , Anestesia e Rianimazione, ASMN, Reggio Emilia, ITALY;

ABSTRACT FINAL ID: T-133;

TITLE: The dynamics and clinical signs of neurogenic shock

ABSTRACT BODY:

Abstract Body: Neurogenic shock is due to extensive injuries to the central nervous system or to the spinal cord with poor peripheral perfusion and hypotension in the absence of tachycardia and vasoconstriction for loss of sympathetic tone. It is recognised based upon the clinical signs and the dynamics of the trauma sustained.

Mr. O.S. was found by his colleagues, who had been attracted by his loud cries. His clothes were caught in the lathe, a tool made up of a long rotating arm able to conduct between 100-800 rotations/ min. His colleagues managed laboriously to free from the grip of the lathe and to cut off his clothes, which were tightly twisted around his neck and upper limbs. Having been found unconscious and without a pulse; advanced CPR was performed by the emergency doctor. In shock room: patient intubated, bradycardia, hypotension, right otorrhagia, haematoma of the neck, hemithorax and right arm abrasion with probable dislocation strain of the right humerus; GCS 3/15, FR14, PAS 70 mmHg, FC 39 bpm; ecoFAST: negative; after lactated ringer and packed cells infusion (two units), blood pressure rose to 100 systolic, a total body CT scan was conducted; dislocation in cranio-caudal direction of C5-C6, diastasis of the intervertebral space of approximately 1 cm, mild retrolisthesis of C5 whose rear edge protrudes into the vertebral cavity; multiple right rib fractures. The patient was admitted to intensive care with a diagnosis of neurogenic shock from traumatic injury to the spinal cord at C5-C6. He died on the second day. Conclusions: the lathe is a machine which operates by removing wood shavings; the cutting motion is provided by the piece being carved (rotary motion) while the forward motion is provided by the tool (translational motion). The lathe in question, in addition, did not have an external fixing point for the rotating beam, therefore the patient, once he got caught in the machine, immediately suffered two mechanisms of injury, on one side the rotation of his own body around the rotating beam, on the other the pulling/strangulation of the neck and limbs by his clothes entangled in the rotating spindle with consequent dragging in the rotation.

AUTHORS/INSTITUTIONS: L. Spaggiari, L. Trabucco, A. Iori, S. Magnani, A. Ferrari, , Dipartimento Emergenza-Urgenza, ASMN, Reggio Emilia, ITALY;

ABSTRACT FINAL ID: T-134;

TITLE: The sensitivity of FAST in hemodynamically stable patients with blunt abdominal trauma

ABSTRACT BODY:

Abstract Body: P: hemodynamically stable patients with blunt abdominal trauma

I: Focused Assessment with Sonography for Trauma

C: CT

O: sensitivity of FAST in hemodynamically stable patients

Background

Blunt abdominal trauma is an everyday clinical situation. Evaluation of patients who sustained blunt abdominal trauma and the diagnosis of intra-abdominal injury can be a challenge for the emergency physician. Physical examination alone does not identify all patients with intra-abdominal injury. 4,5

Since the 1990s the Focused Assessment with Sonography for Trauma (FASTscan) is a widespread accepted part of evaluation protocols blunt abdominal trauma.

The position of ultrasonography in the diagnostic algorithm of a hemodynamically stable patient has not been well established. The aim of this PICO is to evaluate the results of FAST examination in the hemodynamically stable blunt abdominal trauma patients and compare this with other diagnostic algorithms like the Computerized Tomography (CT)

Conclusion:

Natarajan et al concluded that given the low sensitivity, a negative FAST without confirmation by CT may result in missed intra-abdominal injuries and with a positive FAST a CT is also needed for a better understanding of the intra abdominal injuries and to decide on operative versus no-operative management. Therefore the use of FAST in hemodynamically stable patients is not worthwhile.

Miller et al came to the same conclusion and opted that this group should undergo routine CT scanning.

Stengel et al concluded that there is insufficient evidence to justify the use of ultrasound as part of the diagnosis of patients with abdominal injury.

Clinical bottom line:

Given the low sensitivity of ultrasound, clinical practice guidelines must be scrutinized for the value of ultrasound examinations within established trauma algorithms of a hemodynamically stable patient.

Level of recommendation:

Level B

AUTHORS/INSTITUTIONS: D. Linzel, Emergency, VU, Amsterdam, NETHERLANDS;

ABSTRACT FINAL ID: T-135;

TITLE: Atypical Presentation of Pneumocephalus

ABSTRACT BODY:

Abstract Body: Chief Complaint:

26M found down and unresponsive with GCS 3 by EMS.

History of Present Illness:

No bystanders on scene. Patient remained unresponsive upon admission to trauma bay. An obvious left orbital injury with hematoma and an occipital hematoma were present.

Initial Vitals:

HR:58 BP:160/64 RR:4shallow

O2 sat 60%. After intubation by EM resident, O2 sat gradually rose to >90%.

HEENT: L eye is ecchymotic, R eye is proptotic with avulsed orbit. L pupil unreactive at 3mm. Vomitus and blood present in oropharynx. Hematoma of the occiput. No obvious skull fracture.

EXT: flaccid muscle tone, no deformity or sign of extremity trauma. Remainder of physical exam normal.

Pertinent Labs:

139 | 107 | 14 / 206 Lactic Acid 3.9 EtOH 214

3.0 | 23 | 0.78\

34.9\ 14.4 / 189

/ 42.7\

PNEUMOCEPHALUS is defined as the presence of air or gas in the cranial cavity. Initial presenting symptoms include headache, obtundation, nausea, vomiting, and nuchal rigidity. The treatment is supportive care, supplemental normobaric oxygen, and antibiotics. Prompt neurosurgical consultation is warranted for possible craniotomy in the presence of tension pneumocephalus.

The most common causes are: penetrating trauma (73.9%), neoplasm (12.9%), infection (8.8%), operative (3.7%), and the combination of barotrauma, dural tear, radiotherapy, and idiopathic combined causing <1%.

Our patient was found lying on a deserted street and was initially assumed to be the victim of physical assault or a hit and run motor vehicle vs pedestrian collision. The gun shot wound was masked by the orbital injury and hematoma and the absence of an exit wound. Small amounts of air in the superior cranial vault were evident on the CT evaluation of the brain (image 1), and they became more pronounced approaching the base of the skull. The presence of two large and multiple small metallic objects in the cranial vault were appreciated (image 2), and the diagnosis of gun shot wound to the brain with extensive hemorrhage and pneumocephalus was made. As a result of the massive brain trauma, the patient died about ten hours after arrival to the hospital. Pneumocephalus of any amount is abnormal and warrants an immediate and complete evaluation.

AUTHORS/INSTITUTIONS: J.F. Engle, L. Moreno-Walton, Emergency Medicine, LSUHSC-New Orleans, New Orleans, LA;

ABSTRACT FINAL ID: T-136;

TITLE: Distance of road traffic accidents from the receiving hospitals does not correlate with pre-hospital death in an urban area of Crete.

ABSTRACT BODY:

Abstract Body: Introduction: Trauma due to road traffic accidents accounts for ~10% of the EMS calls in urban areas of Crete. Mean prehospital time is <30'. The aim of this study was to correlate incident data with the risk of pre-hospital death.

Materials and methods: Prospective recording of trauma patients from traffic accidents that were transferred by EMS to Heraklion hospitals during a six month period (1/1/2009 - 31/6/2009). Statistical analysis was performed with one-way ANOVA or chi square where applicable and spearman's rho for non parametric data correlations.

Results: 728 eligible patients were transferred to both hospitals during the study period. 56% of cases occurred in the centre of the city (<5Km) and 73.4% within the borders of the urban area (<10Km). 18.5% of road traffic accidents happened in a distance >20km from the city centre. The peak incidence of accidents was between 15:00–19:00. 44 of those patients (5.88%) died before arrival at the hospital. 45% of the deaths resulted from accidents <5km away from the city centre and 65% of them <10 km from the city centre. There was no significant correlation between the time of the incident or the distance from the city centre and the occurrence of pre-hospital death.

Discussion: Trauma deaths from road traffic accidents is an endemic problem in Greece. A high percentage of trauma patients (5.88%) die before arriving at the hospital, in spite of the rapid access of the EMS to these patients and the proximity of the event to the hospital. Since the majority of patients are young and otherwise healthy, these deaths should be attributed to other factors such as the severity of the mechanism of injury.

Conclusions: In the scale of Heraklion and the close-by surrounding rural area, the majority of pre-hospital trauma deaths due to traffic accidents are not related to the distance from the hospital. However, better traffic control during the afternoon hours of increased traffic accident incidence could decrease their frequency.

AUTHORS/INSTITUTIONS: P. Agouridakis, G. Notas, N. Sbyrakis, , Emergency Department, University Hospital of Heraklion, Heraklion, Crete, GREECE; M. Zervopoulos, M. Zeaki, D. Vourvachakis, , National Center of Prehospital Emergency Medical Care. Department of Crete., Heraklion, Crete, GREECE;

ABSTRACT FINAL ID: T-137;

TITLE: A buckshot in the interventricular septum

ABSTRACT BODY:

Abstract Body: Introduction:

Cardiac penetrating injuries are serious causes of death. Their prevalence is 30%, and they are generally stabwounds. In developing countries stab wounds are seen more often. A 30-year old who has been diagnosed with an interventricular buckshot with vital signs stable and who has been discharged after monitoring at the Emergency department, is presented in this case study, as it is a very rare situation.

Case:

30-year old men attended ED with a wound caused by buckshot. His vital signs were stable. In physical examination he had an entry of buckshots on the forefront of the thorax, neck, abdomen, both upper extremities and left flank and subcutaneous emphysema on forefront of the left thoracic wall. FAST (Focused assessment sonography of trauma) examination was normal and a CT of the thoracoabdomen was also evaluated. In the left thorax, a mild pneumothorax, multiple buckshots, contusion of the lung, mild pericardial effusion and buckshot at interventricular septum was detected. (Figure 1) Bedside cardiac ultrasonography revealed mild pericardial effusion and buckshot at interventricular septum. The hemodynamics of the patient was stable all through his monitoring at the ED. The patient, who was not planned to be operated, was discharged after the one-week monitoring at the ED.

Discussion:

In cardiac penetrating traumas, the place of the lesion, the type of the instrument and its features, the trace of the wound, and the extent of the severity is associated with mortality and morbidity. In literature, it has been reported that penetrating cardiac traumas generally occur by a bullet directed at the heart or by the embolization of buckshot from the periphery. In only three cases, buckshot stories similar to our case have been reported. In literature, atypical-risky buckshot locations have been shown to penetrate at the ventricle [1,2], pericard [1,2], ascending aorta [2] and interventricular septum [3]. Our case is distinguished from these in the context that the hemodynamic signs were stable for the patient.

Conclusion:

In cardiac penetrating injuries, no effusion may be detected with FAST and hemodynamic signs may stay stable.

AUTHORS/INSTITUTIONS: O. Cetinkaya, F. Karbek Akarca, S. Kiyani, Y. Altunci, E. Firinciogullari, , Ege University School of Medicine, Izmir, TURKEY;

ABSTRACT FINAL ID: T-138;

TITLE: Gynecological injuries?

ABSTRACT BODY:

Abstract Body: INTRODUCTION:

Injuries are frequent pathologies in the emergency department, except those that are rare gynecological injuries in the emergency department.

OBJECTIVE:

Scan patients in a hospital in High Resolution gynecological injuries during 2010.

CASE REPORT

22 years old patient who was admitted to Hospital High Resolution edema and pain in gynecologic region after sex. After assessing the patient required drainage of the hematoma and subsequent hospitalization for drainage.

CONCLUSION

Gynecological injuries are rare, in most cases require drainage of the hematoma and hospitalization to prevent complications.

AUTHORS/INSTITUTIONS: M. Lopez Perez, I. Aguilar Cruz, J. Hortal Carmona, A. Garcia Moron, A. Amezcua Fernandez, B. Amini Shervin, F. Parrilla Ruiz, D. Cardenas Cruz, Urgencias, Hospital Alta Resolucion de Guadix, Granada, SPAIN;

ABSTRACT FINAL ID: T-139;

TITLE: Case presentation:Dissecting aneurysm of the abdominal aorta in politrauma

ABSTRACT BODY:

Abstract Body: Case presentation:

A 62 years old male is brought in by an ambulance after he has fell from approximately 9 meters (third floor). The family denies any previous pathology or medication taken by the patient.

In the emergency department the patient is conscious, responsive, but with mild dyspnea, and bradycardia (46 b/min), the skin is pale and sweaty. The secondary evaluation shows subcutaneous emphysema and bone cracking sounds on the right side of the chest. No breathing sounds can be heard on the entire right side of the chest and on the lower part of the left side of the chest. Immediately FAST is performed and the findings were: the absence of the pleural sliding on the right side of the chest, and a clear abdomen. Immediately right thoracic drainage is performed (through the tube air and blood is evacuated). The chest CT scan shows right hemo-pneumothorax, multiple rib fractures on the right side of the chest and left pneumothorax. Another tube is placed on the left side too and following that the respiration becomes normal, the respiratory effort diminishes. But in a few minutes the patient becomes again pale, sweaty, with enormous pain in the lower abdomen and the lower limbs, he loses sensibility in that area and also he cannot move he's lower limbs. Several possible causes of these symptoms are evaluated and hemodynamic support (crystalloids and drugs) is started. The contrast enhanced CT scan of the abdomen shows an Aortic aneurysm which extends from the renal artery towards the aortic bifurcation.

Discussions:

Aortic posttraumatic aneurysm is usually identified during laboratory investigations in a patient with politrauma, but in this case it occurred after thoracic drainage when pressure dropped in the chest cavity and fluid refilling and has increased the aneurysm concluding with its rupture in final. We intend to discuss both on laboratory investigations and differential diagnosis.

AUTHORS/INSTITUTIONS: P. Florica, , Spitalul Clinic Judetean Oradea, Arad, ROMANIA;

ABSTRACT FINAL ID: T-14;

TITLE: The Register of Serious Injuries in the DEA of Reggio Emilia

ABSTRACT BODY:

Abstract Body: Data collection plays a fundamental role in the management of serious injuries. Only by analysing data can serious injury management be assessed, making, where necessary, alterations to the clinical-diagnostic path. It is for this reason that our hospital starting from 1st January 2007, has been using the register of serious injuries as a tool for collecting and processing data, in compliance with regional directives. Included in the register are patients with an ISS above 15, patients who have died in shock room and all patients admitted to intensive care. Using the register, we are able to track the trauma patient throughout their clinical path, or from the event, until they are discharged from hospital, using the 118 forms, the shock room clinical file, the resuscitation clinical file and/or the files from other departments. Ours is an electronic register, linked to the 118, shock room and laboratory analysis computer systems, and is completed for the non-electronic data from the department's clinical file. The type of injury, the dynamics, the time spent in shock room and the treatment conducted at the accident location is recorded within the 118 data; the length of stay in the shock room and the entire clinical-diagnostic-treatment path, with respective time scales, is recorded within the shock room form; and the recovery department logs, in addition to the clinical path described above, the specific treatment path from that department. Finally, a form is completed to assess the patients' long-term outcome. All serious injuries in the province have been centralised within our hospital, the key trauma centre for the whole province. Conclusions: the authors hope that the data collected by the various entities is uniform, assessed and verified by competent bodies. Only by homogeneous collection and data comparison may any changes be made to the clinical path in order to improve the quoad vitam and quoad valetudinem prognoses for victims of serious injuries; they also hope that this data can be added to that which is held in other registers already present in our regional network, such as the serious brain injuries register.

AUTHORS/INSTITUTIONS: L. Trabucco, A. Iori, A. Ferrari, , Dipartimento Emergenza- Urgenza, ASMN, Reggio Emilia, ITALY; E. Becchi, , Anestesia e Rianimazione, ASMN, Reggio Emilia, ITALY;

ABSTRACT FINAL ID: T-140;

TITLE: Do Motorcycle Passengers Have More Severe Injuries than Motorcycle Operators?

ABSTRACT BODY:

Abstract Body: Background: Despite decades of trauma to patients operating or riding motorcycles, there is very few published studies of the difference in injuries between motorcycle operators and passengers following a motorcycle crash (MCC). Motorcycle operators typically do not ride as high off of the ground as passengers and often have more protection from handlebars and a windshield than the passenger. It would seem that passengers would suffer more injury since they are not in control of the motorcycle nor have warning of an impending collision.

Objective: We hypothesize that motorcycle operators have less severe injuries when compared to motorcycle passengers.

Methods: This study is a observational retrospective cohort study of patients in one trauma center's registry from 5/1/1998 – 5/1/2011. This is a Level 1 trauma and teaching hospital located in a semi-rural area adjacent to a busy interstate highway. The trauma registry records the Injury Severity Score (ISS), and motorcycle riders are classified with a specific code with a modifier for patients who are passengers. The ISS of both groups were compared using the Wilcoxon Rank Sum Test with two-sided p value. We defined a minimum difference of 4.0 on the ISS as being clinically significant.

Results: There were a total of 1180 MCC patients. Of these, 1119 were operators and 61 were passengers. The average age for operators was 34.5 years (SD=14.97) and for passengers was also 34.5 years (SD=14.38). The average ISS for operators was 13.6 (SD=11.2) and for passengers was 13.4 (SD=10.4) (p=0.99). This study had an 80% power to detect an ISS difference of 4 between the two groups.

Conclusion: This is the first large study comparing the severity of injury between passengers and drivers of motorcycles following a MCC. The severity of injuries appears about the same between these two groups clinically and statistically. Further study should focus on pre-hospital mortality or different types of injuries to passengers and drivers. In addition, there may be sub-groups (such as age, gender, or speed) that were not examined in this study which can predict differences in injury severity.

AUTHORS/INSTITUTIONS: B. Pickett, T. Jones, Emergency, Scott & White Memorial Hospital, Temple, TX;

ABSTRACT FINAL ID: T-141;

TITLE: A Survey Investigation: Frequency of Eating Fast Food and Orthopedic Health

ABSTRACT BODY:

Abstract Body: **OBJECTIVE:** Obesity is one of the most prevalent diseases in Western society. Fast food is a major contributory factor. Obesity is shown to correlate with orthopedic injury and saturated fat intake with a higher risk of bone loss and osteoporotic fracture. No literature exists establishing the relationship between frequency of eating at fast food restaurants (FFR) and the frequency of orthopedic injuries.

The study aim is to test the correlation between the frequency of eating at fast food restaurants (EaFFR) and the number of orthopedic injuries (OI). **METHODS:** This is a self-report survey study of a convenience sample of 100 subjects recruited in the Emergency Department waiting area of an urban teaching hospital. Body mass index (BMI) was calculated for each. The survey included questions about OI in the previous 5 years, stratifying by injury type and surgical v. non-surgical intervention, and questions about the favorite meal at the favorite FFR, for which nutritional value was calculated. Tabulated values were assessed using chi-square test. Relationships between variables were analyzed using Spearman correlation coefficients. **RESULTS:** The average BMI was 29.4 (SD= 6.62). Average number of orthopedic injuries was 1.06 (SD = 2.11). The rho value of the relationship between the number of meals EaFFR and OI was 0.25 (p-value = 0.0138). EaFFR and the number of fractures sustained was not statistically significant, but there was significant correlation between EaFFR and the number of sprains, strains and ligamentous injuries sustained (rho = 0.30 and p = 0.0024). The relationship between EaFFR and OI was not impacted by age. (Age adjusted correlation= 0.275; p = 0.006). Older subjects were less likely to EaFFR (p = 0.0006). **CONCLUSION:** There is a positive correlation between EaFFR and OI independent of the known correlation between obesity and OI. Younger subjects EaFFR more often than older subjects. These findings may indicate that today's young people will have more orthopedic injuries than their counterparts in earlier generations due to a life time of EaFFR.

AUTHORS/INSTITUTIONS: P. Hurd, L. Moreno-Walton, Emergency Medicine, Louisiana State University School of Medicine, New Orleans, LA; L. Myers, , Tulane University School of Public Health and Tropical Medicine, New Orleans, LA;

ABSTRACT FINAL ID: T-142;

TITLE: Clinical Management of Complicated Skin and Soft Tissue Infections in Southeast Louisiana

ABSTRACT BODY:

Abstract Body: **OBJECTIVES:** This is a data analysis at 2 sites in Southeast Louisiana(SELA) participating in an IRB approved, consented registry of patients(pts) hospitalized requiring IV treatment(tmt) of Complicated Skin and Soft Tissue infections(Inf)(cSSTI) including diabetic foot inf, surgical site inf, abscess, and cellulitis. The study observed current practice of in-pt management of cSSTIs. Comparison is made with outcome of similar pts treated with hyperbaric oxygen(HBO) therapy. **METHODS:** Data was compiled by the SELA EM Research Teams in New Orleans(NO) and Baton Rouge(BR) over 18 months and acquired data on cSSTI treatment once admitted to the hospital. Care was recorded from admission through discharge with one follow-up call. Pts who were pregnant or participating in a clinical trial were excluded as tmt would not be standard care. 25 pts with necrotizing cSSTI, gangrene, or osteomyelitis, likely facing amputation or extensive surgery, were compared to consented pts to determine if use of HBO might change the course of therapy. **RESULTS:** More than 500 pts were screened at the 2 sites with 71 enrolled in NO and 16 in BR. Pt population consisted of 54 males and 33 females ranging in age from 21–74 (avg 48.3). Pt ethnicity was African American 52/87 (59.8%), Caucasian 34/87 (39.1%), 1 Native American. 21 pts received antibiotics prior to presentation in the ER. Pathogens were isolated in 67.8% of pts. Pathogens isolated from surgical site inf not previously infected were distinct. Most pts (56/62) enrolled received initial IV antibiotics in the ER (90.3%), most frequently Vancomycin (72.6%) and Zosyn (54.8%), but included others. In an analysis of 26 pts referred for HBO treatment, amputation or further surgery was avoided in all but 3 cases (88.5%). **CONCLUSIONS:** This study provides a portrait of care of pts with cSSTI and highlights the value of HBO in the management of cSSTIs, especially pts with necrotizing inf and osteomyelitis. Prolonged therapy, more stringent follow-up, and HBO tmt might decrease the burden of tmt failure and amputation. Attention to prophylaxis for surgical wounds might minimize development of inf.

AUTHORS/INSTITUTIONS: D.E. Sibley, L.M. Dunbar, A. Farook, Medicine/Emergency Medicine, Louisiana State University Health Sciences Center, New Orleans, LA; R. Edler, , Louisiana State University Health Sciences Center, Baton Rouge, LA;

ABSTRACT FINAL ID: T-143;

TITLE: Determination of PDGF-AA in Platelet Gel and its Clinical Implications

ABSTRACT BODY:

Abstract Body: **OBJECTIVE:** The platelet gel (PG) is widely used in clinical practice for the treatment of skin and mucosal ulcers, promoting the healing. However, the mechanisms underlying this phenomenon are still under investigation. A key role in tissue regeneration of ulcers is played by growth factors (GF-growth factors) released by the alpha granules of activated platelets: PDGF-AA, PDGF-AB, PDGF-BB, TGF-beta, EGF, IGF I, VEGF. Recent studies in animal models demonstrate the importance of this GF in the activation of immune cells, fibroblasts, osteoblasts and appears to be mitogen for smooth muscle cells and mesenchymal cells. The aim of our study is compare the different methods to prepare the platelet gel and their evaluation over time on the base of the kinetics release of PDGF-AA and clinical outcomes obtained from their use. **METHODS:** Three PG are obtained from whole blood of healthy subjects: platelet rich fibrin matrix (PRFM Cascade Fibrinet® System); PG-clot (Cascade Fibrinet® System); platelet rich fibrin (Vivostat® System PRF®). The three different systems were immersed in a platelet poor plasma (PPP). At 1, 6, 24, 48 and 72 hours of the gelation we determined the levels of PDGF-AA released into the PPP for each of the three gels, by enzyme immunoassay (ELISA, R&D Systems®). **RESULTS:** At ELISA there was no evidence in the time of an increased concentration of PDGF-AA for the PG-clot® (average 500 pgr/ml); for PRFM® was found an increase of 180% at 24 hours after preparation (about 1000 pgr/ml to about 2800 pgr/ml), constant for three days; for PRF® was shown an increase of 480% (from about 500 pgr/ml to about 2900 pgr/ml). Concerning the results of 8 patients with chronic GVHD were enrolled (4 with skin ulcers and 4 with ulcers of the oral mucosa) and treated with homologous Vivostat® PRF® (fig.1-2). All healed after an average of 11 days (min 8- max 28 days) with two applications per week. **CONCLUSIONS:** Our preliminary study hasn't demonstrated any statistical significance but we noticed a strong correlation between the levels of PDGF-AA and the clinical results in addition to the easy applicability of the Vivostat® System PRF®.

AUTHORS/INSTITUTIONS: C. Ronci, A.S. Ferraro, A. Lanti, G. Iuliani, T. Blefari, G. Del Preposto, , Tor Vergata Foundation, Rome, ITALY; O. Chiru, E. Fiorelli, E. D'Alessandro, G. Adorno, G. Isacchi, , Department of Haematology, Tor Vergata University Hospital, Rome, ITALY; M. Villa, M. Grande, F. Rulli, G. Tucci, , Department of Surgery, Tor Vergata University Hospital, Rome, ITALY;

ABSTRACT FINAL ID: T-144;

TITLE: Subcutaneous Emphysema and Pneumomediastinum following Minor Laceration of the Forearm

ABSTRACT BODY:

Abstract Body: CASE REPORT: 21 years old patient arrived to the emergency room after being lacerated. A 3 cm lunar wound that had been sutured, with pain, swelling and emphysema along the arm, shoulder,

AUTHORS/INSTITUTIONS: N.Y. Nasrallah, emergency department, nazareth hospital , Nazareth, ISRAEL;

ABSTRACT FINAL ID: T-145;

TITLE: Nicolau syndrome following diclofenac injection in an emergency department: A case report

ABSTRACT BODY:

Abstract Body: Nicolau syndrome is characterized by severe pain and distinct skin lesions following injection of various drugs. As this syndrome is rare, it may be overlooked at early clinical phase and subsequently, the clinical outcome may be worsened. We report on a 34-year-old female who developed Nicolau syndrome requiring surgical reconstruction following intramuscular diclofenac injection. Understanding the characteristics of Nicolau syndrome and careful surveillance for clinical features may enable physicians to successfully diagnose and treat this condition.

AUTHORS/INSTITUTIONS: J. Ko, M. Choa, K. Kim, J. Yeo, S. Chung, Emergency Medicine, Kwandong Univeristy College of Medicine Myongji Hospital , Koyang, Kyunggi , KOREA, REPUBLIC OF;

ABSTRACT FINAL ID: T-146;

TITLE: A five Year Retrospective Review of our Emergency Department Burn Patients

ABSTRACT BODY:

Abstract Body: Introduction: Burn has been a trauma which could affect humans of all ages during all along the history and is one of the important morbidity and mortality cause from trauma in the world. The aim of this study was to analyze the sociodemographic and traumatic characteristics features of burns cases presenting in our ED. Methods: This is a retrospective study analysing 286 patients referred to our hospital between January 2005 and December 2009. Under the age of eighteen patients were excluded. The analysed data include sex, age, mortality, the reason of the case, cause of burns anatomical distribution of burn injuries, the width and depth of the burn area. Results: Totally 286 patients were included to the study. Mean age was 35.5 ± 15.187 . The majority of patients were in the 20-29 age group (35%). 168 of our patients were male, and 118 were female. Average mortality rate of all our cases was 1.0%. In addition all of the deaths were male. Of the referred patients 142 were wounded by scald, 65 by flame, 61 patients were wounded by hot oil burn, 18 by an electric shock. The most effected parts of the body, in decreasing frequency were upper extremities and then the thoraco-abdominal area, the lower extremities, the head neck face area and genital area. When the percentage of burn area of the body was lower than 20%, the mortality was 0.0% whereas it was 14.3% when the burn area exceeded 20% of the body. While the mortality was 30.0% among the cases with third degree burns there were no deaths among those with second and first degree burns. 9.8% of patients were hospitalized and 87.8% of patients were discharged from ED while 1.4% of patients were transferred to another hospital. Discussion: In our study, the vast majority of the patients (49.7%) were wounded by a scolding burn. We found that surface area of burn larger than 20% was a significant factor on mortality. Conclusion: To create effective programs for preventing burn injuries, should be developed in accordance with specific sociodemographic and traumatic characteristics features. Key Words: Burn Traumas, Emergency Department, Sociodemographic Features.

AUTHORS/INSTITUTIONS: M.B. Sayhan, M. Eralp, , Trakya University Department of Emergency Medicine, Edirne, TURKEY; E. Seçgin Sayhan, , trakya universty department of public health, edirne, TURKEY; C. Kavalci, , numune training and research hospital department of emergency medicine, ankara, TURKEY;

ABSTRACT FINAL ID: T-147;

TITLE: Sterile vs. non-sterile gloves in surgical site infection of contaminated wounds in emergency department

ABSTRACT BODY:

Abstract Body: Surgical site infection is one of frequent nosocomial infections which can lead in severe medical conditions and costs for patient. On the other hand, using sterile or non-sterile gloves in surgery impose different costs to health settings. Lack of enough evidences about the incidence of surgical site infection of contaminated wounds when applying sterile vs. non-sterile (but clean) gloves is a gap in emergency department.

We designed a randomized clinical trial defining inclusion criteria of patients with simple traumatic contaminated wounds who have the antibiotic prophylaxis indication. We excluded patients with other disease and conditions. Patients followed up for 10 days by phone. Rasul-Akram and Seventh Tir Martyrs Hospitals emergency departments, Tehran, Iran were the settings selected for the study. According to Helsinki declaration, ethical issues were considered all over the study. Also this study was registered in IRCT registry (IRCT201011175193N1). We analyzed data with Chi test (Fisher's exact test) in SPSS 17.

222 patients meet the criteria for inclusion and randomly assigned in two groups (111 patients in each group); however, 24 patients in group A (non-sterile gloves) and 12 patients in group B (sterile gloves) did not intended to be followed up by phone. 4 infections in group A and 2 infections in group B were reported and treated. We could not detect statistically significant difference in two groups ($P=0.322$, $CI=95\%$, Fisher's Exact Test=0.98).

Findings show no difference between using non-sterile (but clean) and sterile gloves. As utilizing non-sterile gloves are cheaper than sterile gloves, we suggest another large-scale clinical trial.

AUTHORS/INSTITUTIONS: H. Ghafouri, S. Zoofaghari, , Emergency Department, Sina Hospital, Tahran University of Medical Sciences, Tehran, Tehran, IRAN, ISLAMIC REPUBLIC OF; H. Ghafouri, S. Zoofaghari, , Emergency Department, Rasul-Akram Hospital, Tahran University of Medical Sciences, Tehran, Tehran, IRAN, ISLAMIC REPUBLIC OF; F. Shokraneh, , Research Center for Pharmaceutical Nanotechnology (RCPN), Tabriz University of Medical Sciences, Tabriz, Eastern Azerbaijan, IRAN, ISLAMIC REPUBLIC OF; F. Shokraneh, , Iranian Center for Evidence-Based Medicine (ICEBM), Tabriz University of Medical Sciences, Tabriz, Iran, Tabriz, Eastern Azerbaijan, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: T-148;

TITLE: Continuing problem of burn wound: chronic pain

ABSTRACT BODY:

Abstract Body: Inadequate burn-related pain control contributes to poor functional and psychological outcomes, has directly impact on patient's recovery and quality of life (QL). Burn-related pain is one of the most severe forms of pain experienced by patients.

The aim of study. To investigate the frequency of chronic pain, the quantitative and qualitative assess of their performance, quality of life of patients with burns after 6 months period.

Methods. A cross sectional study carried out in Kaunas medical hospital in Lithuania. Standard McGill Pain Questionnaires (Lithuanian version), numeral analog pain intensity measuring scale (NAS) and health-related quality of life (SF-36) Q were sent by email to burn victims treated in a single burn unit during period of 01/06/2008–30/04/2009.

Results. Response rate - 36.7%. The mean age of respondents - $51,34 \pm 16$. 68.2% of patients indicated that they are suffering from varied intensity of pain in burnt place, 51.6% - felt severe pain in skin donoric site. Patients, experienced wound infection in acute trauma period, indicates higher NAS score ($p=0.03$). 86.3% of our patients were generally noted the emotional scale: one quarter – fearful and one-third - tiring, 84.38% were marked neuropathic pain scales: hot burning -36,4%, gnawing -29,5%, tingling - 20,5% ($p=0.01$). Even 70.4% of our patients due to poor physical well-being and emotional problems were limiting social relationships and communication with friends, 43.2% of patients said that post-burn pain was limited their usual daily activity.

Conclusions. More than half of the patients experienced burn, felt chronic pain in traumatic or donoric place. The intensity of chronic pain directly correlated with the infection of wound during the initial treatment period. Mixed sensory-emotional components were related with chronic post-burn pain. Quality of life in patients experiencing post-burn pain is worse regarding to partial physical well-being, general health disruption and chronic pain.

AUTHORS/INSTITUTIONS: L. Juozapaviciene, , Lithuanian University of Health Sciences University Hospital Kauno Klinikos, Departament of Anaesthesiology, Kaunas, LITHUANIA; N. Jasinskas, E. Vaitkaitiene, D. Vaitkaitis, P. Doboziuskas, K. Stasaitis, , Medical Academy, Lithuanian University of Health Sciences, Departament of Emergency and Disaster Medicine, Kaunas, LITHUANIA;

ABSTRACT FINAL ID: T-149;

TITLE: IGF1 levels, inflammation and nutrition status in middle-age and elderly women with low- energy distal radius fracture

ABSTRACT BODY:

Abstract Body: Background. The distal radius is the most frequent fracture localization. Elderly patients suffer fractures through low-energy mechanisms. IGF1 plays an important role in the maintenance of bone mass and its levels declines with advancing age and in states of malnutrition.

Aim. To investigate, in a pilot study, IGF-1 levels, inflammation and nutritional status in middle-age and elderly women with low-energy distal radius fractures.

Methods. Thirteen women, age 69.1 ± 8.8 years (mean \pm SD), with low-energy distal radius fractures occurring due to fall on slippery ground, indoor or outdoor on snow/ice, were recruited in the emergency room (ER) (visit 1) and follow 1 and 5 weeks (visit 2 and visit 3) after fracture by orthopedic consult. Fractures were diagnosed according to standard procedure by physical examination and X-ray. All patients were conservatively treated with plaster casts in the ER. Patients who afterward needs re-interventions were excluded from our study. Blood samples were drawn in ER and after 1 and 5 weeks. Blood samples were taken within 24h after fracture and analyzed in the routine laboratory.

Results. A significantly higher level of white blood cells (WBCs) were found at visit 1 ($9.8 \pm 3.3 \times 10^9/L$) compared to visit 3 ($7.1 \pm 3.5 \times 10^9/L$) ($p < 0.001$). A tendency to higher levels of high sensitive C-reactive protein (hsCRP) at visit 1 (5.8 ± 7.9 mg/L) compared to visit 2 (1.3 ± 1.0 mg/L) was found ($p = 0.07$). An inverse correlation was found between hsCRP levels and IGF1 levels at visit 1 and 2 (126.1 ± 48.0 μ g/L and 127.4 ± 46.2 μ g/L, respectively). Nutritional status, evaluated by body mass index (24.2 ± 7.8 kg/m²), over arm diameter (28.9 ± 8.9 cm), over arm skin folder (2.5 ± 0.7 cm) and albumin levels (41.0 ± 2.8 g/L), was normal.

Conclusions. In a pilot study, in postmenopausal women with a low-energy distal radius fracture we found signs of inflammation, but not low IGF1 levels or signs of malnutrition.

AUTHORS/INSTITUTIONS: S. Chisalita, M. Wajda, L. Chong, , Department of Acute Health Care, County Council of Östergötland, Linköping, SWEDEN; L. Adolfsson, , Department of Orthopedics, County Council of Östergötland, Linköping, SWEDEN; H. Arnqvist, , Department of Clinical and Experimental Medicine, Faculty of Health Sciences, Linköping University, Linköping, SWEDEN;

ABSTRACT FINAL ID: T-15;

TITLE: Cyberspace – Another Access Point to the ED?

ABSTRACT BODY:

Abstract Body: No Irish Emergency Department (ED) has a stand-alone website. Similarly, there are few websites in existence in the UK/ NHS system. The potential benefits of a web site for an Irish ED include:

- Informing the public how to access the ED
- Health promotion information
- Improving the public awareness of the activities of the ED
- Developing potential research and educational links with other departments
- Attracting new staff from overseas

Sligo General Hospital Emergency Department has pioneered it's own dedicated website, www.edsligo.ie. A structure was designed to construct the website that would be easy to navigate and clear in the information it presented. A commercial web-hosting service was contacted to manage the website content and apply for a domain name.

Information we included on our website was as follows:

- Public information – opening times, location
- Public health messages – meningitis awareness, stroke recognition, road safety awareness
- Personnel information - medical and nursing staffing
- Research & training projects at our hospital
- Information about the local area

The website went live on 20.05.2011. A website hit-counters was used to track website activity – to date there have been over 1000 'hits' on the site from six international locations.

Website design for a modern Emergency Department is an important way of disseminating information to the public and specialty colleagues. Creation of a website allows public feedback about the quality and nature of the service that is provided by our local ED.

AUTHORS/INSTITUTIONS: C. McDermott, M. Sweeney, Emergency Department, Sligo General Hospital, Sligo, IRELAND;

ABSTRACT FINAL ID: T-150;

TITLE: Acute Respiratory Failure Treatment in the University Hospital of Modena during 2009

ABSTRACT BODY:

Abstract Body: **OBJECTIVE:** Oxygen, in the treatment of Acute Respiratory Failure (ARF), has to be given through spontaneous or mechanical ventilation (invasive (VMI) and non-invasive (NIV)). The study aims are to evaluate: 1) the impact of NIV on average outcome and on the length of hospitalization; and 2) the value of the protocol used in Medicina Interna Area Critica (MIAC) for the treatment of ARF with NIV when there is a $pO_2 < 70$ mmHg. **METHODS:** We analyzed the non-paediatric and non-oncological ARF hospitalizations during 2009. We didn't analyze hospitalized patients for reheightening COPD, or cardiorespiratory arrest. **RESULTS:** The final database totaled 253 patients. 1) Out of 253 patients: 149 (58,9%) had been treated with open circuit O₂ therapy, 23 (15,4%) of whom died and 126 (84,6%) had been discharged. 54 (21,3%) had been treated with NIV, 15 (27,8%) of which died and 39 (72,2%) had been discharged. 50 (19,8%) had been treated with VMI, 31 (62%) of these died and 19 (38%) had been discharged. Patients treated with NIV and dead were older patients with many co-morbidities. The length of hospitalization was reduced in patients treated with NIV (6,65 days VS 10,49). 2) We analyzed the patients hospitalized in Pneumology and in MIAC, treated with normal oxygen therapy (118 patients): 89 (75,4%) patients showed $pO_2 < 70$ mmHg: 11 (12,4%) of which died and 78 (87,6%) had been discharged. 29 (24,6%) patients showed $pO_2 > 70$ mmHg: 22 (75,9%) had been discharged and 7 died (24,1%). The 7 dead patients with $pO_2 > 70$ were older and with co-morbidities. We analyzed patients treated with NIV in the same departments (46): 35 patients had $pO_2 < 60$ mmHg; 6 (17,14%) died and 29 (82,86%) had been discharged. 11 patients had pO_2 between 60 and 70 mmHg; 7 (63,64%) had been discharged and 4 (36,36%) died. The dead ones were elderly patients (medium age 90,25 years old). **CONCLUSIONS:** In conclusion, NIV treatment should be incentivised because the average length of hospitalization and the necessity of intubation appears decreased. Notwithstanding the small amount of cases, the outcome data support the validity of the protocol applied by MIAC.

AUTHORS/INSTITUTIONS: L. Brugioni, C. Gozzi, M. Tognetti, D. Vivoli, D. Grisanti, F. Donati, , Medicina Interna ed Area Critica Policlinico di Modena, Modena, Modena, ITALY;

ABSTRACT FINAL ID: T-151;

TITLE: Pulmonary Embolism Presenting as Lactic Acidosis

ABSTRACT BODY:

Abstract Body: INTRODUCTION: Pulmonary Embolism is often a difficult diagnosis to make in the absence of diagnostic imaging. CASE REPORT: We present a case of a previously fit and well 36 year old male who presented to the emergency department with dyspnea and chest pain. He was initially treated as a probable pulmonary embolism with LMWH but deteriorated and subsequently developed a profound lactic acidosis, deranged liver function tests, acute kidney injury and hyperkalemia with an elevated troponin and d-dimer. CTPA showed bilateral pulmonary emboli for which he was thrombolysed and made a full recovery. DISCUSSION: The authors postulate that the manifestation of his condition was due to liver, kidney and adrenal hypoperfusion causing ischaemic hepatitis and transient adrenal insufficiency possible due to unidentified thrombus elsewhere.

AUTHORS/INSTITUTIONS: G. Tunnard, , St Thomas Hospital, London, UNITED KINGDOM;

ABSTRACT FINAL ID: T-152;

TITLE: Exercise Induced Bronchospasm and Asthma Susceptibility: Could It Be a Water Channel Problem?

ABSTRACT BODY:

Abstract Body: Background: Muscarinic receptor agonists increase water secretion from the acinar cells of respiratory, sweat, salivary and lacrimal glands through a family of water channel proteins called aquaporin (AQP). Mice lacking the gene for aquaporin (AQP)5 exhibited marked reduction in glandular secretion and increased methacholine-induced bronchoconstriction when compared to normal mice. Individuals with exercise induced bronchoconstriction (EIB) also exhibit enhanced airway responsiveness to methacholine challenge testing (MCT) and diminished capacity for airway hydration. Because AQP5 in humans is also expressed in respiratory, sweat, salivary and lacrimal glands, we hypothesized that those individuals with EIB and excessive bronchiolar reactivity should also exhibit decreased muscarinic receptor dependent sweat, salivary and tear gland secretion. Using the muscarinic agonist-induced sweat secretion as a surrogate marker for AQP5 function in the respiratory tract, we compared the subject's sweat production to their MCT result.

Objective: To assess the correlation between exercise induced bronchospasm and the AQP5 gene function and/or its expression.

Method: 56 healthy subjects, ages 18-40, evaluated for new onset exercise induced bronchospasm were included. The investigators were blinded to the results of the MCT. Means of the values obtained between cohorts were compared with an unpaired t-test and a p-value < 0.05 was considered to be statistically significant.

Results and Statistical Analysis: Of the 56 patients, 22 were "+" and 34 "-" to MCT. The mean fall in FEV1 expressed as % fall +/- SEM, were 27.9 +/- 1.6 vs. 9.0 +/- 1.1, respectively n=56, p <0.0001 Sweat secretion from the two groups expressed in mg sweat/cm² skin/20 min +/- SEM were 37 +/- 3 vs. 59 +/- 3, n =56, p <0.0001 Linear regression analysis showed a statistically significant inverse correlation between the % fall in FEV1 and sweat volumes, n=56, r = -0.59, p < 0.0001

Conclusion: Defect in the human AQP5 may help explain the diminished capacity for airway hydration that results in exercise induced bronchospasm.

AUTHORS/INSTITUTIONS: C.W. Park, D.M. Macian, Emergency Medicine, Naval Medical Center Portsmouth, Portsmouth, VA; W. Lockette, C.M. Stafford, , Naval Medical Center San Diego, San Diego, CA;

ABSTRACT FINAL ID: T-153;

TITLE: Spontaneous Tension Pneumothorax in young man

ABSTRACT BODY:

Abstract Body: 20 year old man presents to the emergency department with a chest pain in left side for about two hours, without dyspnea. He denies trauma,cough,before the pain. His medical history Without disease ,he denies any prior surgeries ,and there was no family history of emphysema or connective-tissue disease. he does not smoke tobacco, drink alcohol, or use illicit drugs. An ECG and arterial blood gases were done at triage (see panel 1,2). On physical examination, his respiratory rate was 18 breaths per minute, oxygen saturation 96% while he was breathing ambient air, Pulse is regular, with a rate of 121 beats/min. Blood pressure is 120/80 mm Hg ,temperature is 36.8°C. auscultation of the heart reveals a normal S1 and S2, with no murmurs or rub.A chest examination revealed decreased breath sounds on left side,and resonance on percussion. A chest x-ray showed massive left pneumothorax with ipsilateral lung collapse and ragged on the opposite side of the mediastinum (see figure 1).A chest tube was inserted immediately (see figure 2).A subsequent chest x-ray was performed after two days showed expansion of the collapsed lung.(see figure 3).The lung fully expanded after a few days. after one week was performed CT of the thorax showed no lung disease,(no emphysematous changes or connective-tissue disease).The patient was discharged in good health condition without clear cause of pneumothorax.

AUTHORS/INSTITUTIONS: S.Z. Ziyada, M. Salim, B. Corrias, F. Pugliese, , Sandro Pertini Hospital Emergency Department, Rome, ITALY; E. Mancini, , Sandro Pertini Hospital,Surgery Department, Rome, ITALY;

ABSTRACT FINAL ID: T-154;

TITLE: Angiotensin converting enzyme inhibitors induced angioedema, a challenge for the emergency services

ABSTRACT BODY:

Abstract Body: PURPOSE:

Angiotensin converting enzyme inhibitors (ACEI) are the standard treatment for heart failure. Among the adverse effects associated with ACEI, the occurrence of angioedema, which can be fatal in up to 20% of cases, stands out. Here we present a case of glottic angioedema in a female patient with a number of comorbidities under treatment with enalapril.

SUMMARY:

An 82 year old female patient with a history of hypertension under treatment for 3 months with enalapril (Renitec) presented to the emergency department with severe symptoms of oedema of the tongue and inflammation of the floor of the mouth of 2 hours duration. Glucocorticoids (methylprednisolone), antihistamines and epinephrine were prescribed. Despite the treatment begun, the symptoms worsen, almost completely obstructing the airway. Suspecting angioedema associated with enalapril treatment, icatibant (Firazyr) was administered, after which the symptoms improved significantly within a few minutes of treatment, reaching almost complete remission after 7 hours stay in the emergency department. Enalapril was discontinued at discharge and replaced by a calcium channel blocker and the patient was referred to the allergy department to complete testing and proper follow up.

CONCLUSION:

Despite a lack of specific treatments for this type of angioedema, the similarity of the pathogenic mechanisms of hereditary angioedema (HAE) and angioedema secondary to treatment with ACE inhibitors, both of which are mediated by increased bradykinin levels in the blood, suggests, as shown by our case, that the bradykinin B2 receptor antagonist icatibant, approved for treatment of symptoms of acute episodes of HAE, can greatly benefit patients experiencing acute episodes of angioedema secondary to treatment with ACE inhibitors.

AUTHORS/INSTITUTIONS: F.J. Colorado Sampere, M. Blanco Anguís, J. Fernández Cejas, A. Perez Tornero, Servicio de Urgencias, Hospital Civil, Málaga, Málaga, SPAIN; F. Moya Torrecillas, Hospital Xanit Internacional, Benalmádena, Málaga, SPAIN;

ABSTRACT FINAL ID: T-155;

TITLE: Facial erythema by adverse events of medications

ABSTRACT BODY:

Abstract Body: Purpose:

A case of angioedema associated with nonsteroidal anti-inflammatory drugs (NSAIDs) plus angiotensin-converting enzyme (ACE) inhibitors in a stable patient is reported.

Summary:

A 58 year-old male with no known drug allergies and a history of hypertension and rheumatoid arthritis arrived at our Emergency Department (ED) with facial erythema, oedema of the tongue, dysphagia, breathing difficulties and rash. Symptoms appeared 10 hours prior to his arrival to ED. He presented erythema, oedema of the tongue and no injuries to thorax or limbs. He did not report pain, fever, vomiting or diarrhoea. His usual medication included Enalapril 10 mg /d, omeprazole 40 mg/d, metamizole 575 mg/8h, and methotrexate 7 mg twice a week. He had no family history of allergies and had never experienced an angioedema attack before.

We treated patient with anti-allergic agents (methylprednisolone and dexchlorpheniramine) and after 30 minutes we could see that the drugs given were not being effective, so we administered Icatibant 30 mg subcutaneous (SC). It took us 4 hours to achieve an improvement of symptoms. The only adverse event experienced was erythema at the injection site.

During the follow-up visits it was concluded that the combination of ACE inhibitors and NSAIDs was most likely the cause of angioedema in this patient. When he was discharged from hospital we switched his therapy to angiotensin II receptor blockers (ARBs) and acetaminophen.

Conclusion:

Icatibant was effective in treating an angioedema attack likely to be induced by a combination of ACE inhibitors and NSAIDs.

AUTHORS/INSTITUTIONS: R. Torres, A. Martínez Virto, E. Muriel Patino, A. Rivera Nuñez, R. Gomez Bravo, M. Quintana Díaz, , Hospital La Paz, Madrid, SPAIN;

ABSTRACT FINAL ID: T-156;

TITLE: Development of a Non-Invasive Vagal Nerve Stimulator for Treatment of Acute Asthma Exacerbations

ABSTRACT BODY:

Abstract Body: Objectives: To demonstrate safety and efficacy of non-invasive vagal nerve stimulation (nVNS) for the potential treatment of asthma exacerbations in patients not responding to standard of care therapy (SOC).

Background: Neuronal mechanisms play a significant role in regulating bronchial airway tone and their dysfunction has been associated with many symptoms of asthma. Recently, a novel vagus nerve stimulator (VNS) was shown to be effective in reducing histamine-induced bronchoconstriction in guinea pigs and swine (Hoffmann, 2009). Preliminary feasibility data for treating asthma exacerbations in the ED with a percutaneous VNS device was encouraging. One hour of VNS significantly improved FEV1 and reduced hospital admissions in subjects who failed 1 hour of SOC, as compared to a non-randomized observational cohort (Miner, 2011 abstract). nVNS may be an adjunct or alternative treatment for asthma, both for use in the ED or at home. Methods: A proprietary electrical signal and non-invasive delivery system (AlphaCore™) were developed. To confirm that the AlphaCore had a similar safety and efficacy profile as percutaneous VNS, the device was tested in an established hypersensitive beagle asthma model. In stage 1, changes in airway resistance, BP, and HR were monitored during nVNS. In stage 2, dogs were subjected to methacholine (Mch) challenges inducing about 100% increase in airway constriction, and were then treated with AlphaCore for 2 minutes. Dogs were then repeatedly challenged with the same dose of Mch at 1, 15 and 30 min and every 30 min thereafter for up to 2 hours. Results: In Stage 1, 2 minutes of nVNS had no significant effect on HR, BP, or airway resistance. In Stage 2, two minutes of nVNS significantly attenuated Mch induced bronchoconstriction. The effect occurred within 1 minute, was maintained for the entire 2 hour study, and appeared to be as effective as albuterol in the same model (Fig 1). Conclusions: These data suggest that nVNS may provide a rapid, safe, and effective treatment for asthma exacerbations.

AUTHORS/INSTITUTIONS: B. Simon, J. Majdanska, T. Hoffmann, , ElectroCore, Morris Plains, NJ; E.G. Barrett, K. Rudolph, , Lovelace Respiratory Research Institute, Albuquerque, NM;

ABSTRACT FINAL ID: T-157;

TITLE: Admission to a Clinical Decision Unit for investigation of suspected pulmonary embolism reduces hospital length of stay.

ABSTRACT BODY:

Abstract Body: Introduction: A Clinical Decision Unit [CDU] is a designated area in the Emergency Department [ED] that allows for short term observation, treatment and diagnostic investigation which up to 24 hours. There are 10 beds in the CDU that admit specified medical conditions including suspected pulmonary embolism [PE]. PE is a common medical condition that is associated with considerable morbidity and mortality. Often such patients are stable and can be safely admitted to the CDU for observation and diagnostic testing, such as a CT pulmonary angiogram [CTPA] or a ventilation perfusion scan [VQ scan]. The main objectives of the study included the average length of stay [ALOS] for patients with suspected PE in the CDU and to determine if the choice of investigation contributes to a longer ALOS. Methods: All patients presenting to the ED with suspected PE were admitted to the CDU. CTPA or VQ scan were performed to exclude the diagnosis of PE. Result: There were 160 patients admitted to CDU for suspected PE in 2010. There were 31 males [19%] and 129 females [81%]. The main presenting complaint for patients with suspected PE was chest pain [73%] and by dyspnoea [13%]. The ALOS in CDU was 1.9 days. There were 84 patients who had a CTPA [53%] and 76 patients who had a VQ scan [47%]. The ALOS for VQ was longer than CTPA [2.1 days vs. 1.9 days]. Conclusion: The ALOS for a VQ scan is much longer than a CTPA. This can be explained by the process involved in performing a VQ scan. It normally involves 2 parts of imaging, which are required to be performed 24 hours apart. British Thoracic Society [BTS] recommended CTPA should be the initial lung imaging modality for suspected PE. However in some instances, VQ scan can be performed for low and intermediate pre-test probability. The choice of investigation will depend on the availability of diagnostic test, co-morbid illness and pre-test probability. BTS recommends a diagnostic test should be performed ideally within 24 hours for non massive PE. Any delay in performing or reporting a VQ scan should prompt the physician and radiologist toward CTPA.

AUTHORS/INSTITUTIONS: T. Hassan, U. Mc Hugh, M. Rochford, J. Gray, , Adelaide and Meath Hospital, Incorporating National Children Hospital, Dublin, IRELAND;

ABSTRACT FINAL ID: T-158;

TITLE: Abdominal Pain as a Symptom for Pulmonary Thromboembolism

ABSTRACT BODY:

Abstract Body: Introduction: Abdominal pain is a rare symptom for pulmonary thromboembolism. We report a case with symptoms abdominal pain and hemoptysis and diagnosis of pulmonary embolism. Case: 24 yo male patient with abdominal pain for four days was consulted in the ED. His pain was on right upper quadrant at first 3 days. The last day pain was on left upper quadrant. No nausea and vomiting. Defecation was normal. He was hospitalized and treated for acute bronchitis for 1 week ago at a medical center. There were coughing and bloody sputum for a week but there were no shortness of breath and chest pain. Vital signs: blood pressure 130/80 mmHg, heart rate 86/min, respiratory rate 20/min, body temperature 38.2°C, pulse oxymeter 99%. On physical exam, ral at right lower chest area, epigastric and left upper quadrant tenderness. No signs of peritoneal irritations. His ECG was sinus rhythm, DIII-V1-2-3 T wave negative. Labs, chest x-ray, abdominal x-ray, bed-side abdominal ultrasonography were normal. During the follow up in the ED, his abdominal pain was increased. His abdominal pain was relieved after enema. After he was consulted with a doctor from chest disease for bloody sputum, he was discharged. He came back to the ED after 20 h. Signs and symptoms were similar to the first time. On result of blood gas analysis pH:7.53, pO₂: 77.6 mmHg, pCO₂:25.6 mm, HCO₃:24.4mmol/L, SatO₂: 96.9% and D-dimer: 34730 ng/mL. On multislice chest CT, there were emboluses within both of pulmonary arteries (Figure 1), right femoral and popliteal veins. The patient was hospitalised and treated for pulmonary embolism. Conclusion: Pulmonary thromboembolism was frequent and sometimes hidden diagnosis in the ED. ED practioners always suspect for pulmonary thromboembolism when the presence of hemoptysis and abnormal vital signs, even absence of clear risk factors.

AUTHORS/INSTITUTIONS: H. Ozcelik, N. Acar, A.A. Cevik, E.A. Ozakin, Healthcare Professional (Hospital), Eskisehir Osmangazi University, Eskisehir, TURKEY;

ABSTRACT FINAL ID: T-159;

TITLE: FACTORS THAT MODIFY MORTALITY IN PATIENTS WITH NON INVASIVE MECHANICAL VENTILATION

ABSTRACT BODY:

Abstract Body: The aim of this study was to evaluate the clinical and laboratory items that modify the possibility of death during hospitalization in patients with non invasive mechanical ventilation (NIMV) for respiratory failure (RF). We performed a prospective descriptive study of 25 patients, treated with NIMV in the Emergency Department. Demographic data, medical record, blood test and mortality were assessed during admission. We conclude that nearly one third of patients admitted to the emergency department who recieved treatment with NIMV died. The initial diagnosis of acute hypoxemic and hypercapnic RF was associated with higher rates of death. Exacerbation of chronic RF had lower mortality. Low blood presure, both systolic and diastolic at the begining was related to a higher risk of death.

AUTHORS/INSTITUTIONS: S. Navarro Gutierrez, Emergency Medicine, Hospital de La Ribera, Alzira, Valencia, SPAIN; C. Herraiz de Castro, F. Gonzalez Martinez, S. Losada Ruiz, P. Franquelo Morales, M. Alcantara Alejo, A. Panadero Sanchez, , Hospital Virgen de la Luz, Cuenca, Cuenca, SPAIN;

ABSTRACT FINAL ID: T-16;

TITLE: The Epidemiology of Rabies in North-West of Iran: Tabriz Sina Hospital, Department of Combat Rabies

ABSTRACT BODY:

Abstract Body: **OBJECTIVE:** By considering the increased trend of keeping pets and hunting dogs in rural areas and low proper control of wild and stray animals, it seems the bites of wild animals is increasing while accurate statistics about animal bites and rabies vaccination is not available. The aim of this demographic study is to collect information about animal bites and injured people. **METHODS:** This is a cross sectional and descriptive study. In this study we reviewed who was bitten by animals and referred to the Department of Combat Rabies in Sina Hospital from 20th of March 2008 up to 20th of March 2011. We gathered data and then analyzed them with SPSS.15 statistical program. **RESULTS:** 1084 patients were included, 84.7% were male, 71.7% were city residents. The most common animal bite was dog bite (72.4%) which mostly happened in home (45.8%) most of the animals kept under observation (80.4%). The history of rabies vaccinations was positive in only 1.4% of patients. Most of the bites happened in May, March, April and January and December. **CONCLUSION:** By considering our observation who lives in big cities and have no appropriate information and also not enough knowledge about keeping pets at home. This results in an increase of number of people bitten in rural areas and specifically on upper parts of the body which are more exposed areas and this can be solved by providing essential education for proper keeping of pets at home.

AUTHORS/INSTITUTIONS: S. Shams Vahdati, N. Mesbahi, , Emergency department Tabriz university of medical science, Tabriz, IRAN, ISLAMIC REPUBLIC OF; P. Habibollahi, , pharmacist, Tabriz university of medical science, Tabriz, IRAN, ISLAMIC REPUBLIC OF; S. Shams Vahdati, M. Anvarian, P. Habibollahi, , education development center and talented students' office, Tabriz university of medical science, Tabriz, IRAN, ISLAMIC REPUBLIC OF; M. Anvarian, , veterian, Tabriz Azad University, Tabriz, IRAN, ISLAMIC REPUBLIC OF; R. Talaei, , department of combat rabies, Tabriz, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: T-160;

TITLE: CLINICAL AND ANALYTICAL IMPROVEMENT IN PATIENTS TREATED WITH NON-INVASIVE MECHANICAL VENTILATION IN THE EMERGENCY DEPARTMENT

ABSTRACT BODY:

Abstract Body: The aim of this study was to evaluate the clinical and laboratory findings in patients with respiratory failure (IR) who required invasive mechanical ventilation (NIMV) in the Emergency Department. We compared clinical and subjective improvement with gasometric data, collected at different times after starting NIMV. We assessed as well, side effects of NIMV masks.

Most patients reported improvement of dyspnea with NIMV. This improvement was reported in most cases within an hour of NIMV. There was no evidence that clinical improvement was accompanied by subjective improvement in laboratory findings.

Low rate of side effects related to NIMV masks were reported.

AUTHORS/INSTITUTIONS: S. Navarro Gutierrez, Emergency Medicine, Hospital de La Ribera, Alzira, Valencia, SPAIN; S. Losada Ruiz, F. Gonzalez Martinez, C. Herraiz de Castro, P. Franquelo Morales, M. Alcantara Alejo, , Hospital Virgen de la Luz, Cuenca, Cuenca, SPAIN;

ABSTRACT FINAL ID: T-161;

TITLE: INITIAL NONINVASIVE MECHANICAL VENTILATION PARAMETERS AND POSSIBILITY OF DEATH DURING ADMISSION

ABSTRACT BODY:

Abstract Body: We assessed the possibility of death during admission in patients with respiratory failure (RF) related with different initial non invasive mechanical ventilation (NIMV) parameters

We conducted a prospective descriptive study of 25 patients who were treated with NIMV in the Emergency Department (ED)

Sociodemographic data were collected as well as, inspiratory pressure (IPAP), expiratory (EPAP), frequency and oxygen flow, late respiratory failure and tolerance to the interface. We assessed admission length of stay and death rate.

We conclude that 29% of patients requiring NIMV for IR in the ED, died during admission. No differences were reported among NIMV starting parameters. The general trend is that patients who survived, rarely had late failure, although statistical significance was $p = 0.07$.

Patients who required initial (NIMV) in the ED, died within 4 days.

AUTHORS/INSTITUTIONS: S. Navarro Gutierrez, Emergency Medicine, Hospital de La Ribera, Alzira, Valencia, SPAIN; C. Herraiz de Castro, F. Gonzalez Martinez, S. Losada Ruiz, M. Alcantara Alejo, E. del Olmo Carrillo, , Hospital Virgen de la Luz, Cuenca, Cuenca, SPAIN;

ABSTRACT FINAL ID: T-162;

TITLE: A Case Report: Acute Abdomen following Dermoid Cyst Rupture in a Young girl - Role of Prehospital Emergency Ultrasound

ABSTRACT BODY:

Abstract Body: INTRODUCTION: The diagnosis of acute abdomen due to ruptured ovarian cyst in prehospital condition is difficult to make on the basis of symptoms and physical findings. Unfortunately, delayed intervention can lead to irreversible damage and even loss of the life. This report describes a finding seen on prehospital ultrasonography that may lead to the correct diagnosis. CASE REPORT: A 17 year old young girl, accompanied by her school friend, came into the EMS complaining of abdominal pain. Earlier this morning, a school friend had arrived at the patient's home and found her alone then complaining of sudden abdominal pain. The patient came on foot, she was scared, pale and without sweating. On examination, BP was 98/55 mmHg, HR was 110\min, RR was 16\min, oxygen saturation is 96%, and temperature is 36.5°C. Her Glasgow Coma Scale score was 15. Breath and heart sounds were clear and regular. The abdominal examination is notable for marked tenderness over the whole abdomen with some guarding in the low abdomen. The pain deteriorated by coughing and tapping. The patient was virgin with regular period. Transabdominal sonography of the pelvis showed a large amount of free fluid with particulate matter in the cul de sac and around the left adnexal region. The left ovary showed remnants of what appeared to be a ruptured hemorrhagic cyst. The right ovary shows a cystic mass with a solid, highly echogenic "dermoid plug" and in addition, a "dermoid mesh" is also seen, an irregular echogenic solid mass within the cyst. Echogenic debris is seen floating within the fluid. The patient was transported to hospital as a critical patient with prehospital diagnosis: Hemorrhagic shock, Acute abdomen, Ovarian cyst rupture, Abdominal tumor. The patient was operated in the first hour of admission to the hospital without repeating ultrasound. DISCUSSION: Prehospital emergency ultrasound is possible, feasible and has particular importance in critically ill patients.

AUTHORS/INSTITUTIONS: T. Rajkovic, T. Micic, D. Jankovic, S. Ignjatijevic, V. Janackovic, , Emergency medical servis Nis, Nis, SERBIA; V. Janackovic, , Military hospital, Nis, SERBIA;

ABSTRACT FINAL ID: T-17;

TITLE: Profile and Injury Patterns of Passenger Vehicle Occupants in Motor Vehicle Crashes

ABSTRACT BODY:

Abstract Body: Study Objectives:

Singapore is a densely built up urban city with an ever increasing vehicle population. Injuries sustained in road traffic accidents lead to significant morbidity and mortality each year. This study aims to examine the profile, crash characteristics, injury patterns and medical outcomes associated with passenger vehicle occupants involved in a motor vehicle crash (MVC).

Methods:

The medical records of all passenger vehicle occupants who presented to Tan Tock Seng Hospital's Emergency Department in 2006 after a MVC were retrospectively reviewed. Demographics, diagnosis, disposition and clinical summaries were extracted from the hospital's real time computer system and paramedic ambulance sheet.

Results

The records of 1458 consecutive patients were reviewed. The mean age of these patients was 39, with 897 males (61.5%) and 561 females (38.5%). With regard to injury patterns, female patients sustained significantly more pelvic fractures than male patients ($p<0.05$). The lack of seat belt use was associated with significantly more rib and sternum fractures ($p<0.05$), vertebral column fractures ($p<0.05$), open wounds ($p<0.01$) and facial fractures ($p<0.01$). Patients who had consumed alcohol sustained significantly more severe and critical injuries (Abbreviated Injury Scale score of 4 or 5) than those who did not ($p<0.05$). The mean injury severity score (ISS) for patients admitted to the intensive care unit (ICU) or high dependency unit (HD) was 17.0, while the average length of hospitalisation was 32.1 days. Conversely, the mean ISS for those not admitted to the ICU or HD was 1.8, while the average length of hospitalisation among those admitted to the general ward was 7.7 days.

Conclusion:

The results revealed injury profiles and demonstrate a clear association between alcohol consumption and the lack of seat belt use with significant injury patterns. Patients who sustain more severe injuries require more intensive use of hospital resources and longer periods of hospitalisation.

AUTHORS/INSTITUTIONS: T. See, , Tan Tock Seng Hospital, Singapore, SINGAPORE;

ABSTRACT FINAL ID: T-18;

TITLE: The paper of pediatric advanced simulation to prepare Galicia community's response strategy in h1n1 previsible pandemia

ABSTRACT BODY:

Abstract Body: Introduction: The Autonomous Community of Galicia public health system has developed a contingency planning to respond to the influenza A (H1N1) pandemia. This is a multidisciplinary and multifaceted plan that follows international recommendations and includes efforts to improve the preparedness of the emergency pre-hospital medical staff to urgently assist and transport. Our objective was to design and implement an advanced simulation course specifically directed to fill this need.

Methods: A group of instructors with extensive experience in advanced simulation at the levels of case design and development as well as in pediatric simulation courses with the Simbaby® system worked to reproduce four relevant scenarios that should represent the main situations in the prehospital assistance to children who might develop respiratory failure in the context of influenza A. The main teaching objective was the adequate initial evaluation and treatment including, if indicated, airway management, mechanical ventilation and transport. These cases will be the core content of the 4 hours simulation course.

Results: After reviewing the available evidences about epidemiology, clinical manifestations and risk factors for impending respiratory failure as a consequence of a influenza A (H1N1) infection, four cases were chosen, developed and implemented in the simulation system: 1) previously healthy infant with fever and respiratory distress, 2) infant with antecedents of bronchiolitis and current respiratory distress and hypoxemia, 3) preschool asthmatic child who present with fever, cough and dyspnea, 4) infant with prior neuromuscular disorder who presents with fever and severe hypoxemia.

Conclusions: Advanced medical simulation is a recognized tool to improve health care staff performance at individual and team levels but it needs to be flexible in order to fit eventual and unexpected training needs. The challenge of influenza A (H1N1) is a good example of the potential utility of advanced pediatric simulation to rapidly address new and changing assistance demands.

AUTHORS/INSTITUTIONS: J. Iglesias-Vazquez, L. Sanchez-Santos, A. Rodriguez Núñez, M. Chayan Zas, J. Aguilera Luque, V. Barreiro Diaz, Educational Center, Public emergency Service of Galicia, Santiago de Compostela, A Coruña, SPAIN;

ABSTRACT FINAL ID: T-19;

TITLE: Parental Misconceptions Regarding Vaccines Still Persist

ABSTRACT BODY:

Abstract Body: Public perception regarding the safety and usefulness of vaccines remains an important factor in vaccination rates among children. **Objective:** To elucidate parental knowledge regarding efficacy/safety of vaccine in parents presenting to the ED. **Methods:** Design: Prospective observational study. Setting: A suburban hospital with a dedicated pediatric ED that sees 23,000/yr. **Subjects:** Convenient sample of parents with children between the ages of 6 months and 18 yrs of ages presenting to the ED between Jan. and Apr. of 2010. **Exclusion:** critically ill child, incomplete data, or prior participation. **Protocol:** After initial treatment of the patients presenting medical condition, the study investigator administered a standardized close-ended questionnaire, after obtaining verbal informed consent. This study was approved by our IRB. **Results:** A total of 274 questionnaires were completed. Children age distribution: 11% (N=30) were under a year old, 22% (N=60) were 2-5 years old, 29% (N=80) were 6-11 years old and 37% (N=101) were 12-17 years old. Only 44% (121) of adults report having received the seasonal flu vaccine, yet 58% (N=159) of their children had. Twenty-four percent (N=66) of parents believe that the flu vaccine can cause the flu. Ten percent (N=27) believe vaccines don't protect their child from the flu. 15% (N=41) of parents feel that the flu is a mild illness that is not dangerous to their child. Less than 3% (N=7) of parents believed that the swine flu virus causes mild disease. Ten percent believe that vaccines can cause autism and 50% are unsure. Thirteen percent believe that vaccines weaken the immune system. Twenty percent (N=55) were not sure. Eighteen percent (N=49) of parents have refused a vaccine for their child. Four percent (N=12) believe that vaccines are promoted mainly to make money for drug companies and twelve percent (N=33) are not sure. Two percent (N=5) believe that doctors get paid a lot of money when they give vaccines. **Conclusions:** There continues to be a significant number of misconceptions regarding vaccines in the community.

AUTHORS/INSTITUTIONS: F. Fiessler, H. Books, , Morristown Medical Center, Morristown, NJ;

ABSTRACT FINAL ID: T-20;

TITLE: Burns in a rural Greek district hospital

ABSTRACT BODY:

Abstract Body: Burns are one of the most significant health problems throughout the world .Aim of this study was to describe the management and outcome of case with burns admitted to a rural district hospital during a 3 year period (2003,2004,2005) . A retrospective analysis was performed in all of the case notes of consecutive cases of burns. 58 individuals (50 men-86, 2 % , 8 women- 13, 8 % , median age 41 years) presented to the outpatient department and 38 were admitted (65,5 %) . The average length of stay was 10 days. The major parts of the burns were caused by accidents and the main cause was an open flame. The average burned body surface was 8 % and most had first degree burns. Most common complication encountered during their hospital stay was wound infection. The most common organisms causing wound infection were Pseudomonas and Acinetobacter. Accurate support for burn patients appears to be necessary during the hospital permanence.

AUTHORS/INSTITUTIONS: N. Syrmos, N. Kapoutzis, A. Televantos, , Surgical Department, Goumenissa General Hospital,, Surgical Department, Goumenissa General Hospital,, GREECE;

ABSTRACT FINAL ID: T-21;

TITLE: Parental Knowledge and Emergency Department Staff Instruction Involving Child Safety Seat Use After Involvement in Motor Vehicle Collisions

ABSTRACT BODY:

Abstract Body: Objective: 200,000 children are injured in motor vehicle collisions yearly. MVCs are the leading cause of death for children ages 2 to 14. Proper child safety seat use reduces the number of fatally injured infants by 71% and toddlers by 54%. The objective of this study was to assess parental knowledge of child seat safety use and to determine the frequency that child safety seat specific discharge instructions are provided to parents by ED personnel.

Methods: We performed a quantitative study using telephone surveys of parents to determine understanding of child safety seat use and incidence of ED and pre-hospital personnel providing discharge instructions on child safety seat use. Guardians of children <8 years old presenting to the ED after being involved in an MVC were identified. Guardians were contacted within 72 hours of their ED visit and a scripted 12-question survey was administered.

Results: Ninety-two guardians were identified and surveys were completed. 82% reported they were not given child safety seat instructions. Of the 18% who reported receiving instructions, 7 received them from a physician; 6 received them from pre-hospital personnel; and 4 received them from ED nurses. 74% of guardians were unaware that a safety seat must be replaced after any MVC. 33% of guardians were unable to identify the criteria to change a rear-facing infant seat to a forward-facing one. 67% of guardians could identify North Carolina State Law requirements mandating children <8 years of age or <80 pounds must be restrained in a child safety seat. Only 86% of guardians reported that their child always uses a safety seat. Five percent of the children identified for this study were not restrained in a safety seat at the time of the MVC.

Conclusions: This study demonstrates parents are not aware of the appropriate use of child safety seats, particularly safety seat replacement following an MVC. ED providers have an excellent opportunity to educate parents and are in a unique position to decrease morbidity and mortality by promoting injury prevention.

AUTHORS/INSTITUTIONS: L. Lawson, L. Patterson, V. Corbin, Department of Emergency Medicine, East Carolina University, Greenville, NC;

ABSTRACT FINAL ID: T-22;

TITLE: Child Safety Seat Counseling in the ED: Why don't we do it?

ABSTRACT BODY:

Abstract Body: Objectives: Motor vehicle collisions are the leading cause of death for children ages 2 to 14. A prior survey of parents at our institution demonstrated a lack of proper discharge instruction by staff members regarding the recommended use of child safety seats. Our objective was to understand ED personnel knowledge of child safety seat recommendations and to identify barriers to providing safety seat education to guardians.

Methods: We surveyed ED personnel to determine their knowledge of Child Safety Seat Laws and Recommendations and to identify barriers to providing discharge instruction.

Results: 143 full-time ED staff members were surveyed. 86% (123) completed surveys: 18 attending physicians, 40 resident physicians, 63 nurses, and 2 social workers. 84.5 % of respondents never or rarely provided discharge instructions on safety seat use. Respondents identified lack of printed educational resources for patients, followed by lack of staff knowledge as the most significant barriers to educating guardians on safety seats. Fewer than 24% of respondents identified NHTSA conditions that must be met in order for a car seat to be reused following an MVC. 78% of staff surveyed did not ensure that the patients have a new car seat prior to discharge. 92% of respondents agreed that a short instructional presentation about proper use of child safety seats and available programs to help pay for child safety seats would increase their knowledge and likelihood of educating patients at discharge.

Conclusions: ED personnel have an excellent opportunity to provide instructional information to parents. Currently, most personnel are not providing basic safety seat education and personnel's lack knowledge and availability of educational resources are the major barriers to providing patient education. To provide correct information to patients, EDs should create educational programs for staff and patients. Finally, ED staff should ensure that patients have appropriate child safety seats when being discharged from the ED after being involved in an MVC.

AUTHORS/INSTITUTIONS: L. Lawson, L. Patterson, A. Britt, Department of Emergency Medicine, East Carolina University, Greenville, NC;

ABSTRACT FINAL ID: T-23;

TITLE: Lumbar spine injuries-Clinical evaluation and treatment

ABSTRACT BODY:

Abstract Body: N.Syrmos,Ch.Iliadis,G.Gavridakis , V.Valadakis,K.Grigoriou,D.Arvanitakis
Neurosurgical Department –Venizeleio General Hospital,Heraklion,Crete,Greece

Aim of this study was to describe the clinical evaluation , the radiological evaluation , the management and the outcome of cases with ,lumbar spine injuries admitted our hospital during a 5 year period (2006,2007,2008,2009,2010) . A retrospective analysis was performed in all of the case notes of consecutive cases of cervical spine injuries . 96 individuals (80 men , 16 women , median age 39 years , range 12-91 years) presented to the outpatient department and 80 were admitted . The average length of stay was 10 days. The major parts of the injuries were caused by accidents . Accurate support for patients with lumbar spine injuries appears to be necessary during the hospital permanence.

AUTHORS/INSTITUTIONS: N. Syrmos, C. Iliadis, V. Valadakis, K. Grigoriou, G. Gavridakis, D. Arvanitakis, ,
Neurosurgical Department –Venizeleio General Hospital,Heraklion,Crete,Greece, Neurosurgical Department
–Venizeleio General Hospi, GREECE;

ABSTRACT FINAL ID: T-24;

TITLE: Elderly Patients and the Emergency Department: A Challenge

ABSTRACT BODY:

Abstract Body: **OBJECTIVE:** Medical progress is a two-sided coin, the first shows the winning side, the increase of average age, the other its consequences, the increase of elderly people affected to chronic diseases and disabilities. Western society and our health systems are prepared to respond to such progress? **METHODS:** In order to answer this question, we analyzed data of patients arrived to Milan San Carlo Hospital E.D. from 2005 to 2010. Annually our ED receives about 85,000 patients of which 14% are hospitalized: 70% in internal medicine area and the 30% in surgical area. **RESULTS:** Among all accessing the ED, 25% are aged more than 64y.o. vs the 56% aged between 15 and 64y.o. In these age groups the percentage of top priority code (Red and Yellow) assigned by triage is 28% vs 11%, moreover in the older group, the presenting symptoms are more commonly due to internal medicine vs surgical problems in 60% to 40% cases respectively and, among younger patients, there is an opposite ratio while the two groups present a level of admission of 33 vs 10% respectively. **CONCLUSION:** In spite of these data, however, hospitals invest more resources in surgical facilities rather than in internal medicine resources by reducing the number of the assigned beds to the medical departments and thus decreasing the possibility of hospitalization, often forcing the resignation of frail patients at risk of major events without an adequate territorial service network planning. Actually while in Germany the number of hospital beds per 1000 habitants is 8.2 and in French 6.9, in Italy the number is 4.3 and is going to be reduced to 4 per 1000. Our study aims to stimulate thinking on the needs to improve the hospital as well as the territorial service network planning in a multidisciplinary strategy.

AUTHORS/INSTITUTIONS: M. Marco, C. Girardi, R. Daccò, Emergency Medecine, A.O.San Carlo Borromeo Milano , Milano, ITALY;

ABSTRACT FINAL ID: T-25;

TITLE: The Rate of Geriatric Emergency Department Return Visits and Hospitalization on Return Visits within 72 hours of Emergency Department discharge is Increasing

ABSTRACT BODY:

Abstract Body: Background: In recent years Medicare and other insurance payers have increasingly scrutinized hospital admissions and lengths of stay.

Objective: We hypothesized that this has resulted in an increase in emergency department (ED) return visits and subsequent admissions through the ED for geriatric patients (age 65 and older), within 72 hours of a prior ED discharge.

Methods: Design: Retrospective cohort of ED visits. Setting: 35 suburban, urban and rural New York and New Jersey EDs with annual visits from 14,000 to 82,000. Population: Consecutive patients aged 65 and older seen by ED physicians between 1/1/1996 and 9/30/2010. Protocol: For each year, we counted the number of patients > 65 years and the number of unscheduled returns to the ED and subsequent admissions to the hospital through the ED within 72 hours of a prior ED discharge. Data Analysis: For each year, we calculated the percent of unscheduled ED returns and percent subsequent hospital admissions using as a denominator the total number of patient visits > 65 years of age. We calculated 95% confidence intervals (CIs), and also performed a linear regression analysis by year.

Results: There were 3,332,610 patients over the age of 65 in the database. From 1996 to 2010 there was a 38% (95% CI, 33% to 44%, $p < 0.001$) increase in the percent of return visits to the ED from 2.1% to 2.9% and a 53%, (95% CI, 44% to 62%, $p < 0.001$) increase in return subsequent hospital admissions from the ED from 1.0% to 1.6%. The linear regression for returns to ED and return hospital admissions versus year yielded R squared = 0.84 ($p < 0.0001$) and 0.88 ($p < 0.0001$) respectively.

Conclusions: We found an increase in the percents of ED returns and subsequent hospital admissions through the ED within 72 hours of prior ED discharge for geriatric patients between the years 1996 and 2010. We speculate that this is due in part to increased scrutiny by Medicare and other insurance payers regarding hospital admissions and lengths of stay.

AUTHORS/INSTITUTIONS: S. Nagrani, M.E. Silverman, J. Allegra, , Morristown Memorial Hospital, Morristown, NJ;

ABSTRACT FINAL ID: T-26;

TITLE: Effectiveness of Emergency Department Based Multimedia HIV Testing and Counseling in a Geriatric Cohort

ABSTRACT BODY:

Abstract Body: **OBJECTIVE:** This study aimed to determine the effectiveness of an emergency department (ED)-based HIV testing program using video counseling and computer-assisted data collection in older adult patients (50 years and older) and evaluate their risk behavior profiles.

METHODS: A prospective cross-sectional study on a convenience sample of stable ED patients was conducted from 10/1/05 to 11/30/10. The number of patients tested, identified HIV infections, and patient satisfaction were determined to assess the model's acceptability and effectiveness. Population characteristics were analyzed using descriptive statistics. Means and standard deviations were calculated for continuous variables and proportions for categorical variables.

RESULTS: Of 55,341 patients tested, 9,913 were 50 and above; 83.7% (11,141/13,318) of approached geriatric patients were deemed eligible for testing. 89.0% (9,913/11,141) eligible geriatric patients accepted testing (Table 1). The cohort was 44.5% (4412/9913) male, 53.0% (4937/9318) Hispanic, and 36.4% (3389/9814) non-Hispanic black. Mean age was 59.9 ± 8.7 years. Prevalence of HIV was 0.5% (46/9,913), compared to 0.4% for the entire patient cohort. 76.1% (35/46) of HIV positive patients were linked to care. Most patients (98.6%) thought rapid HIV testing in the ED is helpful, 98.0% said the video answered their questions regarding HIV testing, and 85.3% felt influenced to change their sexual health practices.

CONCLUSIONS: An ED-based HIV testing program achieved high acceptance of HIV testing and high satisfaction among patients aged 50 years and older. With multiple HIV risk factors and a similar HIV prevalence to that of the entire patient cohort, this group comprises a subpopulation that demands increased efforts for HIV testing and prevention strategies that address the specific needs of older adults.

AUTHORS/INSTITUTIONS: C. Brusalis, J. Leider, E. Cowan, Y. Calderon, , Jacobi Medical Center, Bronx, NY; J. Leider, E. Cowan, Y. Calderon, Emergency Medicine, Albert Einstein College of Medicine, Bronx, NY;

ABSTRACT FINAL ID: T-27;

TITLE: Is decreased skin turgor a reliable indicator of dehydration?

ABSTRACT BODY:

Abstract Body: Background: decreased skin turgor is often cited as a clinical indicator of dehydration, however there is little evidence to support that.

Search strategy:

Patient: dehydrated geriatric patients

Intervention: skin turgor

Control: patients without dehydration

Output: sensitivity, specificity

Search terms: dehydration, turgor. Limits: adult, English.

Results: 6 articles. 2 usable.

Usable articles:

1. Clinical Presentation of Hyponatremia in Elderly Patients: A Case Control Study.

J Am Ger Soc, 2006, 54(8):1225–1230.

2. Clinical assessment of dehydration in older people admitted to hospital: What are the strongest indicators? Arch

Gero & Ger, 2008. 47(3):340-355.

Unusable articles (reason):

1. Images in clinical medicine: Decreased skin turgor. De Vries Feyens C, de Jager CP, NEJM, 2011 Jan 27, 364(4):e6. (Image).

2. Caretaker's perceptions, attitudes and practices regarding childhood febrile illness and diarrhoeal diseases among riparian communities of Lake Victoria, Tanzania.

Kaatano GM, Muro AI, Medard M. Tanzan Health Res Bull. 2006 Sep;8(3):155-61. (Pediatric).

3. The rational clinical examination. Is this patient hypovolemic? McGee S, Abernethy WB, Simel DL. JAMA. 1999. Mar 17; 281(11):1022-9. (Medline search, no RCT).

4. Skin turgor: do we understand the clinical sign? Dorrington KL. Lancet. 1981;1(8214):264-6.(physiology).

Reference search, 2 unusable articles (no RCT):

1. Clinical indicators of dehydration severity in elderly patients. Gross et al, J Em Med, 1992, 10(3):267-274.

2. Evaluation of the tilt test in an adult emergency medicine population. Levitt et al. An Em Med, 1992, 21(6):713-718

Conclusion: there is only little evidence to support examining skin turgor in patients suspected of dehydration. There is variable sensitivity and specificity values for the clinical test. The absence of randomization, blinding, small numbers and confounding variables limit the value of these studies. There is a need for well-designed randomized controlled studies to establish the clinical value of this sign.

Clinical bottom line: skin turgor is of limited value as an indicator of dehydration in the geriatric age group.

AUTHORS/INSTITUTIONS: B. Sukkar, , UMCG, Groningen, NETHERLANDS; B. Sukkar, , NVSHA, Utrecht, NETHERLANDS;

ABSTRACT FINAL ID: T-28;

TITLE: Are Older Adults Under-triaged in the Emergency Department?

ABSTRACT BODY:

Abstract Body: Current systems of triage based on presenting complaint and physiological data have been criticised as they have not been validated in an older population. Rates of under-triage for older ED attenders have been reported at 25.3% (versus 7.5% for younger adults).

A retrospective review of all patients seen in January 2011 and in July 2010 was undertaken at Midwestern Regional Hospital Limerick. Data were obtained by interrogating the Maxims patient tracker programme in the ED, and analysed using SPSS version 15.

Data were examined to see what correlations if any there were with patient age group, triage category and discharge outcome.

11,149 patients were seen during the 2 months studied, with 11,091 having Manchester triage category recorded.

1,979 patients in the group studied (17.9%) were aged 65 years or older. The admission rate was 49.9% of this age group compared to 27.7% of paediatric patients and 22.6% of younger adults.

Older adults were more likely to be admitted across all triage categories compared to younger adults and paediatric populations ($p < 0.05$).

The mortality rate among older adults in the ED, who were triaged to category 1 was 46.2%. This was compared to 30% of younger adults and 20% of paediatric patients. Older adults triaged to category 2 had an ED mortality rate of 1.5% in the ED compared to no deaths in the other two groups.

Although these outcomes are undoubtedly influenced by a number of factors, it may also suggest that there is a failure to recognise disease severity in older adults.

A prospective review with long term outcome data is desirable to determine the factors which influence triage category assignment and decision to admit. A modified triage system for older adults that incorporates these factors should be developed.

AUTHORS/INSTITUTIONS: R. McNamara, Emergency Department, Midwestern Regional Hospital Limerick, Limerick, IRELAND; R. McNamara, Graduate Entry Medical School, University of Limerick, Limerick, IRELAND;

ABSTRACT FINAL ID: T-29;

TITLE: Characteristics of elderly patients who were transferred from geriatric hospitals

ABSTRACT BODY:

Abstract Body: Purpose: Recently, more residents of geriatric hospitals are being transferred to emergency departments(ED). These residents suffer from various chronic diseases, and are expected to differ from other geriatric patients who visit ED voluntarily. The objective of this study was to investigate the overall characteristics and outcomes of geriatric hospital's residents who were transferred to ED.

Methods: We identified geriatric hospital's residents aged 65 years and older who had been transferred to the ED of a university medical center from January 2008 to December 2009. Retrospective analysis of the medical records was carried out. Further attention was paid to those who had been diagnosed with sepsis. A separate group of sepsis patients was collected, made up of geriatric patients who had visited the ED voluntarily from home or medical institutions other than geriatric hospitals during the same period. We compared the overall outcomes of the two cohorts.

Results: A total of 314 patients were included in this study. 262 patients(83.4%) transferred due to non-traumatic causes(table 1). 196(62.4%) of them were provided with the necessary procedures, or showed improvement in symptoms after appropriate management and were subsequently discharged or transferred back to the geriatric hospitals. On the other hand, 76(24.2%) patients whose caregivers did not comply to the necessary procedures or refused aggressive management were discharged home or retransferred to geriatric hospitals without improvement. Meanwhile, a total of 41 sepsis patients had been transferred from geriatric hospitals. Table 2 shows differences of dispositions in sepsis patients who were transferred from geriatric hospitals compared to sepsis patients who visited from home or other hospitals.

Conclusion: Considerable number of patients were found to be discharged or retransferred to geriatric hospitals due to refusal of treatments. Likewise, the comparison of sepsis patients between the two arms showed a greater portion being retransferred with inadequate treatment as well as a greater rate of mortality among patients transferred from geriatric hospitals.

AUTHORS/INSTITUTIONS: S. Moon, Emergency department, Korea University Medical School, Ansan, Kyunggi, KOREA, REPUBLIC OF;

ABSTRACT FINAL ID: T-30;

TITLE: GERIATRIC SUBCLAVIAN STEAL SYNDROME PATIENT A RARE REASON OF SYNCOPE

ABSTRACT BODY:

Abstract Body: INTRODUCTION:

Syncope may occur at any age with increasing prevalence of advanced age. Subclavian steal syndrome is a "steal" from cerebral blood flow which occurs during the use of the upper extremity as a result of stenotic / chronic obstructive process of subclavian artery at proximal side of vertebral artery distinction. Syncope often occurs with a sudden movement to the opposite side of the head

The values of more than 20 mmHg difference between arterial blood pressure measured in either arms or the absence of pulse are diagnostic criteria for this syndrome. Our aim is to present a geriatric subclavian steal syndrome patient which is a rare reason of syncope.

CASE:

A sixty four years old male patient admitted to our emergency department with sweating, the feeling of viciousness, dizziness, blurred vision and syncope.

Arterial blood pressure was measured, in left arm it was 150/80 mm Hg and 190/90 mmHg in right arm. We detected T wave inversion in patient's electrocardiography (ECG) as same as his old ECG's. Laboratory results (complete blood cell, serum biochemistry analyse) were in normal range. Subclavian steal syndrome hallmarks detected in toraco abdominal computarized tomography images.

DISCUSSION:

The occlusive process of this syndrome mostly seen in left subclavian artery (72-75%) it was similar for our patient. According to our patient's clinical features like geriatric age, sweating, feeling of viciousness, dizziness, blurred vision and syncope and the difference of arteriyal blood pressure between two arms, we suggested that this clinical stiuation could be result of global cerebral hypoperfussion.

Emergency staff should remind subclavian steal syndrome for geriatric patients who admitted to emergency department with syncope or near syncope. Evaluation of peripheral pulses and arterial blood pressure of two arms are very important for geriatric patients.

AUTHORS/INSTITUTIONS: E. Uyar, K. Gokcek, Y. Altunci, M. Ersel, M. Ozsarac, Emergency Medicine, Ege University Faculty of Medicine, Izmir, TURKEY;

ABSTRACT FINAL ID: T-31;

TITLE: Stiff Person Syndrome - An Unusual Case of Falls

ABSTRACT BODY:

Abstract Body: Introduction: Stiff Person Syndrome (SPS) was first described in 1956 by Moersch and Woltman. It is a rare progressive autoimmune neurological disorder characterised by muscle rigidity with concurrent painful spasms. These are induced by unexpected visual, auditory or somatosensory stimuli. The most common pathologic correlate anti-GAD is detected in 60% of patients. This is a disease of middle age that severely curtails the functional capacity of those it strikes. We present a case of this incapacitating disorder that lead to recurrent falls and impaired ambulation.

Clinical details: A 75 year old man presented with frequent falls for several years. His main complaints were difficulty in walking, stiffness in spinal muscles and spasms in the left leg triggered by being startled. He was unable to prevent himself falling and sustained several fractures as a result. Fear of falling and loss of confidence significantly affected his independence. He had a history of coeliac disease, pernicious anaemia and diabetes. Examination revealed an abbreviated mental test of 10/10, axial rigidity, spasticity in left leg, brisk reflexes, upright posture, unsteady gait and loss of normal spinal curvature. Magnetic resonance imaging of spine showed spondylotic changes with no significant compression. Electromyogram (EMG) showed prominent spinal muscle activation suggestive of stiff person syndrome. Anti-GAD was strongly positive at >1000units/ml. Neurology review confirmed the diagnosis of SPS. Patient was treated with diazepam and baclofen which showed dramatic improvement.

Discussion: In this report, we describe a diabetic patient with SPS in association with celiac disease and pernicious anaemia. Treatment with diazepam and baclofen resulted in significant clinical improvement in functional status. SPS can be misdiagnosed as Parkinson's disease, multiple sclerosis, fibromyalgia and psychological disorders. Early recognition and prompt institution of treatment is paramount to prevent long-term disability. Anti-GAD and EMG testing is useful in the diagnosis of SPS. Corticosteroids, intravenous immunoglobulins and rituximab have been used in refractory cases.

AUTHORS/INSTITUTIONS: T.M. Bhutta, R.A. Mappilakkandy, J. Reid, Geriatric medicine, university hospitals leicester, Leicester, UNITED KINGDOM;

ABSTRACT FINAL ID: T-32;

TITLE: Falls in the Older Population: The Need to Improve Risk Assessment in the Emergency Department and the Dangers of Labelling Falls as 'Mechanical'

ABSTRACT BODY:

Abstract Body:

OBJECTIVES AND BACKGROUND

Falls represent one of the principle causes of morbidity and mortality in the older population. The resultant cost to both the NHS and social services is vast, and only set to increase with an ever-ageing population.

Our study sought to determine whether older patients were being adequately risk-assessed and investigated following a fall. It also explored whether clinicians were using the term 'mechanical fall' as a diagnosis and whether such patients were subsequently found to have a pathological aetiology for their fall.

METHODS

Symphony® software was used to retrospectively identify patients aged over 65 years presenting to the Emergency Department (ED) with falls within a 2-week period. Patient records were also examined.

RESULTS

In a 2-week period, 100 older patients presented to the ED with a fall. Deficiencies in risk assessment were noted in all cases. In particular, a mental test score was recorded in 10% and postural blood pressures in only 15% of patients. Cardiovascular and neurological examinations were recorded in 52% and 45% of cases, respectively.

The term 'mechanical fall' was utilised in 20% of cases. 90% of these had 2 or more significant co-morbidities and 25% had an underlying medical problem which likely accounted for their fall.

CONCLUSIONS

The clinical and diagnostic assessment of older patients presenting with a fall remains inadequate. Failure to identify high-risk patients may lead to increased morbidity, mortality and cost. The term 'mechanical fall' continues to be applied despite the presence of underlying pathology in many cases. This label may lead to false reassurance and inadequate secondary prevention. We propose the use of a diagnostic algorithm to facilitate decision-making and diagnostic assessment when managing older patients presenting with falls to the ED.

AUTHORS/INSTITUTIONS: Y. Miki, D. Hicks, , Queen's Hospital, Romford, UNITED KINGDOM;

ABSTRACT FINAL ID: T-33;

TITLE: Demographics of Emergency Department Patients with GI Bleeds

ABSTRACT BODY:

Abstract Body: Objective: Over 300,000 patients a year in the US are

admitted for GI bleeds while countless others are managed

as out patients. Guidelines suggest some pts may be

discharged if they are asymptomatic and hemodynamically

stable, report no melena, have a hematocrit above 30%,

have no history of varices or aortic surgery, and are

under 60 years of age and otherwise healthy with

appropriate follow up. There have been no studies

examining the demographics of ED patients who present with

GI bleeds. Proposal: To examine demographics and admission

rates in ED patients with GI bleeds. Methods:

Retrospective, case-controlled (IRB-approved). Setting:

Community ED with EM residency and 85,000 pt visits/year.

Participants: All patients presenting with GI bleed (ED

ICD9 code) from 7/1/2005-6/30/2008. Protocol: Data from ED

records were abstracted into an Excel database. Admission

rates, gender, age makeup and differences in admission

rates per age and gender were analyzed. Data was analyzed

using Mann Whitney U and chi-square ($p < 0.05$ significant).

Results: 2348 patients had GI bleeds. The median age was

40.5 (IQR 22.5-63.6). 1196 (50.1%) were male. 1853

patients were admitted (79%). There was a statistical

difference in median age for admitted vs discharged

patients 75.5 6 (95% CI 74.76.7) vs 40.6 (95% CI 36.4-

45.2) ($p < 0.001$), but no difference in admission rates

between males and females ($p < 0.95$). 808 patients were

under 60 years of age with an admission rate of 56% (455)

while 1542 were over the age of 60 (admission rate 91%;

1398 patients) Conclusion: Patients admitted to the

hospital for GI bleeds are older. While half of patients

under 60 years of age with GI bleed are discharged less

than 10% over the age of 60 go home from the ED.

AUTHORS/INSTITUTIONS: D. Salo, S. Coltharp, F. Fiessler, P. Szucs, P. Porter, Emergency Department, Morristown Memorial Hospital, Morristown , NJ;

ABSTRACT FINAL ID: T-34;

TITLE: Geriatric Injuries in primary health care

ABSTRACT BODY:

Abstract Body: A majority of injuries sustained by the elderly are secondary to falls and motor vehicle accidents. Aim of this study was to describe the management and outcome of cases with geriatric injuries to a rural district hospital during a 6 year period (2002,2003,2004,2005,2007,2008) . A retrospective analysis was performed in all of the case notes of consecutive cases of geriatric injuries. 68 individuals (over 65 years old, range 66-102 years , 60 males-88, 2 % , 8 females – 11,8 % , median age 77 years) presented to the outpatient department and 30 were admitted (44,1 %) . The average length of stay was 16 days. The major parts were caused by accidents. Accurate support for burn patients appears to be necessary during the hospital permanence. The geriatric injury prevention includes education and instruction

AUTHORS/INSTITUTIONS: N. Syrmos, N. Kapoutzis, A. Televantos, , Surgical Department, Goumenissa General Hospital,, Surgical Department, Goumenissa General Hospital,, GREECE;

ABSTRACT FINAL ID: T-35;

TITLE: Impaired Consciousness Revealing a Cerebral Amoebiasis: A Case Report

ABSTRACT BODY:

Abstract Body: INTRODUCTION: Amoebiasis is a parasitic infection cosmopolitan tropic intestinal. However, it can have extra-intestinal manifestations (liver, skin and even brain) and distorting the diagnosis. We report the case of a young adult with cerebral localization and neurological clinical result was indicative of multifocal amoebiasis (amoeboma, liver and brain). CASE REPORT: We report a patient of 42 years, 5 months before surgery for an appendectomy and admitted to intensive care for impaired consciousness after a convalescent stable uncomplicated. At admission, clinical examination found a patient at 12/15 in Glasgow and a right hemiplegia. His condition was stable hemodynamically. He is panting at 20 cycles / minute and arterial oxygen saturation is 97% on room air. Moreover, the patient is afebrile and had discrete hepatomegaly. CT scan revealed diffuse hypodensity with a discrete brain edema. Echocardiography was normal with no signs of valvular disease or endocarditis. An abdominal ultrasound supplemented by an abdominal CT scan, found multiple liver abscesses. HIV negative serology. The therapeutic management consisted of intubation and assisted ventilation, a tri-antibiotic regimen of ceftriaxone, gentamicin and metronidazole. The echo-guided puncture of the liver abscesses surface allowed the evacuation of 200 ml of pus, color "chocolate brown". The bacteriological and parasitological pus evacuated did not allow identify a germ but given the macroscopic appearance (chocolate brown), Amoebic serology was performed and was highly positive. Confirmation of amoebiasis involved in therapeutic terms, high doses of metronidazole for an extended period (60 days). The outcome was favorable with a clear neurological improvement. In abdominal ultrasound and CT scan, the initial lesions regressed. A replay of the play performed an appendectomy is performed five months ago and found a amoeboma (rare digestive form)). DISCUSSION: Amoebiasis is a parasitic cosmopolitan mainly related to hygiene. Amoebic dysentery is the most common clinical expression, however, the extraintestinal sites including brain and liver are possible and can be revealing.

AUTHORS/INSTITUTIONS: H. Ezzouine, B. Malajati, A. Benslama, B. Charra, S. Motaouakkil, , university teaching hospital Ibn Rochd. Casablanca. MOROCCO, Casablanca, MOROCCO;

ABSTRACT FINAL ID: T-36;

TITLE: Severe Sepsis Revealing Visceral Leishmaniasis in an Immunocompetent Adult: A Case Report

ABSTRACT BODY:

Abstract Body: **INTRODUCTION:** Leishmaniasis is a parasitic infection caused by a flagellate protozoan of the genus *Leishmania* transmitted by the bite of an insect vector. We report a case of severe sepsis revealing visceral leishmaniasis in an immunocompetent adult. **CASE REPORT:** A patient aged 50 years without known medical history was admitted in intensive care for severe sepsis. Clinical examination revealed a febrile patient T 39 ° 5, comatose (GCS 12/15), with heart rate 130 beats per minute and his blood pressure 80/40 mmHg. He was breathing fast at 30 cycles/minute, arterial oxygen saturation is 87% air. He had bilateral pulmonary condensation syndrome, a muffling of heart sounds with a slight splenomegaly without hepatomegaly or adenomegaly. Abdominal ultrasound and CT scan with no abnormalities. The bacteriological evaluation included negative blood culture. Lumbar puncture was without abnormalities. Procalcitonin was 0.5ng/l. Serologies HIV, HCV and HBV negative. Antinuclear antibodies, anti-DNA and antiphospholipid are negative. The search for anti-*Leishmania infantum* (ELISA VIRCELL) positive (index 12) for an index of positive laboratory > 11 and myelogram confirmed the presence of *Leishmania*. Our therapeutic management involved intubation and assisted ventilation, treatment by meglumine antimonate 100mg/kg/day dose (30 mg pentavalent antimony/kg/day). The evolution was marked after apyrexia, hemodynamically stable after fluid resuscitation and extubation of the patient on the 8th day of the cure Glucantine. At relapse of leishmaniasis is confirmed by antibody antileishmania infantum that were positive by ELISA at 11, and myelogram VIRCELL the presence of rare *Leishmania*. The patient was given liposomal amphotericin B 3mg/kg/day for 10 days. Apyrexia was obtained in 48 hours with a good clinical outcome. **DISCUSSION:** Visceral leishmaniasis is a parasitic infection which may occur sporadically with a clinical picture of severe sepsis. Therapeutic response to meglumine antimonate is mostly effective, however, liposomal amphotericin is an alternative if relapse.

AUTHORS/INSTITUTIONS: H. Ezzouine, B. Malajati, B. Charra, A. Benslama, S. Motaouakkil, , university teaching hospital Ibn Rochd.Casablanca.MOROCCO, Casablanca, MOROCCO;

ABSTRACT FINAL ID: T-37;

TITLE: A Case of Septic Shock with Multiple Organ Failure

ABSTRACT BODY:

Abstract Body: CASE REPORT: A 44 years old female subject arrived in our department for fever with vomiting and diarrhoea, and leaning to drowsiness. She had diabetes mellitus type I. The patient had been evaluated by the First Aid Unit and had been discharged with an empiric antibiotic therapy for a urinal fever with no results. At the hospitalization the patient was soporous, BP 170/80 mmHg, CR 110 bpm, SpO₂ 94% in O₂ open circuit therapy at 2 l/min, TC 38,8°C, glycaemia stick 543 mg/dl. At the medical examination: bad-evaluable chest, soft abdomen aching in hypogastric area and in left side with suspected vesical globe; rhythmic cardiac tones; dehydrated skin and mucoses. The results of urgent exams showed: thrombocytopenia (51migl/ul), marked neutrophilia, increase of renal functionality index (urea/creatinine 113/4 mg/dl), and increase of aspecific index of inflammation (PCR 54mg/dl). A vesical catheter was set and further hydration and insulin therapy were formulated.

The encephalon CAT showed that there were hypodensity areas in pale nucleus compatible with anoxic damages and the abdominal echography showed obstructive pyelonephritis with hydronephrosis in the left kidney. Since the nephrostomy was not possible, a ureteral stent was positioned and almost immediately it caused a neat improvement in renal disease and diuresis. The antibiotic therapy was then modulated to cope with the Escherichia Coli bacterium isolated in the urine culture exams. She was submitted to abdominal MR that showed about 1 cm abscess in the left kidney that justified an antibiotic therapy. Since suspecting a possible immunodeficiency syndrome an HIV test was done with negative result. The patient gradually improved and started again eating satisfactorily, at the discharge she was vigilant and normal, with the only exception of creatinine at 1,4 mg/dl. The patient was therefore addressed to urology department and further exams showed a complete remission of renal abscess. **DISCUSSION:** In conclusion fevers that take origin from urinary tract can get worse and become septic shock; so it's necessary supervising the clinical conditions from the beginning of the symptoms.

AUTHORS/INSTITUTIONS: L. Brugioni, C. Gozzi, S. Rosi, F. Donati, S. Pigati, M. Baraldi, , Medicina Interna ed Area Critica Policlinico di Modena, Modena, Modena, ITALY;

ABSTRACT FINAL ID: T-38;

TITLE: Project Control: Evaluation of a brief HIV counseling video to improve teenagers' risk reduction behavior

ABSTRACT BODY:

Abstract Body: Background: This study compared the effectiveness of a brief theory-based, youth-friendly HIV counseling video series with the standard practice (an HIV counselor) in improving risk reduction behavior among teens recruited in an urban Emergency Department (ED).

Methods: A two-armed randomized controlled trial was conducted on a convenience sample of 203 non-critically ill, sexually active individuals aged 15-21 in an urban emergency department. Participants in the control (counselor) group received HIV information and counseling from a counselor while those in the intervention (video) group watched a series of youth-friendly counseling videos tailored to patients' stages of change. All participants completed pre- and post-intervention measures on three mediating variables hypothesized to reduce unsafe sexual behavior: condom intention, condom outcome expectancy, and condom self-efficacy. HIV testing was optional for both arms.

Results: 203 patients were enrolled and randomized, 102 in the video group and 101 in the counselor group. The groups were similar with respect to age, gender, race, ethnicity, and sexual history. The video intervention performed as well as in-person counseling at improving several condom use measures. Participants in the video group improved their condom use intention score significantly more than those in the counselor group (Table 1). The intervention effect on condom intention score did not differ by gender or ethnicity.

Conclusions: The use of theory-based, youth-friendly video can be a valid means to provide post-test counseling education and prevention messages within an urban ED. The theory-based prevention messages can improve specific mediators representing risk reduction behavior among teenagers immediately following the intervention.

AUTHORS/INSTITUTIONS: Y. Calderon, E. Cowan, M. Rosenberg, J. Leider, L. Bauman, , Albert Einstein College of Medicine, Bronx, NY; Y. Calderon, E. Cowan, J. Nickerson, C. Brusalis, M. Rosenberg, J. Leider, , Jacobi Medical Center, Bronx, NY; C. Leu, , Columbia University, New York City, NY;

ABSTRACT FINAL ID: T-39;

TITLE: Meningitis in adult patients with a negative direct cerebrospinal fluid examination: value of cytochemical markers for differential diagnosis

ABSTRACT BODY:

Abstract Body: Introduction: The objective of this study was to determine the ability of various parameters commonly used for the diagnosis of acute meningitis to differentiate between bacterial and viral meningitis, in adult patients with a negative direct cerebrospinal fluid (CSF) examination.

Methods: This was a prospective study, started in 1997, including all patients admitted to the emergency unit with acute meningitis and a negative direct CSF examination. Serum and CSF samples were taken immediately on admission. The patients were divided into two groups according to the type of meningitis: bacterial (BM; group I) or viral (VM; group II). The CSF parameters investigated were cytology, protein, glucose and lactate, the serum parameters evaluated being C-reactive protein and procalcitonin. CSF/serum glucose and lactate ratios were also assessed. Results: Of the 254 patients presenting meningitis with a negative direct CSF examination, 35 had BM and 181 VM. The most highly discriminative parameters for the differential diagnosis of BM proved to be CSF lactate, with a sensitivity of 94%, a specificity of 92%, a negative predictive value of 99 %, a positive predictive value of 82 % at a diagnostic cut-off level of 3.8 mmol/L (AUC 0.96, 95% CI [0.95-1]) and serum procalcitonin, with a sensitivity of 95%, a specificity of 100%, a negative predictive value of 100 %, a positive predictive value of 97 % at a diagnostic cut-off level of 0.28 ng/mL (AUC 0.99, 95% CI [0.99-1]).

Conclusion: Serum procalcitonin and CSF lactate concentrations appear to be the most highly discriminative parameters for the differential diagnosis of BM and VM.

AUTHORS/INSTITUTIONS: A. Viallon, O. Marjollet, M. Belin, N. Desseigne, S. Guyomarch, Emergency, University hospital, Saint Etienne, FRANCE; J. Borg, , University hospital-biochemical laboratory, Saint-Etienne, FRANCE; B. Pozetto, , University hospital-Microbiology laboratory, Saint-Etienne, FRANCE; F. Zeni, , University Hospital-Intensive Care Medicine, Saint-Etienne, FRANCE;

ABSTRACT FINAL ID: T-40;

TITLE: Urinary tract infections in ED: which patients and which bacterial ecology?

ABSTRACT BODY:

Abstract Body: Urinary infections are common in emergency patients and their management is based on a initial probability antibiotic treatment. The aim of this study was to analyse the patients characteristics and the bacterial ecology of these infections.

Methods: We conducted between July and December 2009 a monocentric, prospective, observational study with systematic inclusion of all patients who consulted at the ED and had a positive urinary test.

Results: During the study period, 23807 patients consulted at the ED and 442 had positive urinary culture. 36 were excluded because of chronic urinary disease history or permanent bladder catheterisation. The mean age was 53 +/- 27 y (m+/-sd) and 81% were women. In 37% of the cases, the urinary infection was acute pyelonephritis and in 40% patients were asymptomatic. Among the women presenting cystitis, 65% were less than 35 years old. 56% of asymptomatic patients were more than 75 years old. Escherichia coli was identified in 70% of the cases. 11% of the germs were resistant to fluoroquinolones, and 8% to the 3rd generation cephalosporins. In 2.5% of the cases (n = 10), the germs [Escherichia coli (n =7) or Klebsiella pneumoniae (n = 3)] were extended-spectrum beta-lactamase producing (ESBL). Among these 10 patients, 9 were women, aged M 79 [E 25-103] 5 had an asymptomatic infection, 2 had an history of recent hospitalisation, 3 had received antibiotics in the past 6 months, and 3 were living in institutions. Seven of them were resistant to the fluoroquinolones too.

Discussion: Probability antibiotherapy used in ED in urinary infection are fluoroquinolones and 3rd generation cephalosporins. The risk factors for infection caused by ESBL producing enterobacteriaceae are repeated urinary infections, recent antibiotics prescription and recent hospitalisation.

Conclusion: There is an increasing in resistance to probability antibiotherapy for community-acquired urinary infection in ED. Presence of ESBL producing enterobacteriaceae could be suspected by a rigorous anamnesia.

AUTHORS/INSTITUTIONS: C. Hermand, O. Gardy, V. Lalande, C. Lejeune, S. Besnard, D. Pateron, Emergency department, Hopital Saint Antoine, Paris, FRANCE;

ABSTRACT FINAL ID: T-41;

TITLE: Discrepancy between levels of pain and visible symptoms associated with Necrotizing Fasciitis: a case series of eight patients.

ABSTRACT BODY:

Abstract Body: INTRODUCTION

The outcome of Necrotizing Fasciitis (NF) relies on the early diagnosis and treatment of the disease. It is in this regard that the emergency physician plays a pivotal role, because most patients are hospitalized through the emergency department.

NF is an insidiously advancing soft tissue infection characterized by widespread fascial necrosis. We will present a case series of eight patients who were treated at our centre over a period of 5 years. All patients diagnosed with necrotizing fasciitis / myositis were included and their medical records retrospectively reviewed.

MATERIALS AND METHODS

We will present a case series of 8 patients who were treated at our centre over a period of 5 years. All patients diagnosed with necrotizing fasciitis / myositis were included and their medical records retrospectively reviewed.

DISCUSSION

Diagnosis remains difficult because there are no fixed criteria. Early recognition is important to initiate proper treatment which consists of intravenous antibiotics, immediate surgical debridement, and in case of STSS intravenous immunoglobulins. In our case series all patients had severe localized pain disproportional to the cellulitis-like presentation, consistent with recent literature. Also, every patient reported feeling generally unwell, suggesting systemic involvement. And although none of the patients had fever on admission, and inflammatory blood tests were inconsistently elevated, almost all patients presented with systemic involvement to a greater or lesser extent (see table 1).

Cultures are useful for confirming the diagnosis, but surgical treatment cannot be delayed until the results are known. Moreover, only deep wound cultures taken during surgery are reliable in detecting a causative agent.

In recent literature MRI has been suggested for diagnosing NF and has a high sensitivity and specificity. This is in line with our data where all of the MRI results were positive for NF. Thus MRI can be a useful tool when there is any doubt about the diagnosis, although availability remains a problem.

AUTHORS/INSTITUTIONS: B. Bouts, R. Leto, , ZNA Middelheim, Antwerp, BELGIUM;

ABSTRACT FINAL ID: T-42;

TITLE: Confirmed H1N1 admissions to intensive-care units (ICUs) and confirmed H1N1 deaths during Pandemic 2009-2010 and first post Pandemic 2010-2011 periods.

ABSTRACT BODY:

Abstract Body: Aim:

Assessment of the intensity of the disease during the post pandemic period 2010-2011 compared to the pandemic period 2009-2010.

Data:

The data of this study were collected from reports on laboratory-confirmed influenza A (H1N1) cases that were hospitalized in public, private, and military hospitals in Greece.

Method:

All hospital administrators in Greece were required to report daily to the NHOC, through standardized forms, information regarding all patients with laboratory confirmed influenza A (H1N1), hospitalized at their ICUs as well as all the instances of death caused by influenza A (H1N1), with and without ICU admission. Daily, investigators made follow up phone calls to physicians in order to collect additional information.

Results:

During the pandemic period, 294 ICU admissions and 149 deaths related to influenza A (H1N1) were reported. Average age was 43.6 years, 7% were children and 4.4% were pregnant. Average treatment length was 14 days. Admissions at ICUs ranged from 1 -9/day. From these 294 ICU- treated patients, 41,5% (122pts) were fatal. During the post pandemic period, 368 ICU admissions and 174 deaths related to influenza A (H1N1) were reported, average age of the sample was 52 years, 5.7% were under 18 years, and 20.7% were 64 years or older. Average treatment length was 7 days. The admissions at ICUs reached 1-10/day. From those 368 ICU-treated patients 38% (138pts) were fatal.

Conclusions:

During first post pandemic period (2010-2011) the ad hoc system was set up to oversee serious influenza cases that required ICU hospitalization. Much pressure was put on ICU bed availability during post pandemic period. The maximum number of patients hospitalized in an ICU in one day was 127 during post pandemic period versus 70 during the pandemic period. This corresponds to an approximate 20% coverage of the total ICU beds in the country. Efforts must be made to focus on alerting the public regarding pandemic flu and the implementation of measures of personal hygiene, and also reaching the European levels of vaccination coverage of 75% by 2014

AUTHORS/INSTITUTIONS: N. Papageorgiou, S. Papanikolaou, A. Georgiadis, K. Gogosis, G. Karageorgos, I. Xenelis, , National Health Operation Center (NHOC), Ministry of Health and Social Solidarity ., Athens, GREECE; E. Photiou, , Emergency Dept, Ospedale Sant'Antonio, Padua, Italy, Padova, ITALY;

ABSTRACT FINAL ID: T-43;

TITLE: Echinococcal Cyst isolated in Pericardium

ABSTRACT BODY:

Abstract Body: BACKGROUND: We describe a clinical case of hydatidic cyst in pericardium.

A CASE: We describe a 25-years-old man presented to the emergency department complaining of chest pain and minimal efforts dyspnea, asthenia and loss weight. He had no relevant medical history. He denied use of any medication. On admission, his vital signs were as follow, Blood Pressure : 110/70 mmHg; Heart rate: 95 beats/min Temperature : 36.2 C, Respiration rate: 25 breaths/min. SatO₂: 94 % and the physical examination of the patient revealed jugular venous distension, distant heart sounds, ECG showed low QRS voltage and a chest X-ray revealed a pericardial effusion. Pericardium cyst was confirmed with finding of characteristic cysts in ecocardiography and computerized tomography scan in addition to epidemiology and serologic test. The patient was treated with albendazol 800 mg/day and heart surgery. The risk of recurrence is a 11 % and can be prevented by antiparasitic drug.

DISCUSSION: Hydatid disease is a worldwide zoonosis caused by the larval stage of the Echinococcus is a tape worm which belongs to the family Taeniidae. Four species of Echinococcus produce infection in humans. E granulosus and E multilocularis are the most common, causing cystic echinococcosis and alveolar echinococcosis respectively, while E vogeli and E oligarthrus very rarely cause polycystic echinococcosis. Hydatid cysts commonly affect the liver and lungs though any part of the body can get affected. The heart is an uncommon localization (0.5 -2 %) most frequently located at the interventricular septum and isolated pericardial hydatid cyst is a rare disease entity

AUTHORS/INSTITUTIONS: M. Guerrero, A. Almazán, , Hospital Universitario Sant Joan de Reus, Reus, SPAIN;

ABSTRACT FINAL ID: T-44;

TITLE: Medical profile of severe influenza H1N1 patients that were treated at ICUs during the pandemic of 2009-10 and the first post pandemic period 2010-11

ABSTRACT BODY:

Abstract Body: Goal The assessment of underlying diseases, of hospitalized laboratory-confirmed influenza patients at ICUs during the 2009-10 influenza pandemic and the 2010-11 post pandemic period

Data - Method Data was collected from the reports filed by public, private, and military Greek hospitals. All hospital administrators in Greece were required to report to NHOC, via standardized forms, all hospitalized laboratory-confirmed influenza cases. On a daily basis investigators made follow up phone calls to the physicians in order to collect additional information.

Results The most common severe complication reported was primary viral pneumonia followed by the development of acute respiratory distress syndrome (ARDS).

During the pandemic period the most commonly reported underlying diseases among persons aged 20–60 years were obesity (31.5%) and cardiovascular disease (16.3%). The most commonly reported underlying diseases in children ≤18 years were neurologic disorders (31.3%) Among persons aged >60 years, the most commonly reported disease was cardiovascular disease (37.3%).

During the post pandemic period the most commonly reported underlying conditions in adults were metabolic diseases (24.4%), chronic respiratory (21.6%) and chronic cardiovascular diseases (19.8%), while in children (≤18 years), neurological diseases. Morbid obesity was present in 8.4% of those admitted to an ICU and 10.8% of those with a fatal outcome.

Conclusion From the total hospitalized cases, 68.4% (during the pandemic period), and 67.9% (during the post pandemic period) had at least one underlying medical condition. The most common comorbidities were metabolic and chronic respiratory disease for patients admitted to an ICU, while cardiovascular disease and immunosuppression were the most frequently reported ones among fatal cases.

AUTHORS/INSTITUTIONS: K. Karageorgou, M. Tseroni, M. Botsaki, K. Hatzi, P. Bekas, N. Papageorgiou, , National Health Operation Center (NHOC), Ministry of Health and Social Solidarity , Athens, GREECE; E. Photiou, , Emergency Dept., Ospedale Sant'Antonio, , Padua, ITALY;

ABSTRACT FINAL ID: T-45;

TITLE: Community acquired pneumonia. Initial variables in an Emergency Room Service associated with admission to an ICU.

ABSTRACT BODY:

Abstract Body: **OBJECTIVES:** compare epidemiological and clinical characteristics, prognosis and mortality on community acquired pneumonia (CAP) in patients admitted to ICU vs those who are admitted in a medical ward (MW). We studied that risk factors at ER admission were associated with ICU admission.

METHODOLOGY: Prospective observational and cohort study for 3 years of 251 patients admitted to a level 2 university hospital with diagnosis of CAP. Bivariate analysis was performed using SPSS program.

RESULTS: 59 of 251 (23,5%) were admitted to ICU. Evolution: in ICU 52,5% of antibiotic treatment was changed vs 25% (p0,001; OR 3,2; IC 1,7-5,9). Septic shock was diagnosed in a 52,5% in ICU vs 2% (p0,001; OR 52; IC 17-158), 61% in front 13% showed acute renal failure (p0,001; OR 10,4; IC 5,3-20,3). 59,3% in ICU received invasive mechanical ventilation. Mortality was 28,8% in ICU vs 7,8% (p 0,001).

CONCLUSIONS: patients with CAP admitted to ICU are younger, more frequently smokers and have liver diseases. Clinically presented worse scores (PSI, CURB-65, PIRO, APACHE II and SOFA). Vital signs also reflected serious severity with altered mental status, hypotension and tachypnea. An initial multilobar involvement also determines the admission in ICU. They have more acidosis and increased consumption of bicarbonate, impaired renal function, high inflammation markers, more hypoxic and require a greater contribution of FiO₂. During admission in ICU received more antibiotic changes, suffer from acute renal failure, septic shock and 28% died.

AUTHORS/INSTITUTIONS: G. Cañardo, C. Boqué, A. Rodríguez, A. Moreno, J. Gálvez, , University Hospital Joan XXIII, Tarragona, SPAIN; N. Daroca, , University Hospital Sant Joan, reus, SPAIN;

ABSTRACT FINAL ID: T-46;

TITLE: Demographic And Clinical Characteristics Of Patients With Swine (H1N1) Influenza.

Shalabi Rafea MD(1) , Shnaider Arcadi MD(2), Mustafa Ali Anwar MD(2), Soboh Soboh MD(1),And Darawsha Aziz MD(2).

1)Baruch Padeh Medical Center,Poriya

2) Haemek Medical Center Afula,Israel.

ABSTRACT BODY:

Abstract Body: Background: H1N1 Influenza (Swine Influenza) is caused by a new brand of influenza virus that affects humans.

Aim of the study:To compare between demographic and clinical characteristics among patients who were hospitalized because of suspected H1N1 infection and during their hospitalization had positive PCR results to patients whose diagnosis was dismissed by the aforementioned test.

Methods: From the beginning of April until the end of October 2009, 350 patients were hospitalized with a suspected diagnosis H1N1 influenza. Certification of the diagnosis was done by PCR. Regarding each patient, demographic, clinical, laboratory and epidemiologic data were collected.

Results: among the 350 hospitalized patients with suspected H1N1, 87 patients (24.8%) had positive laboratory results (group 1) and 263 patients (75.2%) had negative results (group 2). 47.1% of the pts in group 1 were 18-30 years old and only 18.4% were 55 years old or older. Cough was found to be the most common symptom (73.6%), and sore throat was the second most common (36.8%) in group 1.

On arrival to ED, pts in group 1 showed a high prevalence of systolic pressure below 130 (67.7%) and temperature above 38 (72.4%) in comparison to those in group 2. above 80% of pts in both groups were treated by oseltamivir.

Conclusios:

1-the characteristics of H1N1 outburst in Haemek hospital were similar to those visualized in the rest of the world, the disease affects mainly young groups and is characterized by nonspecific clinical signs.

2-Swine influenza doesn't reach the threat and panic dimensions that we were prepared for and afraid of.

AUTHORS/INSTITUTIONS: B.S. Tzadok, Emergency Department, HaEmek Medical Center, Afula, Israel, ISRAEL;

ABSTRACT FINAL ID: T-47;

TITLE: Pheochromocytoma Revealed by Pulmonary Acute Edema: A Case Report

ABSTRACT BODY:

Abstract Body: **INTRODUCTION:** Pheochromocytoma is a neuroendocrine tumor localized mainly in medullasurrenals. Possible clinical manifestations are heart failure, hypotension, hyperglycemia, and rarely acute coronary syndrome or edema acute lung resulting from the discharge of norepinephrine, epinephrine and dopamine. We report the case of a young patient in whom acute lung edema revealed a pheochromocytoma. **CASE REPORT:** A patient 44 years old, without medical history was admitted to emergencies with respiratory distress. Clinical examination found a conscious patient, Glasgow coma score was 15. Blood pressure was 145/100 mmHg and heart rate was 85 bpm. He had orthopnea, respiratory rate is 40 on room air. On pleuropulmonary auscultation crackles were noted. Troponin Ic was negative. B-natriuretic peptide was 150 pg/ml. The assay of plasma methoxyamines found by also a normetadrenalin high, its value was 6126 pg/ml or 33.48 nmol/l. The plasma metadrenalin was high, it was to 2147 pg/ml so 10.90 nmol/l. Urine vanilmandelic acid was normal: 30.5 μ mol/24 h or 6.0 mg/24 h, 3.6 mg/g creatinine. Urinary methoxyamines were normal. Urinary normetadrenaline was 1784 nmol/24 hrs. The urinary metadrenaline ws 663 nmol/24 h or 130 μ g/24 h. The 3 Ortho urinary methyl dopamine of 662 nmol/24 h or 110 μ g/24 h. Chest radiography found face fluffy opacities bilateral. Abdominal CT scan revealed a right adrenal gland swollen and electrocardiogram had no significant abnormalities. Therapeutic management required noninvasive ventilation and diuretics. Evolution was marked then a significant clinical improvement and the BNP decreased to <5 pg/ml. **DISCUSSION:** Acute pulmonary edema or flushing can be a manifestation indicative of pheochromocytoma. Diagnosis is suggested by the triad or pentad. Clinical, hormonal and radiological explorations are in order to confirm the diagnosis and for adequate therapeutic management. Indeed, noninvasive ventilation combined with diuretic therapy allowed a favorable evolution of our patient waiting for treatment including radical surgery. **AUTHORS/INSTITUTIONS:** H. Ezzouine, B. Malajati, B. Charra, A. Benslama, S. Motaouakkil, , university teaching hospital Ibn Rochd.Casablanca.MOROCCO, Casablanca, MOROCCO;

ABSTRACT FINAL ID: T-48;

TITLE: A Comparison of Effects of Early Plavix Treatment with Dosage of 150 milligrams and 300 milligrams in Emergency Wards

ABSTRACT BODY:

Abstract Body: **OBJECTIVE:** Considering the high rate of cardiovascular disease in Iran and the high mortality rate related to such conditions it is imperative to allocate resources to treat those already affected while continuing the current trend of emphasis on disease prevention tactics. **METHODS:** First of all we choose Shiraz hospitals which receive a great number of cardiovascular patients (Namazi Hospitals). Early doses of Plavix was administered to patients with cardiovascular conditions. In 50 patients in Namazi hospital the initial dose was chosen at 150 milligrams while in 50 patients in emergency ward it was decided to set the initial dose at 300 milligrams. Patients given the initial dose were given a constant daily dose equal to the initial dose during their stay in the hospital. The number of days of hospitalization and the patient's condition including development of side effects were monitored and recorded until their discharge from the hospital. **RESULTS:** Patients suffering from acute coronary condition, who were given a dose of 150 milligrams, were hospitalized for 48 to 72 hours and then discharged while patients of a similar condition who were not given the shot or received 300 milligrams were usually hospitalized for 96 hours before being discharged. It seems that early administration of 150 milligrams of Plavix had a positive effect on quick recovery of patients with coronary conditions. Patients with acute coronary conditions who reported to Namazi hospital were given an initial dose of 300 milligrams or not any drug. It was later demonstrated that this dosage had no significant effect on the duration of hospitalization, which for patients formerly hospitalized was around 48 hours. **CONCLUSION:** It could be concluded that taking special circumstances of our country into account, administering an early low dose of Plavix (at emergency ward stage) is preferable to a later administration after thorough medical examination and it is also preferable to the administration of high doses.

AUTHORS/INSTITUTIONS: H. Manani, M. Kalantari meibodi, A. Keshavarzi, emergency, Shiraz, Shiraz, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: T-49;

TITLE: Swollen shoulder in young woman

ABSTRACT BODY:

Abstract Body: 23 year old woman presents to the emergency department with a 3 days history of pain, swollen of left shoulder and cold hand after physical work.

Her medical history Without disease, She denies any prior surgeries, and her only medications are oral contraceptives agents in the past for a long time. She does not smoke tobacco, drink alcohol, or use illicit drugs.

On physical examination, temperature is 36.8°C. Pulse is regular, with a rate of 80 beats/min. Blood pressure is 135/80 mm Hg, and Respiratory rate is 14 breaths/min. Swollen of left shoulder, auscultation of the heart reveals a normal S1 and S2, with no murmurs or rub. Palpation of the abdomen reveals no tenderness, masses, or enlargement of the liver or spleen, the lungs are clear. The biochemical parameters examined are within normal physiologic limits.

C-reactive protein levels are 8.3mg/dl, D-dimer 403ng/ml, Fibrinogen 536mg/dl.the hematologic examination shows a Hemoglobin level of 11.5 g/dL, total leukocyte count of 10,800 x 10³/μL and a platelet count of 434 x 10³/ml, Ananteroposterior chest x-ray does not show any localized lesions in the lungs.

A contrast chest and abdomen computed tomography (figure 1). demonstrates in the anterior mediastinum is detected the presence of mass 9.1 x 6.1 x9.8 cm.

Thrombosi the left jugular vein (figure 2),left para-aortic lymphadenopathy (figure 3).

The biopsy is performed and the results showed non-Hodgkin lymphoma.

AUTHORS/INSTITUTIONS: S.Z. Ziyada, R. Schirripa, B. Corrias, P. Daniele, A. Revello, F. Pugliese, , Sandro Pertini Hospital, Emergency Department., Rome, Rome, ITALY;

ABSTRACT FINAL ID: T-50;

TITLE: A 43-year-old man, with ulcerative cutaneous masses on the abdomen.

ABSTRACT BODY:

Abstract Body: A 43-year-old man, Romania's ethnic group was admitted to the emergency room with a one year history of small asymptomatic, brown macules on the abdomen. Two of these Macules, in the last three months has developed rapidly, and become solid masses mobile with ulceration (Figure A,B).His medical history Without disease, he denies any prior surgeries, he is heavy smoker,drink alcohol at weekends. On physical examination, temperature is 36,5°C. Pulse is regular, with a rate of 70 beats/min. Blood pressure is 120/80 mm Hg, and Respiratory rate is 14 breaths/min. auscultation of the heart reveals a normal S1 and S2, the lungs are clear, palpation of the abdomen reveals two superficial solid masses mobile, no tenderness, or enlargement of the liver or spleen. The biochemical parameters examined are within normal physiologic limits. hematologic examination shows a Hemoglobin level of 14.7 g/dL, total leukocyte count of 9,580 x 10³/μL and a platelet count of 192 x 10³/ml, A biopsy of the solid mass was performed, and dermal infiltration of large B cell lymphoma. (Figure C,D). Both immunohistochemical staining and flow cytometric analysis reveal neoplastic cells positive for CD20+,and negative for CD30+.Total Body CT was performed showed only two masses 7x2,5x5cm in soft tissue on the abdomen, without lymphadenopathy. A bone marrow biopsy does not show any lymphomatous infiltration. The patient underwent medical treatment with combined use of rituximab and CHOP.

AUTHORS/INSTITUTIONS: S.Z. Ziyada, R. Schirripa, , Sandro Pertini Hospital, Emergency Department, Rome, ITALY; A. Ricci, , Anatomopathology Department., Rome, ITALY; S. Leonetti Crescenzi, , Hematology Department, Rome, ITALY; M. Zaccaria, , Internal Medicine Department, roma, ITALY;

ABSTRACT FINAL ID: T-51;

TITLE: A young man with primary adrenal insufficiency due to tuberculosis

ABSTRACT BODY:

Abstract Body: A 52-year-old man, Rumanian ethnic was admitted to emergency room, disoriented, with strong smell of alcohol on the breath and head trauma.

He was admitted in our Department (internal medicine) with diagnosis Hyponatraemia ,chronic subdural hematoma in alcoholic.

On physical examination the temperature is (36,8°C).heart rate normal 90 bpm. His blood pressure 100/60 mm Hg.the patient was confused,somnolence left leg hematoma .

Laboratory results reveal, Hbg 14.1 g/dl , creatinine 0.6 mg/dl, urea is 26 mg/dl, sodium 118 mEq/L. CPK 1370 u/l. brain Angio-CT demonstrate chronic subdural hematoma,a contrast chest CT demonstrates bilateral lung calcified nodules (Figure A)

During hospitalization for persistent weakness and Hyponatremia were assayed ACTH120 pg/ml (normal range, 0-46pg/ml) cortisol 10 µg/dl(normal range4,5-22,7) aldosterone 22pg/ml (normal range 35-273).

the patient was treated with cortone ,control blood electrolytes sodium 132mEq/L and clinically significant improvement was seen.

AUTHORS/INSTITUTIONS: Z. Maria Cristina , M. Perretti, M. Fioran, P. Lepore, D. Terracina, , Sandro Pertini Hospital,Internal Medicine Department., Roma , ITALY; S.Z. Ziyada, R. Schirripa, , Sandro Pertini Hospital,Emergency Department, Roma , ITALY;

ABSTRACT FINAL ID: T-52;

TITLE: Pseudo Hyperkalemia in a patient with severe leukocytosis

ABSTRACT BODY:

Abstract Body: Introduction

Hyperkalemia is a frequent and potentially lethal electrolyte alteration found in patients presenting to the Emergency Department. Upon finding high levels of potassium, the physician should also consider pseudohyperkalemia, especially when there are no electrocardiographic findings suggestive of hyperkalemia.

Summary

A 72 year old male with no known drug allergies and a past medical history of Mantle Cell Lymphoma – palliative treatment. The patient presents with a progressive deterioration of health over the last 2 months with a more rapid deterioration over the last 2 weeks. He complains of asthenia, anorexia and difficulty swallowing solid foods. Also, there is dyspnea and orthopnea that interrupts his nighttime rest with progressive lower extremity edema that hasn't improved with diuretics.

BP: 105/70HR: 110 bpmRR: 12 rpmTemp: 37 C

Neurological exam is without any focal findings. Cardiovascular exam : regular rate and rhythm without extra heart sounds. Pulmonary exam :Bilateral lung sounds with generalized rhonchi and wheezing. Abdominal exam : soft, depressible and non distended with massive and painful splenomegaly on palpation. No signs of peritoneal irritation. Extremities : bilateral edemas extending to the thighs

Laboratory Analysis

Leukocyte count : 478,900/L Hemoglobin : 8.2 gm/dL Platelet count : 38,000/L Na⁺ : 130 mEq/L K⁺ : 9.1 mEq/L (results confirmed) Urea : 81 mg/dL Creatinine : 1.32 mg/dL

ECG : Sinus Rhythm at 110 bpm. without any other significant findings.

In the absence of electrographical findings of hyperkalemia, a venous I-STAT was performed in the emergency department with the following results : K⁺ : 4.76 mEq/L. Given the discrepancy of the results, a plasma potassium level was requested. The result was a K⁺ level of 4.5 mEq/L, concluding that we were dealing with pseudohyperkalemia which required no specific treatment.

Conclusion

During the clotting process leukocytes and platelets, which are rich in potassium, release it from the intracellular space. This error can be corrected by determining a plasma potassium level; for which the blood sample should be sent in a heparinized tube.

AUTHORS/INSTITUTIONS: I. Baeza, J. Minguez, A.I. Muhammad, R. Blanco, A. Ragheb, S. Sendra, , Hospital Universitario de La Ribera, Alzira, SPAIN;

ABSTRACT FINAL ID: T-53;

TITLE: DOES EACH ATYPICAL SYMPTOM CONVERSION DISORDER?

ABSTRACT BODY:

Abstract Body: Gitelman syndrome (GS) is an autosomal recessive renal tubulopathy that is characterized by hypokalemia, hypomagnesemia and metabolic alkalosis. Conversion disorders usually present as a single symptom with a sudden onset related to a severe stress. Mostly seen in women but it covers all age groups.

We aimed to discuss a young female patient admitted to the emergency department before making the diagnosis of conversion, exclusion of organic causes and evaluate our case with the electrolyte disorder and GS. A twenty three years old young female patient admitted to our emergency department with complaints of feeling tired, contraction at her hands and arms, numbness, weakness and fatigue. Laboratory results were as follows pH:7,7 pCO₂:16.3 mmHg, pO₂:115 mmHg, HCO₃:27 mmol/L in arterial blood gases, potassium level was 2.3 mEq/l in serum.

Firstly emergency medicine staff interprets alkalosis in arterial blood gases falsely. He thought that this situation was result of tachypnea and diagnosed her as conversion.

After the potassium replacement therapy patient's complaints did not improved. So the history of patient questioned again. Patient talked about her illness called GS. Magnesium added potassium replacement therapy, patient clinic improved and discharged.

Gitelman syndrome which is a renal tubulopathy can be a reason of hypokalemia. Electrocardiography should be repeated periodically for arrhythmias

Hypokalemia is preventable and common electrolyte disorder. It has wide clinical spectrum from non specific complaints to cardio pulmonary arrest. Emergency medicine staff should remind hypo magnesium in unexplained or treatment-resistant hypokalemia patients

Emergency staff should be careful for young female patients admitted to the emergency department with atypical complaints feeling tired, numbness, weakness and fatigue. Before making the diagnosis of conversion, he should exclude organic causes and take a detailed medical history. For the unexplained or treatment-resistant hypokalemia patients Gitelman Syndrome should be kept in mind.

AUTHORS/INSTITUTIONS: E. Uyar, Y. Altunci, S. Kiyani, F. Karbek Akarca, M. Ersel, , Ege University Faculty of Medicine, Izmir, TURKEY;

ABSTRACT FINAL ID: T-54;

TITLE: Discordances between different medication records and the Swedish National Pharmacy Registry of clinical relevance at admission to the emergency ward

ABSTRACT BODY:

Abstract Body: One third of medical admissions to the emergency ward (EW) are due to drug related problems (DRP). Often medication lists are absent or obsolete at admission and the emergency physician relies on information from the record kept by the general practitioner (GP-list) or the newly accessible record of purchased drugs in the Swedish National Pharmacy Registry (SNPR). The aim of this study was to investigate the concordance between the patient's own medication history in the admission chart (AC-list) with these sources.

Method

Patients over 18 years admitted to the EW during September 2008 were included, the lists were compared and differences noted were evaluated for clinical relevance by four independent MDs.

Results

168 patients were included in the study, mean age was 65,5 years, the gender distribution was equal, mean no of drugs on admission was 6,9 and hospitalization time was 4,8 days. A majority of the AC-lists had clinical significant discrepancies from the SNPR (79%) and the GP-list (82%). The AC-list did not include drugs registered in the SNPR (63%) or the GP-list (62%) implicating that medication that the patient possibly had been taking prior to admission was not given after admission. On the other hand, the AC-list included drugs not registered in the SNPR (32%) or the GP-list (52%) possibly resulting in that the patient was given medication after admission that was not used prior to admission.

Most differences were found for cardiovascular and CNS-active drugs, the drugs that most often cause DRP and were more frequent in older patients with multiple medication and caregivers.

Conclusion

The lack of correct information on medication upon admission to the EW constitutes a patient safety hazard, since DRP might not be identified or may even be created on admission with an incorrect medication list.

AUTHORS/INSTITUTIONS: J. Fryckstedt, I. Engquist, K. Wyss, , Karolinska Institutet, Departement of Meicine and Emergenct Medicine, Karolinska University Hospital Solna, Stockholm, SWEDEN; C. Stiller, U. Bergman, C. Askerhagelberg, , Karolinska Institutet, Departement of Medicine and Clinical Pharmacology, Karolinska University Hospital, Stockholm, SWEDEN;

ABSTRACT FINAL ID: T-55;

TITLE: Emergency physicians and clinical pharmacologists collaborating on medication and drug related problems in the emergency ward at the Karolinska University Hospital, Stockholm, Sweden

ABSTRACT BODY:

Abstract Body: Introduction

Knowledge and proper documentation of the patient's medication is essential to diagnosis and decision making in the emergency ward (EW), as drug-related problems (DRP) are common. The aim of this study was identify DRPs and improve emergency physicians' (EP) knowledge and documentation on medication and DRP by collaboration with clinical pharmacologists (CP).

Patients and methods

Data was prospectively collected on patients admitted to the EW in Sept 2008, Jan 2009 and Sept 2009 after informed consent. Oct –Dec 2008 was three month intervention period with drug related information to EP by a CP and the practise of new routines concerning medication. DRPs were retrospectively classified by modified Pharmaceutical Care Network Europe Foundation (PCNE) and by clinical assessment of patient files by CP and EP. The EPs were urged to carefully document all drug related issues in the electronic patient file, report adverse drug events, and note DRPs by diagnosis in the discharge notes.

Results

580 patients were included with a mean age of 67,5 years, equal gender distribution, mean time of hospitalization 3,2 days and patients had a mean of 7,3 drugs on admission. 36% of the patients had a DRP either as cause or contributing to the admission. The most prominent DRPs were dose dependent adverse drug reactions, mainly caused by cardiovascular and CNS-active drugs. The fraction of DRPs did not change during the study. 20% of admitted patients experienced a new DRP during hospitalization. Screening by the PCNE classification identified more DRPs than clinical assessment.

Documentation of medication in admission/discharge notes and reporting of DRPs improved slightly during the intervention but declined thereafter.

Conclusion

DRPs constitute a major health problem. Interventions to improve medical decisions and documentation related to drug treatment must be continuous for sustainable effects.

AUTHORS/INSTITUTIONS: J. Fryckstedt, I. Engqvist, P. Lindmarker, , Karolinska Institutet, Departement of Medicine and Emergency Medicine, Karolinska University Hospital Solna,, Stockholm, SWEDEN; D. Rydberg, L. Holm, C. Stiller, T. Bradley, C. Asker-Hagelberg, , Karolinska Institutet, Departement of Medicinw and Clinical Pharmacology, Karolinska University Hospital,, Stockholm, SWEDEN;

ABSTRACT FINAL ID: T-56;

TITLE: Readmitted patients at the Emergency Ward, Karolinska University Hospital Solna: almost doubled mortality and pulmonary causes dominate.

ABSTRACT BODY:

Abstract Body: Background

Lack of hospital beds for patients in need of emergency admission is a common problem and it is important to identify possible improvements in hospital bed utilization. Readmissions have been shown to represent up to one fourth of internal medicine admissions. In this study we have characterized patients readmitted to the emergency ward (EW).

Method:

Computerized medical records were studied in patients admitted to the EW 1 Oct 2008- 31 Jan 2009. Data from the readmitted patients were compared to data from age and sex matched control patients from the same time period.

Results

Readmissions constituted 9, 25% of the 984 admissions. 60 patients were readmitted 1-10 times, the majority only once (78,3%). Mean age was 78,2 years with 29 men and 31 women. Pulmonary admission causes dominated (42,4%) with COPD (26,6%) being the most prominent followed by cardiac causes (26,7%). In the comparison between readmitted and control patients, the most striking difference was an almost doubled 18- month mortality, 43,4% compared to 24,2% in controls. Pulmonary admission causes were more common (42,4% compared to 17,7%) and specifically COPD (24,5% compared to 5,8%). Heart failure and COPD were more common as concomitant diseases. No difference between the groups was seen concerning other admission causes or concomitant disease, living conditions, smoking, alcohol, active daily life index.

Conclusion

This study shows that readmissions are common, that pulmonary diagnoses dominate and that mortality is almost doubled in the readmitted group. Identifying these patients and offering them an alternative to repeated in-hospital care could presumably improve life quality and make more hospital beds available at the EW.

AUTHORS/INSTITUTIONS: D. Karlsson, J. Fryckstedt, I. Engqvist, , Karolinska Institutet, Departement of Medicin and Emergency Medicine, Karolinska University Hospital Solna, Stockholm, SWEDEN; C. Asker-Hagelberg, , Karolinska Institutet, Departement of Medicin and Clinical Pharmacology, Karolinska University Hospital, Stockholm, SWEDEN;

ABSTRACT FINAL ID: T-57;

TITLE: Using ROC curves, sensitivity and specificity of time intervals from onset of chest pain to hospitalization in patients with acute myocardial infarction, in estimation causes of death

ABSTRACT BODY:

Abstract Body: The aim of the study was to evaluate sensitivity and specificity of time periods from the onset of pain to hospitalization, in relation to mortality rate.

Methods: This prospective clinical study included patients both gender with chest pain and clinical, electrocardiographic, and biochemical signs indicative of myocardial infarction according to European Society of Cardiology guidelines, who were admitted to the CCU of University Hospital Split, in 1999, 2003, and 2005.

Results: Of all 1314 patients with diagnosis of AIM, 179 (13,6%) were died. In 1999, 2003 et 2005 mortality was significantly decreased (18,7% : 13,7% : 8,8%; $p < 0.001$) and the patients were arrived faster (5.2 h : 6 h : 4.3 h; $p < 0.001$). We proved significant relationship between arrhythmias and conduction disturbances in patients with AMI and fatality rate ($X^2=237.6$; $p < 0.001$) and between location of AMI and death rate ($X^2=95.9$; $p < 0.001$). In the group of patients with AIM of inferior and inferoposterior location and conduction disturbances, 10 died, and 46 survived during hospitalization. We were estimated 'cut off ' value on 3.45 h, with sensitivity of 70% and specificity of 59%. Area under the ROC curve was 0.679 (95% CI 0.46-0.899); $p=0.078$. In the patients with AIM of anterior and anteroseptal location and ventricular tachycardia and fibrillation, 50 died and 69 survived during hospitalization. We were estimated 'cut off' value on 2.6 h, with sensitivity of 72% and specificity of 52%. Area under the ROC curve was 0.651 (95% CI 0.552-0.749); $p=0.005$.

Conclusion: Survival of patients with AIM depends of location of AMI, appearance of arrhythmias and time when we start to treat AIM. Every beginning after 90 min from onset of pain, decreasing the chance for survival and worsening the prognosis of disease.

AUTHORS/INSTITUTIONS: D. Glavas, K. Novak, Cardiology, University Hospital Split, Split, CROATIA;

ABSTRACT FINAL ID: T-58;

TITLE: Diabetes Ketoacidosis: assessment of the efficacy of a new protocol in the emergency setting

ABSTRACT BODY:

Abstract Body: Introduction: Given the importance of diabetic ketoacidosis, it is indispensable to implement action protocols in the Emergency Departments.

Objectives: To assess the efficacy of a new protocol for the treatment of diabetic ketoacidosis in the emergency setting in terms of a) metabolic complications during treatment, b) mean length of hospital stay, and c) mortality during admission to the hospital.

Material and methods: Retrospective study of all patients attended in the Emergency Department of Hospital del Mar between January 2005 and December 2007 with diabetic ketoacidosis and in whom the protocol was implemented.

Fulfillment in the use of fluids, insulin, monitorization and reposition of electrolytes, as well as associated complications: mortality, acute respiratory distress syndrome (ARDS) and cerebral edema were assessed.

Results: Thirty-one patients (17 men, 14 women) with a mean age of 47 ± 20 years were included in the study. The mean duration of diabetes was 12 ± 8 years (5 patients presented at the onset of the disease). Treatment discontinuation was the most frequent cause of decompensation (42%). At the time of arrival to the Emergency Department, the mean glucose level was 563 ± 214 mg/dL, ketonemia 5.1 ± 0.7 mmol/L, venous pH 7.10 ± 0.13 , and bicarbonate 10 ± 4 mEq/L. The mean time to normalize ketonemia and pH was 10.3 ± 6.0 h and 10.4 ± 8.8 h, respectively. At the time of admission, 2 patients presented hemodynamic instability. Metabolic complications included 4 episodes of hypokalemia (1 very severe with $K < 3$ mEq/L), 1 case of hypoglycemia, and 3 cases of acidosis recurrence (2 due to hyperchloremia and 1 de to recurrence of ketoacidosis). No case of cerebral edema or ARDS occurred. The mean length of stay was 5.95 days.

Conclusions:

- In relation to the new protocol for the care of diabetic ketoacidosis, the number of metabolic complications was low (hypoglycemia, severe hypokalemia and recurrence of acidosis).
- The mean length of hospital stay was almost 6 days and no deaths occurred during admission.

AUTHORS/INSTITUTIONS: M. Lopez Casanova, S. Minguez, O. Pallas, L. Vilaplana, E. Esteve, I. Campodarve, M. Martinez, A. Pedragosa, F. Del Baño, J. Echarte, , Parc de Salut Mar, Barcelona, SPAIN;

ABSTRACT FINAL ID: T-59;

TITLE: DVT Presentation in a Dublin Inner City Emergency Department

ABSTRACT BODY:

Abstract Body: Introduction

Venous thromboembolism is one of the most common preventable causes of mortality worldwide. It has been called the silent killer as it can imitate other common conditions making the diagnosis increasingly more difficult.

The Wells group in Canada developed their eponymous rule whereby patients were risk stratified on the basis of clinical parameters as low, moderate and high risk. When the clinical examination was supplemented by use of sensitive d-dimer testing it is possible to obtain a group of patients with low probability of DVT that do not need further testing. This helps to rationalise the clinical approach to deep venous thrombosis

The Wells study was performed in an out-patient setting and excluded some high risk patients such as intravenous drug users. In our institution we have a significant cohort of patients from low socioeconomic backgrounds with either current or previous intravenous drug using history. We sought to validate our use of the Wells score in our patient group.

Methods

For the calendar year of 2009 all patients presenting to the hospital receiving either a below knee Doppler or a groin ultrasound were sought. Emergency department records were reviewed of all patients who had the investigation requested through the emergency department and specific information obtained including potential precipitants and d-dimer result if performed.

Results

In total 881 lower limb ultrasounds were performed in the hospital in 2009. Of these 292 were requested through the emergency department. There was a slight female preponderance with 54% of all tests being performed on women. Overall 22.6% of patients tested had a positive result which is significantly higher than that expected in an out-patient setting however when intravenous drug users are excluded this is reduced to 15.9%. Overall incidence of DVT in intravenous drug users was 52%

AUTHORS/INSTITUTIONS: A. Moughty, G. O Connor, N. O Connell, A. Calamai, T. Breslin, , Mater Misericordia Emergency Department, Dublin, IRELAND; P. Bassett, , Statsconsultancy Ltd, Amersham, UNITED KINGDOM;

ABSTRACT FINAL ID: T-60;

TITLE: Ischemic Stroke, Comparizon Between The Demographic, Clinical And Social Characteristics Of Patients With Early Arrival To The Emergency Department(ED) With Potential For TPA Therapy To Those Whith Late Arrival. Frantsen Elena MD, Abd Elhadi Fouad MD, Tzadok Bathsheva MD, Tourgeman Yoav MD, and Darawsha Aziz MD. Haemek Medical Center ,Afula, Israel.

ABSTRACT BODY:

Abstract Body: Aim of the study: To examine the relationship between demographic, social, economical, behavioral and clinical characteristics and the arrival time to the ED since the onset of symptoms.

Methods: Patients who arrived to the ED with symptoms of stroke were devided into 2 groups : group 1 included Patients who arrived within 135 minutes since the onset of symptoms and group 2 included patients who arrived after 135 minutes. All patients filled a questionnaire. The demographic, social, economical, behavioral and clinical characteristics of the two groups were then compared.

Results: 383 patients arrived to the ED with symptoms of stroke and were admitted to the hospital. Only 26.4% percent of patients arrived within 135 minutes since the onset of symptoms and were assigned to group 1. 6 patients received thrombolytic treatment with t-PA (1.7% of all patients, 7.1% of patients in group 1, and 18.6% of patients in group 1 with severe stroke). Comparison of the two groups showed statistically significant differences in ethnicity, ($P < 0.04$), education, and means of arrival to the hospital ($P < 0.001$). Group 1 included more patients with hemorrhagic stroke ($P < 0.001$).

Conclusions: A major reason for the arrival delay in group 2 was lack of awareness (70.9%). Jewish origin, higher education, symptoms of severe stroke and transportation to the hospital by ambulance are factors that shorten the delay in hospital arrival.

AUTHORS/INSTITUTIONS: B.S. Tzadok, Emergency Department, HaEmek Medical Center, Afula, Israel, ISRAEL;

ABSTRACT FINAL ID: T-61;

TITLE: Isolated Hand Paralysis due to Small Cortical Infarction: Case Report

ABSTRACT BODY:

Abstract Body: **INTRODUCTION:** Isolated hand paralysis (IHP) frequently is due to peripheral lesions, however small infarcts of cortical motor lesions in the hand region may infrequently cause IHP, too. In the literature, there are few case-reports describing IHP after cortical infarcts. **CASE REPORT:** In our report, we present a 75-year old man with a complaint of sudden-onset left hand weakness. Physical examination revealed the complete paralysis of all finger movements and impaired unilateral hand flexion and extension (0/5) where the sense of touch, pain, heat and cold were preserved. All the other neurological and systemic examinations were normal. Images of cranial diffusion MRI revealed a small acute infarct lesion at the right insular cortex area. The cranial CT, carotid and vertebral artery doppler tests, and EMG test were in normal limits. The patient was admitted to the hospital with a diagnosis of acute cortical infarct. His clinical course was unchanged during his 5-day hospital admission and he was discharged with clopidogrel and ASA. After one-year during his follow-up a relative clinical improvement was observed as his motor weakness was 3/5 in his impaired hand. **DISCUSSION:** The general reasons for small cortical infarcts which causes isolated hand paralysis might be after an embolus or a thrombus. Also isolated motor weakness of an extremity is usually considered as a peripheral lesion when it is initially diagnosed. We would like to present this case to show that cortical infarct should be considered as an important part of the differential diagnosis when an isolated motor weakness of the hand is presented to the emergency department.

AUTHORS/INSTITUTIONS: O. Duman Atilla, O. GURSOY, E. AKSAY, M. YESILARAS, Emergency Medicine, Tepecik Research and Training Hospital, Izmir, TURKEY;

ABSTRACT FINAL ID: T-62;

TITLE: Case of Bilateral Facial Nerve Palsy: A Diagnostic Dilemma

ABSTRACT BODY:

Abstract Body: INTRODUCTION: Bilateral facial nerve palsy (FNP) is a rare condition, corresponding to less than 2% of cases of facial nerve palsy. The majority of these patients have serious underlying medical conditions, ranging from neurologic, infectious, neoplastic, traumatic or metabolic disorders. The differential diagnosis of its causes is extensive and hence presents a diagnostic challenge. CASE REPORT: A 43-year old female presented to the department with sequential bilateral facial paralysis, in which unilateral FNP was followed by contralateral FNP in the next 2 days, before complete resolution of symptoms on the side affected first. During the hospitalization, there was no progression of her symptoms. Serological tests for various agents, including Thyroid Peroxidase Antibodies, Antinuclear antibody, Anti Neutrophil Cytoplasmic Antibody, Syphilis Antibody, Lyme IgM and Epstein-Barr Virus Capsid Ag IgM Antibody, were all negative. Lyme (Borrelia) IgG and Epstein-Barr Virus Capsid Ag IgG Antibody tests were positive. MRI of the brain showed bilateral asymmetrical enhancement of the facial nerves, right more than left, at the apex of their intracanalicular portion as well as their labyrinthine, tympanic and mastoid segments, may be due to atypical Bell's Palsy. She was discharged stable and has been asymptomatic till date during the follow-up. The possibility of Lyme disease and EBV infection was only based on positive IgG antibody serological results. Lyme disease is not prevalent in Singapore and also the patient did not have any recent history of contact with tick or travel to endemic areas and EBV infection is rare in adults. Thus, in absence of any clinical manifestations for the above conditions, her bilateral FNP could not be attributed to any particular etiology. DISCUSSION: Emergency physicians should be aware of these various diagnostic possibilities, some of which are potentially fatal. This warrants admission and prompt laboratory and radiological investigation. Treatment and prognosis depends on the cause and although bilateral FNP may show more severe paralysis, the overall prognosis in most cases is as good as that in unilateral FNP.

AUTHORS/INSTITUTIONS: S. Pothiawala, F. Lateef, Emergency Medicine, Singapore General Hospital, Singapore, SINGAPORE;

ABSTRACT FINAL ID: T-63;

TITLE: Headache and Ocular Proptosis: A Case Report

ABSTRACT BODY:

Abstract Body: CASE REPORT: A 71 years-old female, no relevant past medical history, attended the Emergency Department (ED) complaining of sudden headache came on when walking approximately one hour prior to her visit to the ED and was described as intense, progressive and accompanied with nausea and vomiting. Started on the occipital region and traveled to the right front-temporal area. Physical examination: Glasgow 15. BP 189/90 mmHg, 72 bpm, 97% basal SatO₂. Good general condition, conscious and oriented to time, place and person, normal skull, normal collar, no jugular venous distention, normal cardiorespiratory auscultation, abdomen normal, normal limbs. Neurological: right anisocoria, slight pupil reactivity to light, right eye ptosis (pass pupillary midline), global ophthalmoplegia in all movements, significant conjunctival injection in her right eye, right eye proptosis, no visual field deficit, sensory loss in the First right trigeminal nerve branch. Facial normal. Rest of exploration without significance. Evolution: The patient was initially admitted to our observation ward. Normal blood test. CT scan showed hyperdense and heterogeneous mass on right wall of sella suggestive of an aneurysm at this level. CT angiography was performed in the circle of Willis and supra aortic trunks and showed a right cavernous sinus asymmetry, with enhancement of right superior ophthalmic vein. Findings were consistent with Carotid Cavernous Fistula of the right carotid artery that feeds the ophthalmic vein, petrosal sinus, cavernous and lateral sinus. 48 hours after arrival embolization of the fistula was undertaken. She was discharged 9 days after with minimal sequelae under the care of the Neurology team.

AUTHORS/INSTITUTIONS: O.J. Simón, F. Simon, F. Moya Torrecilla, , Hospital Xanit Internacional, Benalmadena, Málaga, SPAIN;

ABSTRACT FINAL ID: T-64;

TITLE: Billiard: Sport of Risk

ABSTRACT BODY:

Abstract Body: CASE REPORT: A 22 year old man with no relevant history, presented with complaint of weakness in his right limbs. The day before he suffered oral cavity trauma due to a pool cue with syncope secondary to minor oral bleeding. The up after syncope without altered level of consciousness, focal limb language or wandering on their own feet. In the morning he awoke with a decreased level of consciousness and weakness of right limbs. Diagnostic evaluation: BP 110/70 HR 65 T 36.3C 98% O2 Sat. Glasgow 13/15, motor aphasia, hemiplegia facio-brachio-crural extensor and CPR right. Rest of the normal scan. Complementary tests: Analysis: Gluc 139 26 Urea Creat 1 1.11 Na137 K 4 INR Prothrombin time 81% 13.2 Activ Leucos 19,700 (N 85.4%) Hgb 16.3 MCV 92.2 MCH 31.2 Plts 365000. TC craniofacial A sign of the string at MCA left, with left MCA territory hypodensity. Left lateral pterygoid plate fracture. Adjacent soft tissue injury as a pool cue. Angio-CT troncosupraaortic left ICA occlusion. EKG, chest X-ray without pathological findings. In the presence of such images, Neurosurgery interconsultation with another hospital who dismissed the transfer other complications and recommended antiplatelet therapy. Clinical diagnosis: left MCA ischemic stroke. Left internal carotid traumatic Occlusion of traumatic. DISCUSSION: Thrombosis of internal carotid artery (ICA) is a rare complication of penetrating trauma of soft tissues of oral cavity. Is due to endothelial laceration and thrombosis / dissection by blunt trauma. Focal neurologic symptoms may occur for artery-artery embolization between 1-60 hours after the brunt middle cerebral artery (MCA). Few strokes are described by this mechanism, mainly children and with poor prognosis: 20% deaths, 60% and 16% asymptomatic sequelae. Diagnosis is based on clinical suspicion and angio-CT in our case the TSA. No exited treatment protocols for limited cases.

AUTHORS/INSTITUTIONS: M. Pérez López, D. Rosillo Castro, M. García Palacios, T. Martín Casquero, B. Santaolalla Jiménez, A. García Medina, , Hospital Universitario Reina Sofía de Murcia, Murcia, Murcia, SPAIN;

ABSTRACT FINAL ID: T-65;

TITLE: Na⁺/HCO₃⁻ cotransporter immunoreactivity changes in neurons and expresses in astrocytes in the gerbil hippocampal CA1 region after ischemia/reperfusion

ABSTRACT BODY:

Abstract Body: Introduction: The maintenance of intracellular pH is important in neuronal function. Na⁺/HCO₃⁻ cotransporter (NBC), a bicarbonate-dependent acid-base transport protein, may contribute to cellular acid-base homeostasis in numerous physiological and pathological processes. In the present study, we examined alterations of NBC immunoreactivity, its protein and mRNA levels in the hippocampal CA1 region after 5 min of transient forebrain ischemia using gerbils.

Methods: In the sham-operated animals, very weak NBC immunoreactivity was detected in CA1 pyramidal neurons, and the immunoreactivity in the pyramidal cells was significantly increased at 12 h after ischemia/reperfusion. Three days after ischemia, the immunoreactivity disappeared in the pyramidal neurons; however, the immunoreactivity began to be expressed in astrocytes, not in microglia, in the ischemic CA1 region at 3 days after ischemia/reperfusion judging from double immunofluorescence study with glial markers.

Results: NBC immunoreactivity in astrocytes was strong 4 days after ischemia/reperfusion. In Western blot study, NBC protein level in the CA1 region was significantly increased at 12 h after ischemia/reperfusion and significantly decreased 2 days after ischemia/reperfusion. Thereafter, NBC protein level was again increased and returned to the level of the sham-operated group 4 days after ischemia/reperfusion. In RT-PCR analysis, change in NBC mRNA level in the ischemic CA1 region was similar to that in the NBC protein level after ischemia/reperfusion.

Conclusion: These results suggest that changes in NBC expressions may play an important role in the neuronal damage with astrocytosis induced by transient forebrain ischemia.

Keywords: Na⁺/HCO₃⁻ cotransporter, Ischemia, Delayed neuronal death, Acidosis, Hippocampal CA1 region.

AUTHORS/INSTITUTIONS: J. Cho, M. Won, , School of Medicine Kangwon National University, Chuncheon, Gangwondo, KOREA, REPUBLIC OF; J. Cho, C. Park, M. Won, , Clinical Research Institute KNUH, Chuncheon, Gangwondo, KOREA, REPUBLIC OF;

ABSTRACT FINAL ID: T-66;

TITLE: The Total Pentad

ABSTRACT BODY:

Abstract Body: 54 yo female sudden onset nausea, vomiting, ataxia, right facial droop, altered mental status 90 minutes prior to arrival. Normal VS. Awake but confused and agitated, difficulty following commands; mild right sided facial weakness, asymmetric smile. CT normal. Symptoms persisted. MRI showed 8mm area of restricted diffusion suggestive of recent ischemia. Location did not correlate with clinical findings, so TPA was withheld. CBC: H&H 5.4/17.1, WBC 11.4, platelets 14. She was transfused 6 units platelets and 2 units PRBCs. Admitted to ICU.

Hospital Course: LDH 2214, D-Dimer 3721, Haptoglobin <1, Troponin I 2.72, CKMB, 18.2, CK 353, WBC 14.7, H&H 6.9/19.4, Platelets 15, BUN 24, Creatinine 1.14, Total bili 4.2, AST 104, Ferritin 1,294.6, Fibrinogen 564. Peripheral Smear: Schistocytes. Cultures negative. Patient started on daily plasmapheresis. Renal failure worsened; eventually normalized. PLTs remained 11-20 for 11 days on plasmapheresis. Began to improve with solumedrol. Day 24, plasmapheresis stopped. Day 26 platelet count, mental status and cognitive function returned to normal.

Discussion: Thrombotic Thrombocytopenic Purpura (TTP) is a rare life-threatening disorder. Untreated, it has 95% mortality. Diagnosed and treated early, survival rate is 85%. The classic pentad is microangiopathic hemolytic anemia, thrombocytopenia, neurological abnormalities, fever, and renal dysfunction. Only 40% present with the pentad. Our patient presented with anemia, thrombocytopenia, and neurological abnormalities, but developed fever and renal dysfunction, ultimately fitting the pentad. Physical exam is often normal; laboratory findings support the diagnosis: thrombocytopenia without coagulopathy, schistocytes on peripheral smear, decreased hemoglobin, elevated LDH, normal coagulation studies, evidence of muscle and organ ischemia. Early treatment with plasmapheresis and plasma infusion is imperative to decrease morbidity and mortality. Adjuncts include corticosteroids, immunosuppressant and chemotherapeutic agents and splenectomy. Although TTP may be difficult to diagnose due to its variable and often vague presentation, it is important to consider as an early diagnosis.

AUTHORS/INSTITUTIONS: M. Gruber, L. Moreno-Walton, Emergency Medicine, Louisiana State University School of Medicine, New Orleans, LA;

ABSTRACT FINAL ID: T-67;

TITLE: Thrombolysis with intravenous tissue plasminogen activator in acute ischaemic stroke with elderly patients.

Case report.

ABSTRACT BODY:

Abstract Body: Background: The acute ischaemic stroke is the third reason for mortality and it is the most common reason for disability in Hungary. The mortality rate of patients admitted to hospital with acute stroke is about 25-30% in the first year. This disease affects mainly the elderly. The stroke may reoccur within the first few days in 5% of the cases, the consequences of the second cerebral vascular catastrophe usually are more serious than the first one. It is internationally accepted to give intravenous thrombolytic in acute ischaemic stroke (AIS) as a casual therapy, however, limited experiences are available in Hungary about as to its usefulness and its safety for elderly patients. In Bács-Kiskun County Hospital -Hungary- between 2007.05.01 and 2011.04.01. 60 thrombolysis were done. 15 patients of the 60 were over the age of 75.

Aims: To present the safety of thrombolysis with intravenous tissue plasminogen activator in a 88 year-aged patient who suffered from AIS in our Emergency Department (ED).

Case presentation: One hour prior to the patient's admittance to the ED, she suddenly felt dizziness, weakness in her left arm and dysphasia. Her baseline NIHSS score was 14. A CT scan on admission revealed no abnormalities. What was remarkable out of the general physical and neurologic findings were an irregular cardiac rhythm, left hand plegia, left leg severe paresis and dysarthria. The patient was awake, alert, and cooperative. The intravenous thrombolysis was applied within 3 hours of the onset of symptoms. A follow-up CT study showed no haemorrhage transformation, no cerebral oedema. 24 hours after the beginning of the treatment, the patient's neurologic status improved significantly; only minor left hemiparesis was noticeable. The patient recovered well, one week after her admittance, she was able to walk alone.

Conclusion: We wanted to present with our case that in Hungary not only in university clinics intravenous thrombolyses can be safely used and have good effects in AIS with older patients too, if the patients are selected carefully.

AUTHORS/INSTITUTIONS: G. Mihály, I. Szabó, Z. Erdélyi, , Bacs-Kiskun County Hospital, Emergency Department, Kecskemét, HUNGARY; N. Lévai, I. Kondákor, , Bacs-Kiskun County Hospital, Neurology and Stroke Department , Kecskemét, HUNGARY;

ABSTRACT FINAL ID: T-68;

TITLE: Cervical manipulation may draw a patient to the ED with Horner Syndrome

ABSTRACT BODY:

Abstract Body: A 48-years-old woman, otherwise in good health, was admitted to the emergency department complaining of mild paresthesia to the left arm started few hours before. Her past medical history was mute and she wasn't on any medication with the exception of estroprogestinic pill. When interrogated she reported a mild frontal bilateral headache and tinnitus, that started a few days before. She denied any recent trauma but she reported having received cervical spine manipulation by a physiotherapist seven days before. She also reported receiving regular manipulations before this episode.

On examination the patient presented a right eye ptosis with omolateral miosis (Horner Syndrome). Both pupils reacted normally to light and she had no visual complaints. She performed an urgent basal head CT that showed no abnormalities, she then received 500mg of IV salicylate. The negative head CT along with the very characteristic neurological symptoms induced us to perform an urgent head and neck angio-CT. This exam demonstrated a near complete occlusion of both internal carotid arteries lumen with a concentrically hypodense area of sub-intimal hematoma compatible with bilateral occlusive internal carotid artery dissection. The patient was placed on heparin and started salicylic acid. She was then admitted to the neurology ward with the diagnosis of bilateral internal carotid artery sub-occlusive dissection following cervical spine manipulation.

Cervical spine manipulation is a known possible cause of carotid artery dissection. Other known cause can be severe or mild trauma, running, nose blowing, fast head movements and coughing. Spontaneous unilateral and bilateral dissection is also described. The most common symptom is unilateral headache. Neck pain, pulsatile tinnitus, paresthesia and force deficit to the limbs are the second most common symptoms. Horner syndrome may occur but is the most rare. Angio-MRI is the preferred modality to demonstrate carotid artery dissection, however angio-CT is a more fast and feasible option in the emergency department setting. The goal of therapy is to prevent stroke and ischemic complications.

AUTHORS/INSTITUTIONS: L. Carengo, A. Tua, F. Santoro, C. Manfrinato, R. Petrino, , Emergency Department, S. Andrea Hospital, Vercelli, ITALY;

ABSTRACT FINAL ID: T-69;

TITLE: Relationship between risk factors with mortality of stroke

ABSTRACT BODY:

Abstract Body: BACKGROUND: Stroke is a heterogeneous, multifactorial disease regulated by modifiable and nonmodifiable risk factors. we aimed to determine relationship between age, sex, hypertension(HTN), diabetes mellitus(DM), abnormal electrocardiogram(ECG), abnormal Doppler sonography of cervical arteries(DSOCA), focal neurologic deficit(Dysarthria, Paresis) and mortality after 90 days of stroke.

METHODS: The study population consisted of 301 first-ever stroke patients (159 female, 142 male) included in the emergency department for five month, filled the form in several visits and documented the risk factors and signs; then mortality of patients after 90 days of stroke, were assessed, and in last step the significance of them in mortality determined by statistical chi-square test.

RESULTS: HTN was significantly effective risk factor, ($p < 0.001$), in 90 days mortality of stroke. Abnormal ECG ($p = 0.006$), and abnormal DSOCA ($p = 0.023$) were effective in mortality after 90 days of stroke; whereas the relationship between sex ($p > 0.05$), age ($p > 0.05$), DM ($p = 0.935$) with mortality, wasn't significant. Paresis ($p = 0.018$), as a sign of severity in stroke, was effective in mortality but dysarthria, as another sign, wasn't effective, ($p = 0.07$).

CONCLUSIONS: An improvement in acute-stroke management, possibly evolution of cerebrovascular risk factors, and decrease mortality is reflected by changes in the risk factors and outcome of first-ever stroke patients, that presented in emergency department.

AUTHORS/INSTITUTIONS: M. Manouchehrifar, Emergency medicine, Ahwaz University, Ahwaz, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: T-70;

TITLE: Emergency Department guideline for the evaluation and management of first unprovoked seizures

ABSTRACT BODY:

Abstract Body: Objectives

In December 2009, physicians from the Emergency Department(ED) at Changi General Hospital developed a First Seizure Guideline to aid ED management of patients with a first unprovoked seizure.

The objective of this study is to assess the outcomes of patients managed according to the First Seizure Guideline. Primary outcomes of interest include disposition, adverse events such as seizure recurrence, ED re-attendance and mortality from a seizure-related event.

Methods

A retrospective review of all hospital records of first seizure patients presenting to the ED of a 790 bed tertiary hospital from December 2009 to December 2010 was conducted.

Patients aged 12 years or older who presented with a first seizure without identifiable cause were eligible for management according to the guideline. Fully recovered patients with no seizure recurrence following at least a 1 hour observation, normal diagnostic tests results (electrocardiogram, blood sugar level, and non-contrast computed tomography brain scan) and adequate social support were discharged with Neurology appointments within 2 weeks.

Results

235 patients presented with first seizure to the ED during the study period. 62 (26.4%) patients were found to have unprovoked seizures and were managed according to the guidelines. 33 (53.2%) of these patients were admitted and 27 (43.5%) were discharged with Neurology appointments.

Of the 33 admitted patients, 16 were given outpatient electroencephalogram (EEG) and Neurology appointments. 2 patients out of this group of 16 had recurrent seizures within 24 hours of the first seizure. There were no intubations, intensive care unit stays or deaths.

Of the 27 discharged patients, there were no re-attendances for recurrent fits within 72 hours of discharge or reports of injury or mortality from a seizure-related event. 19 patients attended the Neurology appointment and 8 defaulted.

Conclusion

The First Seizure Guideline appears to be a safe and useful tool for evaluation and management of ED patients with a first unprovoked seizure. More research is needed to identify cases suitable for discharge from the ED.

AUTHORS/INSTITUTIONS: G. Sim, H. Lim, , Changi General Hospital, Singapore, SINGAPORE;

ABSTRACT FINAL ID: T-71;

TITLE: A stroke of bad luck?: an unusual causative agent in septic embolic stroke.

ABSTRACT BODY:

Abstract Body: A 26 year old male attends with a presumed methadone overdose having been found poorly responsive in his bed beside an empty bottle. History from his mother gave a story of heroin use concurrently with methadone and a 3 day history of feeling non-specifically unwell.

Examination revealed a loud pansystolic murmur, dense right sided hemiparesis, aphasia and right sided neglect. He was pyrexial and tachycardic. A diagnosis of bacterial endocarditis with septic embolic stroke was made. Echocardiogram demonstrated mitral regurgitation and mitral valve vegetations. A CT scan of his brain without contrast showed an established infarct involving the entire territory of the left middle cerebral artery. A repeat CT at 48 hours after neurological deterioration showed significant oedema, ventricular effacement and midline shift and a diagnosis of malignant MCA syndrome was made. He underwent emergency decompressive craniotomy. Blood cultures were positive for streptococcus agalactiae.

Stroke is a recognised complication of infective endocarditis, and is thought to complicate up to 40% of cases of infective endocarditis involving native valves. The incidence of IE is around 40 times more common in intravenous drug users when compared with the general population.

Staph aureus is responsible for 20% of cases of IE, but in intravenous drug users is the causative organism in 60%. streptococcus agalactiae endocarditis has previously only been described in post-partum women, when it has colonised the female genital tract.

AUTHORS/INSTITUTIONS: M. Harris, emergency, royal infirmary edinburgh, Edinburgh, scotland, UNITED KINGDOM;

ABSTRACT FINAL ID: T-72;

TITLE: CEREBELLAR GIANT MENINGIOMA: A CASE REPORT

ABSTRACT BODY:

Abstract Body: Approximately one fifth all primary brain tumours are meningiomas. Most meningiomas are benign and malignant meningiomas are extremely rare. Benign meningiomas are usually diagnosed in middle-aged or elderly adults however they may be asymptomatic until death in several cases. In this report, a case of incidental cerebellar extra-axial giant meningioma in a 60-year old female is presented. The patient was admitted to emergency department with complaints of dizziness and nausea after she had stumbled and fallen at home. There was not any disease in her past medical history. Her vital signs, neurological and any other system findings were in normal limits during her physical examination. A noncontrast CT scan of the head was ordered and a 6.5x6 cm extra-axial giant meningioma was detected in the right cerebellar hemisphere (Figure-1). Admission and operation was offered but the patient left the emergency department despite medical advice and information.

AUTHORS/INSTITUTIONS: K. Acar, O. Duman Atilla, Emergency Medicine, Tepecik Research and Training Hospital, Izmir, TURKEY;

ABSTRACT FINAL ID: T-73;

TITLE: Delirium Tremens patients in Helsinki District University Hospital and experiences in use of dexmedetomidine

ABSTRACT BODY:

Abstract Body: Delirium Tremens is the most serious manifestation of alcohol withdrawal symptoms. The common treatment in Delirium Tremens is based on use of benzodiazepines, and if needed combination of benzodiazepines and antipsychotics. Dexmedetomidine is a selective α_2 -adrenergic receptor agonist. The interest in dexmedetomidine has been focused mainly for its usefulness in intensive care units (ICUs) and sedation during procedures. There are only small case reports of dexmedetomidine in alcohol withdrawal delirium tremens.

In this prospective study we compared dexmedetomidine as adjuvant to benzodiazepines and antipsychotic with common treatment of benzodiazepines and antipsychotic in Emergency Departments of Helsinki District University Hospitals Jorvi, Meilahti and Peijas. 1.3.2008-1.3.2009 we screened all delirious alcohol withdrawal patients. Delirium was identified using CAM-ICU test. The treatment response were followed by RASS. 43 patients were included in this study. The age of the patients was 39-79 year. 9 were females. 32 received common benzodiazepine based treatment and 11 dexmedetomidine treatment, if common treatment was not suitable, or if common treatment failed. Medication is summarised in table. The total 6-month mortality was 4 patients (9%). In correlation analysis patient age correlated positively in total hospital treatment time and in risk for pneumonia, female sex positively for admission RASS, presence of pneumonia positively in intubation risk, and use of dexmedetomidine adjuvant therapy positively in surveillance time. We could not see any difference in risks for pneumonia or other infections between benzodiazepine and dexmedetomidine adjuvant therapy received patients. Intubation was not needed in dexmedetomidine group.

In conclusion dexmedetomidine may be considered in the treatment protocol of Delirium Tremens, first-line if benzodiazepines should be avoided, and especially in second-line adjuvant therapy, if benzodiazepines based therapy seems to be noneffective.

The comparison of dexmedetomidine and benzodiazepines in Delirium Tremens first-line treatment needs more studies.

AUTHORS/INSTITUTIONS: J. Tolonen, J. Rossinen, V. Harjola, Department of Medicine, Helsinki University Central Hospital, Helsinki, FINLAND; H. Alho, , National Institute of Health and Welfare, Helsinki, FINLAND;

ABSTRACT FINAL ID: T-74;

TITLE: Valproate-Induced Hyperammonemic Encephalopathy

ABSTRACT BODY:

Abstract Body: Introduction

Valproic acid (VPA) is a broad-spectrum antiepileptic drug that has been used for more than 30 years. Valproate-Induced Hyperammonemic Encephalopathy (VTHAE) is firstly described in 80's, this case report discussed VTHAE as one of the altered mental status causes in emergency department (ED).

Case:

A 20-year-old female admitted to the ED with complaint of mental status change, nausea and vomiting. She was epileptic since 3 years and her antiepileptic drug was changed for VPA 500 mg/day. Her complaints were started a couple of days after initiation of VPA. Her vital findings were recorded as follows: blood pressure 120/60 mmHg; heart rate 64/min; respiratory rate 14/min; oxygen saturation on room air 99%; and temperature 36.5°C.

Her Glasgow Coma Score was 14. She was oriented and obeyed simple commands, however she was apathetic and her reaction time was prolonged. Deep tendon reflexes were found to be normoactive, and cerebellar and cranial nerve examinations were normal. Any motor deficits were found on neurological exam. A fine tremor was observed at upper extremities, the rest of her physical examination was revealed normal.

Her blood glucose level was 126 mg/dl, and electrolytes and liver function test are revealed as normal. Her VPA blood level was slightly over the therapeutic ranges (134.37 mg/l) (N: 50-125). EEG test revealed a minimal slowing without any localization and lateralization. Blood ammonia level was 121 mcg/dl (upper limit: 80). The remainder of laboratory tests were normal. The patient was diagnosed as VTHAE, VPA is discontinued, and replaced for levetiracetam.

Supportive treatment and rehydration of the patient was ordered. After 48 hours, her ammonia level was decreased in to normal ranges and she was discharged with improving mental status.

Conclusion

VTHAE is a potentially serious consequence of the use of VPA. Emergency physicians should be familiar this possible cause of mental status change. Those patients should prompt consideration of hyperammonemia. Patients with VTHAE may be asymptomatic, may have behavioral changes, or may have marked deteriorations in their level of consciousness. Deaths have been reported.

AUTHORS/INSTITUTIONS: M. Ersel, H.U. Savas, Y. Altunci, F. Akarca, Emergency Medicine, Ege University Medical Faculty, Izmir, TURKEY; F. Gulec, , Izmir Tepecik Research and Education Hospital Neurology Department, Izmir, TURKEY;

ABSTRACT FINAL ID: T-75;

TITLE: A CASE REPORT: EXTENSIVE PNEUMOCEPHALUS

ABSTRACT BODY:

Abstract Body: Intracranial pneumocephalus was first described in 1866 by Thomas in a report of an autopsy of a trauma patient.. Although the most common reason is cranial surgery, it has numerous causes, including barotrauma, neoplasms, congenital skull defects, septic emboli, infection with a gas-producing organism and spinal anesthesia. In this report, a case of extensive pneumocephalus in an 81-year old male is presented. The patient was presented to emergency department after loss of consciousness. In his past medical history, he had chronic renal failure and was under regular dialysis treatment. On his neurological examination his total Glasgow Coma Scale score was seven points. It was also noted that a hemodialysis catheter had been previously placed via right subclavian vein but the mouth of the catheter was open to the free air. A non-contrast CT scan of the head demonstrated an extensive pneumocephalus besides approximately a hypodense space occupying lesion with a 6.5-cm diameter, brain edema and subarachnoid hemorrhage. Pneumocephalus on a head CT usually compels emergency physicians to a detailed search for differential diagnosis. A pneumocephalus without complication usually does not require any treatment, unless a symptomatic tension pneumocephalus develops, which may require emergent evacuation.

AUTHORS/INSTITUTIONS: M. Yesilaras, O. Duman Atilla, A. Bilge, Emergency Medicine, Tepecik Research and Training Hospital, Izmir, TURKEY;

ABSTRACT FINAL ID: T-76;

TITLE: Subarachnoid Hemorrhage Diagnosed by LP Have a Delayed Presentation

ABSTRACT BODY:

Abstract Body: Subarachnoid hemorrhage (SAH) is an allusive life-threatening disease. A head cat scan (CTH) has been quoted as being most accurate during the first 24 hrs and subsequently decreases. Objective: To determine if a delay in presentation is associated with an increased rate of lumbar puncture (LP) diagnosed SAH. Methods: Design: Retrospective cohort study. Participants: All patients (pts) presenting to the ED between Jan 2005 and Dec 2009 in 20 hospitals. ICD9 diagnosis of SAH was utilized and cross referenced with CPT code for LP. A manual chart review was conducted on all pts diagnosed with SAH who had LP performed. Every 10th SAH chart was utilized as a "control". Pts were excluded if: traumatic etiology, chart unavailability/incomplete, or previous diagnosis of SAH. Duration was "a priori" divided into < 24 hrs, 24-7days, and > 7 days. Statistics: Mann-Whitney Test and Chi Square Test with a present alpha of 0.05. Results: A total of 3,741,129 pts were evaluated during the study period. SAH was diagnosed in 1508 pts. An LP was determined to be positive for SAH in 1.5% (n=22/1508) of pts. Ultimately, four pts had a "CT re-reads" for ICH leaving 1.2% (n=18/1504) (95% CI=0.7%-1.9%) with negative CTH and positive LP. Of the 150 historical control charts 52 were excluded, leaving 98 for analysis. One LP diagnosed SAH was excluded because duration of symptoms could not be determined. No ED deaths were reported. Eight pts in the control arm were intubated, none in the LP arm. One pt was discharge in the control arm and recalled after a CT re-read. Females comprised 61% (N=11/17) of those diagnosed with LP, compared to 62% (n=61/98) of controls. Median years of age in those diagnosed by LP was 51 (SD +/-12.9), compared with a control age of 58 (SD= 19.3) (p=0.11). Duration of symptoms was < 24 hrs in 59% (n=10/17), 2-7days in 29% (n=5/17) and > 72 hours in 12% (2/17) in those diagnosed with LP, compared to a control rate of 85% (n=83/98) 12% (n=12/98) and 3% (n=3/98). respectively (p= 0.037). Conclusion: Only 1% of pts are diagnosed with SAH utilizing an LP and they are more likely to have a delayed presentation.

AUTHORS/INSTITUTIONS: F. Fiessler, D. Calello, D. Salo, L. Kasper, , Morristown Medical Center, Morristown, NJ; R. Riggs, , UMDNJ- Robert Wood Johnson Medical School , New Brunswick, NJ;

ABSTRACT FINAL ID: T-77;

TITLE: Idiopathic acute transverse myelitis with fulminant evolution in the Emergency Department

ABSTRACT BODY:

Abstract Body: We present the case of a 28-year-old man, occasional marijuana consumer, who presented in the Emergency Department for neck pain accompanied by paresthesia in both upper limbs and progressive weakness that began the day before. The patient denies any trauma, recent vaccination or drug injections. Seven years ago he was successfully treated for pulmonary tuberculosis. Physical examination reveals moderate quadriparesis with hyporreflexia, impairment of vibratory and proprioceptive sensation, and a sensory level at C4. His consciousness was clear and he was oriented. Magnetic resonance imaging (MRI) revealed a cervical cord lesion enhanced after gadolinium administration at C2-C4 level. Lumbar puncture: cerebrospinal fluid (CSF) pleocytosis. His condition deteriorated within a few hours, becoming quadriplegic, dyspneic (using accessory muscles), and required intubation and mechanical ventilation. Although the patient reports an antecedent upper respiratory infection with fever three weeks ago, laboratory tests, serological and CSF markers and CSF viral cultures were denied a viral infection (human immunodeficiency virus, human T-cell lymphotropic, Epstein-Barr, cytomegal, human herpes, varicella zoster, enteroviruses, hepatitis, rubella, influenza). Serological tests for mycoplasma, autoantibodies (antinuclear antibodies, double-stranded DNA), antiphospholipid antibodies and aquaporin-4 were negative. Serological or clinical evidence of connective tissue disease were also excluded: syphilis (VDRL CSF), tuberculosis (CSF acid-fast bacilli smear and culture tuberculosis), Lyme disease (anti-Borrelia burgdorferi antibodies), sarcoidosis, Behcet's disease, Sjogren's syndrome, systemic lupus erythematosus, mixed connective tissue disorder. Vitamin B12 and folate levels were normal. Treatment with methylprednisolone in high doses and immunotherapy have improved his neurological status. During hospitalization in the Intensive Care Department, the patient developed nosocomial pneumonia with Acinetobacter Bauman calcoeticus complex multidrug resistant with unfavorable evolution towards sepsis and death.

AUTHORS/INSTITUTIONS: G. Vasile, B. Cristina, C. Nicolaescu, F. Daniel, I. Simona, T. Cristina, Emergency Department, County Hospital Emergency of Timisoara, Timisoara, ROMANIA;

ABSTRACT FINAL ID: T-78;

TITLE: FAHR'S SYNDROME: AN IDIOPATHIC HYPOPARATHYROIDISM PATIENT IN THE EMERGENCY DEPARTMENT

ABSTRACT BODY:

Abstract Body: AIM: Patients attending to emergency departments (ED) with nonspecific neurological symptoms have a wide range of differential diagnoses. In this case report, we present a female patient with episodic peripheral paresthesia, who ended up with the diagnosis of Fahr's syndrome, a rare pathology characterized with bilateral striatopallydodental calcifications

CASE: A 78 years old female presented to our ED with numbness in the left arm and leg, and a history of 4 episodes of facial numbness which occurred the day before. There were no lateralizing neurological deficits in the physical examination of the patient, but Chvostek's sign was (+). The patient had a previous history of stroke and osteoporosis. The only pathology in patient's routine lab work was the Ca level of 5,8 mg/dl. The CT scan of the brain showed bilateral calcifications in the basal ganglia and cerebellum. Patient was consulted by Neurology and Endocrinology in the ED and hospitalized for replacement of hypocalcaemia and further diagnostic work up by Endocrinology with Fahr's syndrome. The PTH values were consistent with hypoparathyroidy.

CONCLUSION: In patients with acute nonspecific neuropsychiatric symptoms, especially in case of Ca metabolism disorders, Fahr's syndrome shall be a part of differential diagnosis and diagnostic work up in the ED should cover this syndrome

AUTHORS/INSTITUTIONS: C. Ertan, E. Karaman, H. Oguztürk, Emergency Medicine, Inonu University Faculty of Medicine, Malatya, TURKEY; D. Ertan, , Private Sevgi Medical Center Radiology Clinic, Malatya, TURKEY;

ABSTRACT FINAL ID: T-79;

TITLE: Far from Rare

ABSTRACT BODY:

Abstract Body: Fahr's disease (FD) is a rare neurological disorder characterized by diffuse symmetrical calcification in the dentate nucleus, basal ganglia, thalamus, and centrum semiovale. Generally seen to be autosomal dominant inheritance, sporadic and autosomal recessive types have been described,. It's first described by Fahr in 1930. The most common manifestation of FD was movement disorders (55%) of which Parkinsonism, while the hyperkinetic movement disorders (chorea, tremor, dystonia, athetosis and dyskinesia) accounted for the rest. Herein we present a case of FD who had diagnosed in the Emergency Department (ED).

A 26-year-old man was brought to the ED because of a sudden loss of consciousness just after tooth withdrawal with contractions in extremities. He had no seizure history previously and denied any past medication history, allergies to medications, chest or abdominal pain, nausea, vomiting or diarrhea. There was no family history of mental illness or dementia. On physical examination, the patient was a healthy appearing man who was fully oriented. The vital signs were: blood pressure 120/60 mmHg, pulse 72 beats/min, respirations 12 breaths/min, temperature 37 C. The general physical examination was unremarkable. Neurological examination revealed no extrapyramidal signs, athetosis or dementia; normal cranial nerve functions, and no motor or sensory focal findings. A laboratory screening panel was normal including thyroid function tests, calcium (9.3 mg/dL) and phosphate (3.1 mg/dL). Electrocardiography and chest radiography was normal. Because of the loss of consciousness a non-contrast head computed tomography was obtained, and revealed extensive and symmetrical hyperdense lesions over basal ganglia. On the basis of the normal examinations performed the patient consistent with FD.

There are no reliable correlations between age, extent of calcium deposits in the brain, and neurological deficit. The clinical picture of FD is complex. There are many asymptomatic cases with no focal signs as our case and we should keep in mind this disease in ED for the patients that were asymptomatic with symmetrical calcification in the basal ganglia, dentate nucleus, thalamus, and centrum semiovale.

AUTHORS/INSTITUTIONS: Y.K. Gunaydin, M.A. Karamercan, Y. Katirci, S. Aslay, E. Demirtas, K. Vural, F. Coskun, , Ankara Education and Research Hospital Department of Emergency Medicine, Ankara, TURKEY;

ABSTRACT FINAL ID: T-80;

TITLE: Spinal injuries in a rural Greek district hospital

ABSTRACT BODY:

Abstract Body: Spinal injury is one of the most significant health problems throughout the world .Aim of this study was to describe the initial management and outcome of case with craniocerebral injuries admitted to a rural district hospital during a 5 year period (2003,2004,2005,2006,2007) . A retrospective analysis was performed in all of the case notes of consecutive cases of burns. 108 individuals (80 men-74% , 28 women- 26 % , median age 39 years) presented to the outpatient department and 18 were admitted (16,6 %) . The average length of stay was 10 days. The major parts of the cases were caused by road accidents and work accidents. Accurate initial support for spinal injury patients appears to be necessary during the hospital permanence.

AUTHORS/INSTITUTIONS: N. Syrmos, A. Televantos, N. Kapoutzis, , Surgical Department, Goumenissa General Hospital, Surgical Department, Goumenissa General Hospital, GREECE;

ABSTRACT FINAL ID: T-81;

TITLE: Acute axonal polyneuropathy and peripheral facial paralysis in the Emergency Department

ABSTRACT BODY:

Abstract Body: Objectives: We present this case in order to demonstrate that not all peripheral paralysis are idiopathic and with mild outcome.

A 17 years old man was admitted to our Emergency Department (ED) for deviation from the mouth, and inability to close the right eye; 7 days before he presented with fever and abdominal pain, and after that weakness, fatigue and tingling of lower members. No previous medical record was reported. He was not taking any medication at that time. Physical examination revealed extreme thinness and right facial palsy with impairment of eye closure and collapse of the right labial commissure, bilateral Achilles areflexia, and extensor digitorum longus with patellar hyporeflexia of both bilaterally, gait was normal and was labeled as normal force due to its thinness. Five days after admission ataxia, inability to rise from a chair without support of upper limbs, predominantly distal symmetrical tetraparesis, numbness and hypoesthesia of lower limbs, later symptoms of dysphagia, dysphonia, and dyspnea.

Blood test as well as cranial scan were normal. Lumbar puncture revealed albumin cytological dissociation in cerebrospinal fluid (CSF). Electromyography (EMG) described an acute distal sensitive-motor axonal polyneuropathy. Our patient improved after treatment with intravenous immunoglobulins.

Guillain-Barre syndrome (GBS) is an acute inflammatory polyneuropathy of autoimmune etiology characterized by the presence of progressive flaccid paralysis, areflexia, and symmetrical sensory disturbance variable. The facial nerve involvement is common but usually bilateral. Unilateral involvement of the facial nerve is rare. We report a case of a patient with acute axonal sensitive-motor neuropathy in the ED as unilateral facial nerve involvement.

AUTHORS/INSTITUTIONS: S. Navarro Gutierrez, Emergency Medicine, Hospital de La Ribera, Alzira, Valencia, SPAIN; F. Gonzalez Martinez, P. Franquelo Morales, C. Herraiz de Castro, D. Garcia Mateos, A. Panadero Sanchez, , Hospital Virgen de la Luz, Cuenca, Cuenca, SPAIN;

ABSTRACT FINAL ID: T-82;

TITLE: Dextketoprofen Induced Angioedema: A Case Report

ABSTRACT BODY:

Abstract Body: Angioedema is a potentially life-threatening mucocutaneous disease that is most often triggered by drugs. In drug-induced angioedema, non-steroidal anti-inflammatory drugs may precipitate attacks by effects on arachidonic acid metabolism. Dextketoprofen trometamol is a water-soluble salt of the dextrorotatory enantiomer of nonsteroidal anti-inflammatory drug ketoprofen. In the literature, cases of dextketoprofen induced photocontact dermatitis are reported, but there are no data about development of angioedema. A 63 years old male was admitted in our emergency department for the acute onset of swelling over the lips 4 hours after taking 25 mg single dose of dextroketooprofen (Arveles©) peroral for back pain. He did not have any previous history of drug allergies. Physical examination revealed well-demarcated cutaneous edema of lips. There was no sign of any cutaneous rash or airway obstruction. He was diagnosed with angioedema triggered by dextroketooprofen. He was treated with intravenous histamine H1 antagonist 45.5 mg Feniramin maleat and intravenous histamine H2 antagonist 100 mg Ranitidine HCl. He was discharged after 6 hours of observation without any progression. He was prescribed short course of oral steroid and oral antihistamines. Angioedema is the swelling of deep dermis, subcutaneous or submucosal tissue due to vascular leakage. If an etiologic agent can be identified, future reactions may be avoided. Treatment of these reactions is generally supportive and symptomatic, with attempts to identify and remove the offending agent. Antihistamines, with or without steroids, are usually sufficient, although epinephrine can be considered in severe or refractory cases. Adverse effects of the non-steroidal anti-inflammatory drugs are usually dose related, although many dose unrelated effects like idiosyncratic effects also appear. These include urticarial rashes, angioedema, and bronchospasm. In our case, angioedema developed after taking 25 mg single dose of dextroketooprofen peroral. This report illustrates the first case of a complication of angioedema following the use of this agent.

AUTHORS/INSTITUTIONS: D. Oray, O. Duman Atilla, E. Gunay, A. Akkaya, Emergency Medicine, Tepecik Research and Training Hospital, Izmir, TURKEY; D. Oray, , International Kent Hospital, Izmir, TURKEY;

ABSTRACT FINAL ID: T-83;

TITLE: Effect of β -2 Adrenoreceptor Polymorphism on the Response to Asthma Treatment with Albuterol in the Emergency Department among Puerto Ricans

ABSTRACT BODY:

Abstract Body: Introduction: Puerto Ricans suffer a high asthma severity, elevated rate of Emergency Department (ED) visits due to asthma, unresponsiveness to conventional treatment, and high hospitalization rate compared to other ethnic groups. Severity is likely to be multifactorial. Variations in the response to β -agonist drugs is among the factors. Polymorphism in the β -2 adrenoreceptor (ADRB2) gene receptor at position 16 has demonstrated variations in responses to β -agonist drugs in the acute setting. We propose to evaluate the clinical significance of ADRB2 polymorphisms in Puerto Ricans by comparing the response to albuterol in children with an acute asthma exacerbation arriving to the Emergency Department. Methods: We conducted a pilot study to enroll Puerto Rican asthmatic children 6-20 years of age. Children received standard asthma treatment, PASS for severity of exacerbation, answered an asthma control questionnaire and provided saliva samples for genotyping. Peak expiratory flow, pulse oximetry, and clinical markers were measured at baseline and one hour after treatment. The study was approved by the IRB of the University of Puerto Rico.

Results: Twenty children were enrolled with a mean age of 10 years. Their asthma was uncontrolled as reflected by an ACQ score of 3 ($p=0.01$). PASS showed mild to moderate asthma exacerbation ($p=0.001$). ADRB2 genotype showed that 11% were Arg-Arg, 61% were Arg-Gly and 28% were Gly-Gly homozygotes. Arg Arg homozygotes had a mean peak flow improvement of 72 L/min, heterozygotes had a 30 L/min improvement and Gly-Gly homozygotes had a 9 L/min improvement. There was a trend for a difference between the ADRB2 genotype and the response to albuterol treatment as measured by peak flow measures one hour after initiation of treatment

($p=0.075$). Conclusions: ADRB2 polymorphism may explain variations in response to acute asthma treatment among Puerto Ricans. The study underscores the need to identify individuals with Gly16Gly variant in order to diminish treatment failures, avoid unnecessary medications, and provide cost-effective treatment in the ED.

AUTHORS/INSTITUTIONS: J. Mercado, B. Rivera, S. Nazario, J. Mercado, Emergency Medicine, UPR Recinto de Ciencias Medicas, Carolina,

ABSTRACT FINAL ID: T-84;

TITLE: Narcotics in a busy emergency department

ABSTRACT BODY:

Abstract Body: Background: pain is one of the most common causes of referring patients to emergency departments. Sometimes pain is coming from the procedures that have done in emergency department. Treatment of pain is one of the important tasks of every emergency physicians and every doctor who works in emergency room. Opioids are one of the most acceptable drugs for reducing of pain in emergency departments. This study has designed to evaluate the type of use, dosage, effect and complications of opioids in our emergency department.

Method: This was an observational study. All patients who had NRS more than or equal of 4, entered into the study. Type of narcotics which has ordered by the in charge physician, patient's vital signs, his or her NRS and some demographic data have been documented. After one hour change in patient's pain was measured by the new NRS. Changes in vital signs and some complications like hypoxia, loss of consciousness, nausea and vomiting were evaluated.

Results: In 10 months 269 patients were entered into the study, 27 percent of them were women. Middle age of patients was 42 years. 87 percent of patients have taken morphine sulfate, 6 percent have taken Meperidine, 3 percent have taken Fentanyl and 4 percent have taken Methadone. Mean of NRS were 8.83 and it has changed to 4.5. there was a decrease in Systolic BP , but without any Shock. Peripheral O2 saturation has been decreased 2 percent, but no one has been had hypoxia, except one patient who needed bag mask ventilation. This patient discharged without any neurologic complications.

Conclusion: Although narcotics used a lot in our emergency department, there is 32 percent of patients who had NRS more than or equal of 4, one hour after injection of narcotics. It shows that we underuse narcotics and maybe other anti-pain drugs in our emergency department.

Amir Nejati, Maryam Purwahabi, Fateme Kanpouri, Hosein Saeedi

AUTHORS/INSTITUTIONS: A. Nejati, H. Saeedi, M. Purwahabi, F. Kanpouri, Emergency Department, Imam Hospital, Tehran University of Medical Sciences, Tehran, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: T-85;

TITLE: Risperidone Overdose Is Associated With Tachycardia, Not Hypotension Or QTc Prolongation

ABSTRACT BODY:

Abstract Body: Background: Risperidone is a second-generation antipsychotic agent with antagonism of serotonin, dopamine, histamine, as well as alpha-1 receptors. Although surprisingly well-tolerated, risperidone intoxication has been reported to cause hypotension, respiratory depression, as well as tachycardia.

Objectives: The measurement of vital signs, including heart rate, oxygen saturation and reported alcohol use in risperidone intoxication.

Methods: This is a structured retrospective review of all risperidone overdoses presenting to an urban-suburban ED from 2002-2010. All patients presenting with risperidone overdose were included.

Results: During the study period, there were 39 patients presenting with risperidone intoxication of which 27 were excluded for polypharmacy ingestion, resulting in 12 cases of single agent ingestions with risperidone. Doses ranged from a minimum of 3 mg to a maximum ingestion of 60 mg. Two patients were noted to have ingested alcohol among this group (BALs ranging from 0.174 to 0.268).

Tachycardia (defined as a heart rate of 100 or greater) was the most prominent symptom, occurring in 7/12 patients (58%) of patients, but only 1/12 (8%) patients had a blood pressure \leq 100 systolic upon arrival. The average QTc on the initial EKG was 440 msec, with one EKG (8%) exhibiting a QTc $>$ 500 msec which did not result in arrhythmia or death. Patients required an average of 1 liter intravenous (IV) fluid, with this reducing heart rate by an average of 14 beats per minute ($t(11)=2.8$, $p<.05$). Respiratory depression was observed in 2/12 (17%) patients requiring supplemental oxygen during the emergency department encounter. Although there was a limited number of alcohol-using patients, they had marginally lower oxygen saturations upon arrival (94.5%) than non-alcohol patients (97.0%). There were no deaths reported in our group.

Conclusions: Risperidone intoxication is characterized by tachycardia without QTc prolongation or hypotension. The tachycardia is well treated with minimal IV fluid.

AUTHORS/INSTITUTIONS: D. Savaser, A.B. Minns, E. Castillo, M.P. Wilson, Emergency Medicine, UCSD Medical Center, San Diego, CA;

ABSTRACT FINAL ID: T-86;

TITLE: Hospital and Treatment Centers Safety during Disaster

ABSTRACT BODY:

Abstract Body: **OBJECTIVE:** Considering the importance of emergency medical practice as a therapeutic specialty both of medical sciences and management science and taking into account our country's being the fourth Asian country in regard to frequency of natural disasters, and it's logical to think to increase safety of hospital before disaster occurred and we assessed structural position and disaster management of one of the hospitals in Mashad (Shahid Hashemi Nejad) in November 2008. **METHODS:** First of all we defined a clinical crisis as a situation in which a hospital is not able to cope based on its normal daily capacity. Such numbers as couldn't be handled through hospitals normal procedures and may overwhelm even the normal flow of work. In the current study a formerly prepared procedure used in Tehran's hospitals is taken as the base on which the study is conducted. The modes are then modified as dictated by climatic, cultural and Mashad. An aerial map of Shahid Hashemi Nejad Hospital (for which the study is conducted) is used to depict the positions of field units and command centers both when it's partially dilapidated. **RESULTS:** The program should be prepared in such a way to constitute immediate establishment of crisis committee comprised of:

1) head of the hospital, 2) Para clinic unit 3) nursing unit, 4) guarding unit, 5) dispatching and discharging unit, 6) psychiatric unit, 7) freezers and refrigeration unit, 8) emergency evacuation unit, 9) installations and maintenance unit, 10) logistics and transport unit, 11) communication unit, 12) public relations and media unit, 13) reception unit, 14) bio-nuclear chemical unit, and 15) specialized units. Instructions are then given by the latter to unit directors who then muster their staff to execute the predefined tasks. **CONCLUSION:** A study of natural disasters in the past reveals a failure by authorities to contain such situations and guide us towards more stern planning as regards reacting to unexpected crises and it's hoped that God willing we could reduce losses caused by natural disasters in the future.

AUTHORS/INSTITUTIONS: A. Payedar, M. Kalantari meibodi, D. Tahami, rajaei, shirazi, Shiraz, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: T-87;

TITLE: Medical students teaching BLS to High school children in the Romanian "Road Safety" Program

ABSTRACT BODY:

Abstract Body: Background:"Road Safety" is a project addresses to future drivers and pedestrians including BLS workshops, implemented first at the local level.In 2011 the Federation of Medical Students Association of Romania decided to be implemented nationwide.Objective:To assess the level of knowledge concerning BLS at the high school children and the value of the medical students involvement in BLS teaching. Methods: We trained medical students to give BLS courses and sent them to teach high school children. We analyzed the questionnaires and drawings (non-verbal expression) completed by 350 high school children (class X - 178 and class IX 172 subjects).After a brief overview of BLS steps according to ERC 2010 Guidelines (1.approach safely 2.check for responsivity 3.shout for help 4.open airway 5.check breathing 6.call 112 7.perform chest compressions 8.ventilation) and watching a video with dynamic BLS, the subjects was asked to completed questionnaires on previous experience with medical emergencies, the correct behavior in case of cardiac arrest and to make a drawing with a message about CPR.Results: The percentage of complete questionnaire was 99.42% and the achievement of drawings 98.57%.11.15% of subjects had already witnessed a medical emergency and 97.42% know the 112 number. Of the eight elements of BLS subjects correctly identified the steps 6 (67.15%) and 3 (33.72%) while only 1.15% mentioned steps 4 and 5. The drawings were related to step 6 (96.4%), step 1 (84.9%), step 3 (81.8%) and 7 (55.2%). The main characters shown by drawing was the victim (99.43%), the rescuer (89.43%), 112 (81.43%) and the ambulance (72.86%).The attitude toward CPR released from the drawing was optimistic in 62.29% cases, neutral 17.72% or pessimistic 7.72%. The information on BLS was simplified, easy accessed and understanding by a target group who can be easy motivated by reducing the age mismatch between the trainer and the trainees. Conclusions: High school children show a great willingness to learn BLS, but their knowledges are incomplete.Training medical students to teach BLS will involved more actively both: the teacher and the audience.

AUTHORS/INSTITUTIONS: C.C. Diana, O.V. Popa, A. Petris, Emergency, University of Medicine and Pharmacy "Gr. T. Popa", Iasi, Iasi, ROMANIA; C.C. Diana, M. Corlade-Andrei, P. Nedelea, A. Petris, , Emergency County Sf Spiridon Hospital, Iasi, ROMANIA; D. Sindilar, , 2Medical Students' Society , Iasi, ROMANIA;

ABSTRACT FINAL ID: T-88;

TITLE: Comparison Study by the Classification of Injury Severity in Frontal Motor Vehicle Collision

ABSTRACT BODY:

Abstract Body: **OBJECTIVE:** This study evaluated significant factors through the comparison between minor injury and major injury as the classification of injury severity in frontal motor vehicle collision. **METHODS:** From January 2011 to April 2011, we collected data from patients who had visited the emergency rooms of two hospitals due to a frontal motor vehicle collision. We also surveyed the cause of the accident, the information of accident vehicle, the damage type or extent of the vehicle, and the injury severity of the patient. The vehicle's damage was presented CDC (Collision Deformation Classification) code through the evaluation of the photographs of the real accident vehicle, and the severity of the patient's injury was evaluated by injury severity score (ISS) and revised trauma score (RTS). Patient's severity was classified as major injury and minor injury at the standard of ISS 15. **RESULTS:** The total number of subjects was 47 with the average age was 42.1 ± 15.7 . Of 47 subjects, 29 (61.7%) were major injury, 18 (38.3%) were minor injury. Average ISS was respectively 32.2 and 6.1 ($p < 0.001$), and average RTS was 7.6 and 5.6 ($p = 0.003$). When we compared seating position of occupant, seat belt use, air bag deployment, vehicle type, crush extent and social environment between two groups, only seat belt use had statistically significant difference ($p = 0.006$). **CONCLUSION:** In frontal motor vehicle collisions, seat belt use is an important factor on preventing major injury.

AUTHORS/INSTITUTIONS: S. Kim, H. Jung, , School of Medicine, Konkuk University, Chungju, Chungcheongbuk-do, KOREA, REPUBLIC OF; K. Lee, W. Lee, , Wonju College of Medicine, Yonsei University, Wonju, Kangwon-do, KOREA, REPUBLIC OF; H. Choi, , College of Engineering, Hongik University, Seoul, KOREA, REPUBLIC OF;

ABSTRACT FINAL ID: T-89;

TITLE: An Instructive Case of a Large, Extraluminal Prosthetic Phallus

ABSTRACT BODY:

Abstract Body: INTRODUCTION: Retained rectal foreign body insertions requiring medical attention are not infrequent occurrences. More commonly, the foreign body is removed in the emergency department without the need for extensive radiologic examination or surgical intervention. Rarely, surgical intervention is needed to retrieve the offending object. Even more uncommonly, colonic damage including perforation may result from the insertion. CASE REPORT: We report the case of a 55-year-old male who presented with sigmoid colon perforation secondary to a large prosthetic phallus. The phallus was completely extraluminal with resulting mass effect on the right hemidiaphragm. Significantly, there were no extraluminal infiltrative changes, collections or pneumoperitoneum. The role of cross-sectional imaging as it pertains to complicated foreign body insertion will be discussed.

AUTHORS/INSTITUTIONS: M. Wang, J. DiPoce, C. Fasanya, J. DiPoce, , Staten Island University Hospital, Staten Island, NY;

ABSTRACT FINAL ID: T-90;

TITLE: Spontaneous Bilateral Patellar Tendon Rupture: A Case Report and Review of the Literature

ABSTRACT BODY:

Abstract Body: CASE REPORT: A 37-year-old man (weight 125 kg; 180 cm) suddenly fell to the ground while playing handball as a goalkeeper. No hurt or direct bump was noted. He described a “crack” in both knees followed by severe pain and being unable to stand and play. In our ED, the patient was in good health and did not have any past medical history. He had a palpable gap over both patellar tendons and was unable to straight leg raise. Ultrasound imaging revealed a hypoechogenic area of the tendon insertion at the inferior pole of the patella bilaterally. MRI demonstrated a tendon segment avulsed from the inferior pole of patella. After 24h the patient underwent surgery. For both knees, the patellar tendon was sutured to the distal pole of the patella and protected by a metallic wire tied at average 60° of knee flexion. A histological examination of the excised patellar osteotendinous tissue revealed an absence of degenerative processes. The evolution was satisfactory in a 3 month period. DISCUSSION: Isolated rupture of the patellar tendon is a rare injury. Patients may have a preexisting medical condition (steroid use) or repetitive micro trauma to the knee. The mechanism of rupture is forceful contraction of the quadriceps muscle on a partially flexed knee presenting a bilateral patellar tendon disruption of proximal insertion. Bilateral ruptures of the patellar tendon are a rare event and occur mainly in older patients with systemic diseases like lupus erythematosus, rheumatoid arthritis or taking longterm corticosteroids. This is the 20th case of a spontaneous bilateral rupture of the patellar tendon at the proximal end without obvious trauma or systemic disease. Surgical management consisting of tendon repair with a suture anchor technique protected temporarily with a cerclage wiring gives a good outcome. In conclusion, bilateral patellar tendon rupture is a rare entity, often associated with systemic diseases. We report the 20th case in the literature of a healthy 37-year-old man with spontaneous traumatic bilateral concurrent patellar tendon rupture without any known predisposing systemic disease or medication or knee problems.

AUTHORS/INSTITUTIONS: E. Revue, , Emergency Department Victor Jousselin's Hospital, Dreux, FRANCE; H. N'Tidam, L. Merlo, , Department of Orthopaedics and Traumatology, Dreux, FRANCE; H. Hadibi, , Department of Radiology, Dreux, FRANCE;

ABSTRACT FINAL ID: T-91;

TITLE: Minor Blunt Chest Trauma: Danger in Missing associated Abdominal Injuries

ABSTRACT BODY:

Abstract Body: **OBJECTIVE:** Blunt chest wall trauma is extremely common either as an isolated injury or as part of multiple injuries. The objective of this study was to determinate the percentage of patients who presented to our Emergency Department (ED) with a minor blunt chest trauma associated with an abdominal injury. **METHODS:** We conducted a retrospective study over a one year period (November 2009 - October 2010) of all patients admitted with a minor blunt chest trauma in our ED. Patients data were reviewed for: age, sex, mechanism of injury, clinical features, type of CT scan (thoracic alone or thoracoabdominal) and outcome. A standardised management of the emergency diagnosis for minor blunt chest trauma was used for all cases. **RESULTS:** From 35307 visits to our ED, 448 patients (12.6%) had a minor blunt chest trauma. Among them 78 patients (17%) had a CT scan exploration: 16 thoracic CT scans alone and 62 thoracoabdominal CT scans. In the sub-group of thoracoabdominal CT scans, there were 44 males and 18 females with an average age of 53 years (17-90 years). The mechanisms of injury responsible included road traffic accidents (32%), falls (50%), direct blows (16%) and crush injury (2%). The selection criteria for associate abdominal CT scan were the first clinical examination findings: tenderness in upper abdominal quadrant, left and right (27%), chest wall tenderness because of lower chest injury with rib fractures (40%) or without (22%) and the high risk mechanism (11%). Only 5 patients (8%) had an abdominal injury confirmed at CT scan: 4 splenic injuries and 1 liver injury. An intraabdominal haemorrhage was found in 3 patients with surgical exploration. Lower ribs fractures (>8th rib) were present in 3 patients. All abdominal injuries were admitted with good outcome. **CONCLUSIONS:** Blunt chest trauma is a frequent injury and the severity can be difficult to assess. The management should include a very systematic first assessment of lower chest injury. In case of tenderness and/or lower rib fractures, the trauma may be associated with splenic or liver injuries which were no frequent in our survey but could be life-threatening.

AUTHORS/INSTITUTIONS: M. Mihalcea, . Slimani, J. Steinmetz, P. Kauffmann, C. Geronimus, J. Kopferschmitt, P. Bilbault, , Department of Emergency Medicine, University Hospital Hautepierre, Strasbourg, FRANCE;

ABSTRACT FINAL ID: T-92;

TITLE: Estimation of Injury Severity According to Risk Factors Calculated on Population Study

ABSTRACT BODY:

Abstract Body: **OBJECTIVE:** The heterogeneity of the trauma patient population relates to variation of the kind and type of injuries, different sex, ages and the presence of coexisting illnesses and factors connected with the quality and time of treatment which constitutes the final severity of injury and the degree of life threat. Systematizing of all these factors, which is essential to scientific research, requires uses of injury severity scales. The aim of this study is the elaboration of an universal method for the evaluation of trauma severity, using accessible parameters administrative databases, with diagnostic efficiency similar to other injury scales. **METHODS:** The database of the Lublin Centre Of The Public Health, gathering the information of all of hospitals of the voivodship made it possible to create a database with 92 463 trauma patients treated in 32 hospitals of the Lublin voivodship in years 2007- 2009. **RESULTS:** An analysis of the diagnostic efficiency of worked out predictive models and injury scales was introduced, it showed that model called the Life Threat Indicator (LTI) possessed the best diagnostic efficiency and the best ability of patient differentiation into groups of deaths and survivals, it is characterized by the highest AUROC value (0,9615). The comparison of the of LTI with other injury severity scales showed that LTI possessed a similarly high diagnostic efficiency as other, injury severity scales. **CONCLUSION:** The developed Life Threat Indicator (LTI) is a simple and universal method which allows us to estimate objectively the severity of injuries and connected risks of life threat, both for individual patients and freely chosen patient groups. It also makes it possible to run population research based on the accessible information in administrative databases. The LTI possesses the comparable diagnostic efficiency of other universally world wide used trauma severity scales.

AUTHORS/INSTITUTIONS: A. Nogalski, T. Lubek, A. Mikula, T. Kucmin, Department of Trauma Surgery and Emergency Medicine, Medical University of Lublin, Lublin, POLAND;

ABSTRACT FINAL ID: T-93;

TITLE: The Road Map to Trauma Center Designation

ABSTRACT BODY:

Abstract Body: INTRODUCTION: Trauma is the leading cause of death in the first 4 decades of life and the third cause of death at all ages. For every trauma death, there are 2 permanent disabilities. Why trauma centers? The ultimate evaluation outcome of trauma system implementation is a reduction in morbidity and mortality. This goal can be accomplished through planning and implementation of process of care improvement, enhancement of system performance, use of evidence-based research, development and implementation of targeted injury prevention programs, and revisions to trauma system plans based on system assessments and data-based needs. CASE REVIEW: Why Al Rahba Hospital? 1. Geographical location: population density in the catchment area and the very rapid growth dense construction in the surrounding community. 2. AL Rahba ED receives more than 70,000 visits annually; with trauma visits representing about 12 % of total visits and trauma admissions represent --% of hospital admissions. 3. Complexity of cases: the admitted trauma cases have a high ISS > 15 which indicates the value of time in the management of these complex trauma cases. 4. The frequent occurrence of Mass Causality Incidents with victims transported to Al Rahba Hospital. Development Process: The authors followed a structured approach for trauma center accreditation. It started by forming a multidisciplinary task force that reviewed the situational background, contacted the American College of Surgeons (ACS), reviewed the optimum resources for providing trauma care and Verification Review Criteria (VRC), performed gap analysis and started a gap closure program. DISCUSSION: The authors present the steps and progress of the program. References: 1. Health Resources and Services Administration, Trauma-EMS Systems Program. (2006). Model Trauma System Planning and Evaluation. Rockville, MD: Author. 2. Mackenzie EJ, Rivara FP, Jurkovich GJ et al. The impact of trauma-center care on functional outcomes following major lower-limb trauma. J Bone Joint Surg Am 2008; 90: 101–19. 3. American College of Surgeons. Verification process. Available at <http://www.facs.org>.

AUTHORS/INSTITUTIONS: G.A. Khalifa, N.S. Boma, Emergency, Al Rahba Hospital, Abu Dhabi, UNITED ARAB EMIRATES;

ABSTRACT FINAL ID: T-94;

TITLE: Probability of Increasing Traumatic Accidents for Drivers of Motorized Means of Transportation because of Narcotics Use and Necessity to Prescribe Higher Dose of Tranquilizers for them

ABSTRACT BODY:

Abstract Body: **OBJECTIVE:** Because, drivers of motorcycles and inter-civil means comprise the majority of applicants to trauma emergencies in hospitals, it is important to consider conditions of narcotics abuse in increasing probable hard accidents caused by decreasing reflex response of the body and awareness status. In this research, accomplished by prospective consideration in this field over 100 patients injured and hospitalized in Imam Hossein Hospital, emergency part because of bone fracture or laceration of skin or dislocation of organs. **METHODS:** In this research, we considered 100 patients who were drivers of motorized means who had a traumatic emergency treated at Imam Hossein Hospital. Patients were hospitalized because of bone fracture or vast laceration of skin or dislocation of organs, they disregard to sex, age and vehicle type. Stabilized first vital signs and then we get a history for using narcotics for the patient or his/her companions, and we get urinary sampling and send the kit to the lab. It is mentioned that these actions accomplished by the consent of the patient and his/her companions and we convinced them that it is important to determine the type and rate of prescribed tranquilizer by the practitioner. In this time we considered 109 patients non-drivers motorized with non traumatic problem (for example infectious disease, surgery, chest pain) went to internal medicine emergency of Imam Hossien Hospital. **RESULTS:** Final findings showed that these 100 patients including 19 women, none of them have any narcotics abuse, neither from their history nor from their lab kits, but from 81 men, only 35 or 43% were healthy from history and lab kit consideration while 39 of them, 48%, have narcotics abuse from history or laboratory consideration. **CONCLUSION:** It is necessary for practitioners working at emergencies of hospitals in trauma part to prescribe tranquilizers in higher dosages and it is necessary to perform cultural interventions to reduce narcotics abuse.

AUTHORS/INSTITUTIONS: S. Bolandparvaz, K. Mohamad, A. Keshavarzi, H. Abasi, M. Gharibi, A. Yazdanbakhsh, emergency, Shiraz, Shiraz, shiraz, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: T-95;

TITLE: A characteristic ground glass appearance on chest CT among patients with blunt lung injury

ABSTRACT BODY:

Abstract Body: Purpose: To clarify the characteristics of ground-glass-lesions on chest CT after blunt trauma.

Methods: We retrospectively investigated all blunt chest trauma patients who were admitted from January 2004 to December 2010. The inclusion criteria were patients with 1) chest CT examination on arrival, 2) intrathoracic traumatic lesions confirmed by initial CT, and 3) a 2nd chest CT examination within 7 days from admission. We divided the subjects into two groups. A GG group included subjects who had ground-glass lesions on initial chest CT and a control group included subjects who did not have the ground-glass appearance.

Results: There were 45 subjects in the GG group and 56 in the control group. The average age in the GG group was significantly younger than that in the control group. The ratio of improvement for the value of SpO₂/FiO₂ between on arrival and the 2nd hospital day and ratio of improvement for CT findings between on arrival and the 2nd CT examination in the GG group was greater than in the control.

Conclusion: The ground glass appearance on chest CT after blunt trauma was not rare (44%), and the patients with ground-glass lesions were younger and tended to have a better improvement of oxygenation and CT images, in comparison with the patients without these characteristic lesions. These findings suggest that the ground glass appearance on chest CT after blunt trauma was lung edema, not contusion, and that it may be characteristic of certain populations of patients.

AUTHORS/INSTITUTIONS: Y. Yanagawa, , Juntendo, Bunkyo, Tokyo, JAPAN; T. Sakamoto, , National Defense Medical College, Tokorozawa, JAPAN;

ABSTRACT FINAL ID: T-96;

TITLE: A compare between children and adult trauma in emergency department in Iran

ABSTRACT BODY:

Abstract Body: Objective: This study is a compare between children and adult trauma that's admitted in emergency department to determine most high risk group to protect them.

Method & Material: This is retrospective existing data study on cases whom admitted in emergency department of Emam Hossein hospital during 2009 in two groups of adults and children and each group contained 100 randomized cases.

Results: In both groups trauma is more common in male. Mean age in adult is 35 and in children is 7 years old. The most common cause of blunt trauma in adult is car accident (40%) and in children is falling down (50%). 20% of trauma in adults is penetrating including 18% by stab wound but it's only 2% in children. Shotgun trauma is occurred in 2% of adults.

Conclusion: According to this study in children 5-9 years old falling down is the most common cause trauma and this group needs the most protection to prevent them from trauma.

AUTHORS/INSTITUTIONS: H. Derakhshanfar, , Emam Hossein Hospital, Tehran, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: T-97;

TITLE: Identifying delays in the transfer of emergency neurosurgical patients

ABSTRACT BODY:

Abstract Body: Background:

Previous studies in the UK have shown consistent delays in the transfer of patients with significant brain injury from the initial receiving emergency departments to neurosurgical centres. We attempted to further pinpoint the areas of delay within the referral system.

Method:

A retrospective study of consecutive patients transferred in to our neurocritical care unit with brain injury was carried out over a three-month period. The case notes were examined to identify the following information:

- 1) Referring unit
- 2) Intracranial pathology
- 3) GCS at time of referral / acceptance
- 4) Time of first attempted referral to neurosurgeons
- 5) Time of successful contact with neurosurgeons
- 6) Time of acceptance
- 7) Time of departure / transfer
- 8) Time of arrival
- 9) Requirement for immediate surgery
- 10) Any specific factors likely to contribute to significant delay

Results:

26 patient notes were examined.

6 patients were accepted straight to theatres, a further 5 had a GCS < 9

For all patients:

The median time from referral to acceptance was 50 minutes (range 9-110mins)

The median time from acceptance to transfer was 108mins (range 22-180mins)

The median transfer time was 35mins (range 15-95mins)

For patients accepted directly to theatre:

The median time from referral to acceptance was 23 minutes (range 9-60mins)

The median time from acceptance to transfer was 98mins (range 22-163mins)

Conclusions:

Across all patients the largest single point of delay was between acceptance to transfer while the patient was still at the referring centre. While the introduction of guidelines concerning emergency radiology provision have reduced delays in the diagnosis of significant injury, and subsequent referral, it is the ongoing management, stabilisation and arrangement of transport that is significantly affecting the care of patients requiring urgent surgery. Further improvements in efficiency would require a cross speciality approach involving the emergency departments, anaesthesia & intensive care departments and the ambulance service.

AUTHORS/INSTITUTIONS: R. Kerry, N. Bindal, M. Smith, Anaesthetics, University Hospitals Birmingham NHS Foundation Trust, Birmingham, UNITED KINGDOM;

ABSTRACT FINAL ID: T-98;

TITLE: Post traumatic intraorbital arteriovenous fistula

ABSTRACT BODY:

Abstract Body: The patient is a 54-year-old woman presented to the E.D with proptosis and eyelid hyperemia and progressive right blurred vision for 1 month. Physical examination did not disclose other abnormalities and no additional clinical symptoms were reported. She had a history of non-penetrating head trauma 40 days ago without family history of vascular disorders. Orbital CT scan showed dilated superior ophthalmic vein and orbital MRI revealed increased signal intensity and vascularity in the right orbital apex. M.R.Angiography of the carotid circulation demonstrated fistula between the right ophthalmic artery and the right superior ophthalmic vein. The patient did not receive any interventional treatment for the intraorbital arteriovenous fistula and follow up without any treatment was performed. Her vision and symptoms gradually improved over a follow-up interval of 6 months.

Conclusion: Patients with intraorbital arteriovenous fistulas without significant loss of visual function could be observed for spontaneous resolution.

AUTHORS/INSTITUTIONS: M. Pouraghaei, P. Moharamzadeh, M. Saeedi, P. Maroufi, Y. Heshmat, A. Ghaffarzad, S. Shoaehari, F. Rahmani, M. Keyghobadi, A. Almasi, S. Ojaghi Haghighi, Emergency Department, Tabriz university of medical sciences, Tabriz, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: T-99;

TITLE: What about the 3 in 1 blokade versus the ilio-facial infiltration in emergencies conditions? A propsective study.

ABSTRACT BODY:

Abstract Body: AIM:

The age of the patient and the series of deseases connected with it increase the risk taken by the rescuing teams to control the pain in case of femoral broken injuries. Due to local abnormalities such as hematomas that displaced anatomical repairs, locoregional approach still complicated. Let us study the efficacy between the llio-facial block (IFB) and the 3 in 1 block (3/1B).

METHODS:

40 patients were randomized and treated. An IFB (G1 n=20) or a 3/1B (G2 n=20) were performed (T0) by lidocaine injection (400 mg). After 10 minutes (T10), tractions to reduce the broken patient's legs started. Pain scoring into several Sensitive Area (the femorocutane (Pfc); the femoral (Pf); the obturator (Po)) were evaluated over a visual analogue scale (VAS: 0/10: no pain; 10/10 maximal pain; 4/10 moderate pain).Satisfactory analysis was performed at the exit from the emergency department. For statistical analysis a Shapiro-Wilk test, Wilcox and a student T-test were used.

RESULTS:

Groups are comparing in terms of demographic data (average age: 69+/-7y) The average VAS between T0-T10 was significantly reduced in G2 (0/10:100%) compared to G1 (0/10:60%) in Pf ($p<0.05$) and in Po (G2:0/10:70% - G1:0/10:30%) ($p<0.05$) but not in Pfc. In G1 intravenous adjunction of analgesics were used in 65% compared to G2 (5%)($p<0.01$).95% of patients were satisfied in G2 compare to 50% in G1 ($p<0.05$).

CONCLUSION:

Hematoma combining with bad positioning in painful attitude complicate the realisation of the 3/1B as well as the IFB but both techniques will reduce the pain significantly in 10 minutes. The 3/1B (guided by a nerve stimulator) remain the best technique to allow large mobilisation in painless condition without intravenous analgesia adjuncts. This technic promote a hudge degree of satisfaction in patients.

AUTHORS/INSTITUTIONS: M. François, Emergency - Intensive Care, Nivelles-Tubize Hospitals, Jauche - Nivelles, BELGIUM;