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Legend: *doctors*
nurses

Abstract number: 001
Abstract type: poster

The basic principles of the oxygen utilization in emergency conditiones

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Oxygen is the most widely used drug in life-threatened patients. Oxygen is used by doctors and nurses/technicians of almost all specialties. The purpose of this article is to familiarize the participants with the current guidelines for the use of oxygen therapy, which was published by the British Thoracic Association (BTS) in October, 2008. For the application of oxygen therapy it is necessary to provide: a source of oxygen (most often oxygen bottles), a system for delivering oxygen (nasal catheter, or different types of masks), rotameter (flow-meter) and moisturizer. Systems for the application of oxygen therapy, depending on the concentration of oxygen, can be divided into delivery systems for low, medium and high concentrations of oxygen. Systems for delivering low concentrations of oxygen are: nasal catheter (flow of 1-6 L/min; the delivery of 24% - 45% oxygen) and simple (standard) mask (minimum flow>5 L/min, delivered 35-40% oxygen). Systems for delivering medium oxygen concentration are: Venturi mask (the flow of 2-15 L/min; delivery 24-50%oxygen) and mask with reservoir without non-return valves (flow of 6-10 L/min, delivered 35-60%oxygen). For the delivery of high concentrations of oxygen (95%) we use a mask with reservoir and no-return valves (mask without rebreathing), oxygen tent, "jet" ventilation etc. In life-threatened patients (cardiac arrest, trauma, anaphylaxis, massive bleeding in the lungs, sepsis, shock, convulsions, hypothermia) we need to apply high concentrations of oxygen to normalize vital signs and then reduce the supply of oxygen so that the target value of SaO_2 is 94 -98%. If the patient is without breathing we need to ventilate the patient with Ambu balloon, if breathing is present oxygen should be administered using masks without rebreathing with a flow rate of 15 L/min. In patients with severe disease who are hypoxic (acute hypoxemia or central cyanosis of unknown cause, deterioration of pulmonary fibrosis or other interstitial lung diseases, acute exacerbation of bronchial asthma, acute heart failure, pneumonia, lung cancer, postoperative dyspnea, pulmonary embolism, pleural effusion, pneumothorax, severe anemia etc.), in which the SaO_2 is <85% high concentrations of oxygen should be applied until normalization of vital signs and then reduce the supply of oxygen so that the target value of SaO_2 is 94-98%. Oxygen therapy should be applied by using masks without rebrithing whith a flow rate of 10-15 L/min and when we achieve value of SaO_2> 85-93%, we can replace the mask without rebrithing, nasal cannula with a flow of 2-6 L/min or simple face mask at a flow rate of 5 -10 L/min. In patients with Chronic Obstructive Pulmonary Disease (COPD) oxygen should be applied in low concentration with target values of SaO_2 88-92%. Delivery of oxygen is carried out using 28% Venturi mask with a flow rate of 4 L/min or simple face mask with a flow of 5-10 L/min. In not hypoxic patients the continuous monitoring is essential (myocardial infarction or acute coronary syndrome, stroke, cardiac arrhythmia, non-traumatic chest pain, pregnancy and emergency conditions related to pregnancy, abdominal pain, headache, hyperventilation syndrome or dysfunctional breathing, poisoning and drug overdose, metabolic or renal disorders, acute and sub-acute neurological conditions, conditions after seizures, gastrointestinal bleeding, heatstroke, etc.) and oxygen therapy should not be used. If these patients become hypoxic (SaO_2 <85%), oxygen should be administered by the previously mentioned principles. Health workers of almost all specialties apply oxygen therapy. If these patients become hypoxic (SaO_2 <85%) oxygen

should be administered by the previously mentioned principles. Even though the health/medical workers of almost all specialties apply oxygen therapy, their theoretical and practical knowledge is quite low in terms of handling the equipment and knowledge of the guidelines of the delivery of oxygen.

Key words: oxygen, hypoxia, oxygen therapy

Abstract number: 002
Abstract type: poster

The multimodal approach to the therapy of acute postoperative pain in older patients after knee joint prosthesis placement

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Background: According to the classification of the European Society of Regional Anaesthesia (ESRA) in 2010, the pain of knee replacement surgery is the pain of high intensity. Good postoperative analgesia is very important in the elderly because it is associated with a slow recovery, altered immune response, the possibility of occurrence of changes in the peripheral and central nervous system with progression to chronic pain syndrome, altered response to stress and unfavorable outcome. In the treatment of pain in elderly patients, the most important is the concept of individual analgesia with regular measurement of postoperative pain as the fifth vital parameter and the application of the principle of "start low, go slow". The multimodal approach is a combination of several analgesic techniques to achieve optimal analgesia effect and minimal side effects.

Material and methods: The study included 63 patients older than 70 years of age, with ASA classification II and III, who had undergone knee replacement surgery. Patients were divided into two groups. The first group of patients (PI) with the general endotracheal anesthesia underwent intraoperative periarticular infiltration cocktail of drugs: a local anesthetic-Chirokain 100mg + NSAIDs (ketorolac-30mg-100mg or ketonal) + Adrenaline 0.1mg. Specifically frozen solution is applied for postoperatively cooling. The second group of patients (BI) has received only general anesthesia. Postoperatively the occurrence of the pain and the need for the addition of analgesic NSAIDs (ketorolac) and tramadol was monitored. Assessment of pain intensity was carried out on the basis of a visual analog scale (VAS from 1 to 10) or verbal pain scale VPS (no pain to worst possible pain), depending on the cognitive function of patients. The values of this scale were then recalculations for VAS scale. Measurements were taken every two hours during the first 24h postoperatively in the ICU.

Results: In the first group (PI) there were 35 patients. The maximum dose analgesic NSAIDs (ketorolac-90mg) and 400mg of tramadol were given to 5 patients. The minimum dose of the analgesic ketorolac 60mg and 100mg of tramadol have been received by 19 patients. In the second group (BI) maximum doses of the analgesic ketorolac 90mg and 400mg of tramadol were required by 18 patients. Minimum doses of analgesic ketorolac 90mg and 100mg tramadol were given to 2 patients. In 5 patients in the PI group for the assessment of pain intensity VSB scale was used. Moderate pain had 3 patients, medium pain had 1 patient and intese pain had 1 patient. In the group BI Verbal pain scale (VSB) was used in 4 patients. Two patients described the pain as a medium and 2 as intense pain. VAS score of the first group (PI) was 4.2 ± 0.7 in a group of (BI), 6.32 ± 0.52. The difference between the doses of analgesics for pain and cropping value VAS scale was statistically significant between the groups.

Conclusion: With this multimodal approach we used advantage of combining different drugs and techniques to obtain the maximum analgesic effect in elderly patients after knee replacement. The first doses of analgesics should be administered at fixed intervals and then the dose is adjusted depending on the needs of patients.

Key words: Acute pain, knee prostheses, multimodal approach

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Abstract number: 003
Abstract type: poster

Atelecttrauma - histopathological, radiological and pathophysiological aspect

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Introduction: Several potential disadvantages and complications of mechanical ventilation of the lungs stand opposite its beneficial effects. Ventilation, which is characterized by small end-expiratory lung volumes, allowing repetitive alveolar opening and closing (collapse) may exert undesirable effects in the form of origin atelekttrauma.
Objective: To determine the effect of low tidal volume ventilation on histopathological and radiological findings in the lungs of experimental animals and pathophysiological changes that accompany low tidal volume ventilation.
Materials and Methods: This study was conducted as a prospective experimental study, which included 20 experimental animals (pigs). Experimental animals were divided into two groups. CPPV with low tidal volumes (6-8 ml/kg) and PEEP (cmH2O 7) was used in the control group. IPPV with a tidal volume of 6 to 8 cm H2O, and without a PEEP was used in the study group. Duration of mechanical ventilation of the lungs is limited to 240 min. Monitoring included Vt, Ppeak, Paw.mean, SaO2, O2, Pa CO2, pH and Pa O2 / O2 Fi ratio. Monitoring parameters were measured at intervals of 60 minutes. X-ray of the lungs was performed at baseline, after 90 and 240-minute duration of mechanical ventilation. The second phase entailed taking samples of lung tissue of experimental animals (pigs) on completion of a four-hour duration of mechanical ventilation, and send them to histopathological examination. Wilcoxon rank sum test evaluated statistically significant difference ($p <.05$), rank sum parameter data observation characteristics of two independent samples. Statistically significant difference ($p <0.01$) in the mean values was tested by t-test in case of a sample.
Results: The results of the study revealed significant changes in the histopathologic findings of ventilated lungs of experimental animals studied groups (moderate perivascular, interstitial and alveolar edema, collapse of the alveoli and small airways, with prominent micro ateletasis fields) compared to the control group ($p <0.05$). Changes are more pronounced in the dorsal (lower) lung regions. Radiological findings pointed to the existence of interstitial edema mind peribronchial and perivascular muff both groups present no significant differences ($p>0.05$). Statistically significant differences was found when compared with each other monitoring parameters of ventilation, oxygenation and acid-base status, control and test groups ($p <.001$).
Discussion and Conclusion: The use of IPPV small tidal volume without PEEP, causing significant structural changes in the lungs of experimental animals. The resulting histopathological changes (longer-lasting inadequate strategy of mechanical ventilation) cover all major lung regions reflecting negatively in terms of the ability to maintain homeostasis pulmonary gas exchange (ventilation, oxygenation and perfusion) and acid-base status. Periodic radiological control of ventilated lung indirectly may indicate the emergence of new or worsening of pre-existing pathological changes in the lung. All this completes the picture of atelectraume as a form of lung damage caused by using an inadequate strategy of mechanical ventilation.
Keywords: atelecttrauma, mechanical ventilation, a small tidal volume, histopathological, radiological and pathophysiological changes

Abstract number: 004
Abstract type: poster

Case report of the patient with a systemic reaction to an insect sting

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Introduction: Systemic reaction to animal bites and stings poses a significant medical risk of vascular or

respiratory reactions that vary according to the patient's response. Emergency Physicians frequently see patients who complain of an allergic reaction to an animal bite or sting.
Objective: To present the patient with systemic reaction to insect stings.
Materials and methods: Descriptive data display. Data source: the book of calls, the protocol of the Institute for Emergency Medical Nis, medical report and discharge letter from the Clinical Center of Nis
Case report: EMS team was called to the public health center where a patient after wasp bites had arrived. The patient had received the following therapy: amp. Synopen No I i.m, amp.Dexason No II i.v and amp.Ranisan No I i.v. The patient said he had been stung by four wasps. Vital parameters: TA 80/60mmHg, SF~90/min, RF16/min, $SaO_2$93%, glycemia 5,3mmol/L, TT 36,5C. During the examination he had dizziness, nausea, dyspnea, urticarial sweating. The physical examination: Heart-action rhythmical, clear tones without heart murmurs. ECG-b.o. Over lungs: normal respiratory sound. Slightly swollen uvula. Neurological examination – b.o. The abdomen below the level of the chest, the superficial palpation painfully insensitive. The liver and spleen is not palpable. The pulses of a.femoralis are equal. The patient was diagnosed with systemic allergic reaction to an insect sting. The cannula IV was applied, the patient was connected to the oxygen and monitor and he was treated with Sol.NaCl 0,9%500ml, amp.Lemod Solu 40mg i.v, amp.Adrenalin (1:10000) 0,5ml i.v. After the treatment, the vital parameters were TA 120/70, SF~100min, RF 14/min; SaO_2 97%, a patient subjectively felt better. The patient was transported to the hematology clinic for the further observation.
Discussion: There are three types of reaction on insect stings. The first is a normal local reaction which results in pain, swelling and redness on the sting site, the second is a large local reaction which results in swelling well beyond the sting site and the third is a systemic allergic reaction with generalized rash, urticaria, angioedema, the patient may have anxiety, weakness, gastrointestinal disturbances (cramping, nausea, vomiting), dizziness, syncope, hypotension, stridor, dyspnea, or cough. As the reaction progresses, a patient may experience respiratory failure and cardiovascular collapse.
Conclusion: Systemic allergic reaction to insect sting requires immediate medical response. Overall, 15-25% of a population exposed to insect stings shows serological and/or skin test evidence sensitization. Only 1-5% of population will give a history of immediate systemic allergic reaction to the prevalent stinging insects, and only half of these will experience life threatening reactions.
Key words: Systemic reaction, insect sting

Abstract number: 005
Abstract type: poster

Pulmonary edema of cardiac origin, prehospital treatment – Sabac EMS experience in 2015

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Introduction: Pulmonary edema is a pathological condition which is characterized by an increased amount of extravascular lung fluid. Quantity of transudate is greater than that which could be removed by lympha. Lung edema develops in three stages. There are two ways of entering fluid in the alveoli a) indirect b) direct. The pulmonary edema is divided to: cardiogenic (when PKP> 8 mmHg) and non-cardiac a) damage to capillaries and increased permeability (in pneumonia, toxic effects of snake venom etc.) b) decrease in colloid osmotic pressure in diseases of liver and kidney c) disorders of lymph drenage from the lungs in lymphangitis, carcinomatosis or d) after anesthesia, stroke, eclampsia, opiate overdoses.
Most often is pulmonary edema of cardiogenic origin. The clinical picture begins with the first stage in which it appears as dyspnea and hyperventilation with the occurrence of wet rustle at bases of the lungs. The second stage is continued as increased dyspnea, development of mass wet rustle from the base to the top of lungs. The third stage is intensified cough, sputum is frothy with traces of blood, the findings of the wet lungs, with "wheezing", tachycardia and tachyarrhythmia and disturbance of mental state of the patient. Treatment and medicines used depending on the

findings include: 1.sitting position, 2.airway and oxygen through a mask, 3.Morfium S divided to doses up to max 20-30mg iv, 4.diuretics (Furosemide, Bumetanide II-III amp.iv bolus for 2 minutes), 5. NTG in the form of a bolus iv or 1mg per infusion of 10-15mg in 250ml of 5% glucosae, 6.venipuncture up to 500ml., 7.Aminophylin I-II amp.a 250mg iv slowly iv 8.Digitalis I-II amp Dilacor if there is AF with a rapid ventricular response, 9. Infusion of Inotropic drugs (dopamine, dobutrex).
Materials and Methods: Observational studies of the book of protocols and medical reports EMS Sabac.
Results: 23 patients with pulmonary edema were examined in EMS Sabac from 01.01. to 31.08.2015 ambulatory (tabulation-distribution by gender and age) and 29 patients (tabular representation by gender and age) in the field. The average value TA =186.3/114 mmHg, SpO_2: 94.5%, SF about 116/ min. The most common therapy was: Furosemide amp (32 amp x I, II x 16 amp, 4 x III and more amp iv) amp Aminophylline x 35 and amp; amp Dilacor 5 x I amp; NTG ling.a 0.5 mg 6 x 1 sl; Oxygen 52 x at a dose of 4-12 L /min. An objective improvement were at 37 cases (21 on the field and 16 ambulatory; in other cases the situation unchanged, there is no deterioration, no deaths until discharge from General hospital)
Key words: acute heart failure, diagnosis, treatment

Abstract number: 006
Abstract type: poster

Emergency Medical Service of Montenegro at The Sea Dance festival 2015

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Introduction: The Sea Dance Festival 2015 was held in Montenegro from 15th-18th of July on the Jaz beach. During four days of this event there were around 110 000 visitors (up to 35,000 per day). Institute for Emergency Medicine of Montenegro secured the event through the organization and work of field hospitals and five remote points with reanimobiles and complete medical teams, as well as additional vehicles for further transportation of patients.
Materials and methods: Descriptive data display. Data source: the protocol of the fild hospital with and statistically analyzed in SPSS.
Results: A total number of 330 patients from 28 countries worldwide were examined. The largest number from Balkan: 270 (81.8%) and Western Europe: 35 (10.6%). Most examined were from Serbia 116 (35.2%), Montenegro 91 (27.6%), Macedonia 20 (6.1%) and the United Kingdom 18 (5.5%). Among examined there were 210 men (63.6%) and 120 women (36.4%). The average age of patients was 26 years, (19-33 years), the most common 20-25 years. The largest number of patients were examined between 21-04h (60.7%), with a peak between 02-03h (13.9%). The most frequent examinations were the first day from 01-03h. The minimum number was between 07-08h (0.3%). Among the examined patients there were 128 injuries (38.8%) and 202 nontraumatic diseases (61.2%). The most common diagnoses were injuries of ankle and foot (19.4%), use of psychoactive substances (7.6%), general symptoms and signs of disease (7.3%), respiratory infections (6.1%), injuries of the knee and lower leg (5.5%). Three injuries were the result of violence. 6 patients were transpoted to the Public Health Centar (acute psychosis, the use of psychoactive substances, head injuries, knee and ankle injuries). There were no lethal outcomes.
Conclusion: All examined patients are adequately treaeted and medical interventiones were efficient and timely.
Key words: emergency medical system, Montenegro, Sea dance festival 2015

Abstract number: 007
Abstract type: poster

Abdominal pain as differential diagnostic problem-newly discovered aortic aneurysm

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Objective: to present a case of patient with abdominal pain, abdominal aortic aneurysms was found.
Materials and methods: present a patient with a pain in the abdomen, where ultrasound examination revealed the existence of abdominal aortic aneurysms, which until then had been unknown.
Case: Patient 69 years comes to the emergency room because of the pain in the abdomen in the area of epigastrium. The pain appeared 90 minutes before the arrival to the doctor. Pain developed after taking larger amounts of fatty and caloric foods. On palpation abdomen remains painless. Lab analysis: WBC 9.8, glycemia 8.9mmol/L, ECG was normal, renal succussion was negative. Given that the available results were in the normal range, we immediately began abdominal ultrasound. The liver was hyperechoic but homogeneous, gall bladder was empty, but the impression was that there is calculus. Both kidney and pancreas were normal. It was observed that there is abdominal aortic aneurysm, which was a diameter of 4.9 cm, a length of 9 cm. There was a wall thrombus. Because of all that, we immediately suspected that the aneurysm is causing pain. But the there were no intimal flapand separation of the wall thrombus. The ultrasonic signs of aortic rupture were absent. According to the available findings it was obvious that the newly discovered aortic aneurysm did not cause problems. Its suspected that the couse of pain is cholelithiasis. Re-ultrasound examination in different positions found calculosis of gallbladder. Problems were soon stopped after an appropriate treatment. The next day ultrasound, carried out with adequate preparation, is clearly showed the existence of multiple calculosis of gallbladder.
Conclusion: Although the typical clinical findings immediately pointed to calculosis of gallbladder, observed aortic aneurysm give us suspicion that pain may be coused by aortic dissection. Thanks to the existence of good diagnostic equipment in the EMS, diagnosis was made immediately, and applied therapy resulted in withdrawal of symptoms.
Key words: abdominal pain, nausea

Abstract number: 008
Abstract type: poster

AV block caused by alcohol as a probable cause of unconsciousness - case report

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Objective: To present the case where the alcohol intoxication is likely cause of a higher degree AV block, followed by loss of consciousness.
Materials and methods: case studies presents a case of a patient who has repeatedly lost consciousness several hours after consuming large quantities of alcoholic drinks and always after waking up.
Results: The patient of 37 years, after the family celebrations returned to home and fell asleep. About 2 hours in the morning he woke up and went to the toilet. Before he reached the bathroom door, he suddenly loses consciousness and falls. The fall was heard by the wife who comes to him and find him unconscious. She colled the EMS immediatly. Until the arrival of the team, he wakes up. On examination: the patient was conscious, oriented, TA 120/80mm Hg, SF 55/min, auscultatory finding of the heart and lungs were normal, SpO_2 98% and Gly 5.9 mmol/L. ECG: sinus rhythm without ST changes, but with the presence of AV block of first degree. The patient and his wife say that it's probably 8-10 time in the last 5 years, the patient loses consciousness, and always at night, always after getting out of bed and going to the toilet, in the interval between midnight and 5 o'clock in the morning.The patient was subsequently completed ultrasound, x-ray of the heart and lungs, complete laboratory analysis, and all findings were in normal range. EKG holter showed a constant presence of first degree AV block. Neurologist found no neurological etiological factor as the cause of loss of consciousness.

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The patient says that almost every night waking and going to the toilet to urinate and he never lost consciousness, except in cases where the drink greater amounts of alcohol. The rule is that whenever he drank large amounts of alcohol (more than 6-8 bottles of beer and / or 10 stong alcoholic drink), he has a few hours later (not immediately), loss of consciousness. When he drank 1-2 beers and/or a glass strong alcoholic drink, he never lost consciousness.
Conclusion: Based on these data, it is obvious that the only permanent thing is presence of first degree AV block. The assumption is that the patient due to the large amounts of alcohol develops transient second degree AV block type II-Mobic, (or third degree AV block), which, probably, lead to loss of consciousness.
Key words: AV block, alcohol, syncope

Abstract number: 009
Abstract type: poster

Spontaneous pneumothorax - Prehospital diagnosis

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Introduction. Pneumothorax is presented as accumulation of air in the intrapleural space due to discontinuity of the visceral or parietal pleura, equaling atmospheric and intrapleural pressure and collapsed lung.
Objective: To show the importance of prehospital doubt on the development of pneumothorax in patients with chronic obstructive pulmonary disease (COPD).
Method. We present case of a man aged 58 years. and the development of spontaneous pneumothorax, as well as undertaken prehospital treatment.
Case report: EMS team was called for a patient who has shortness of breath, chest pain, and that the lung disease. EMS was dispached immediately and on site we found the patient lying down, pale, with cold sweating, with shortness of breath, blood pressure was 95/60 mmHg, the pulse was about 115 / min. He complained of stabbing pain on the left side of the chest which occurred after physical exertion, shortness of breath and fatigue. We get the information that the patient has chronic bronchitis, uses a "puffer" for a few days he feel increased fatigue and shortness of breath. That morning he repeatedly used a pump and planned to go to general practitioners but because of the severe pain he decided to call an ambulance. On examination, the patient was cyanotic, his chest is barrel-shaped, he uses the accesory respiratory muscles. On auscultation of the lungs we faund weakened respiratory sound, on the left inaudible breathing noise. Percutory, hipersonoran sound was found on the left. Patient was seeted in half-sitting position, Analgesia was administered IV, oxygen through a mask 5l/min and with the suspicion of spontaneous pneumothorax transported to the surgery ward where X-rays confirmed the diagnosis of a patient and he was treated performing thoracic drainage.
Conclusion. Patients with COPD are common in the work of doctors at emergency medical services primarily in the outpatient clinic, rarely on the field, but in this particular case, the pneumothorax was suspected already at a phone call. Working diagnosis is set thanks to the history and clinical examination, which was significant for rapid patient transport to surgery.
Key words: dyspnea, COPD, spontaneous pneumothorax

Abstract number: 010

Abstract type: poster

The importance of cooperation between the gendarmerie health service and mobile medical units in providing care in emergency situations

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Introduction: A good deal of time and energy goes into thinking about the future: what we want to achieve, what our goals are, where we would like to travel, live, with whom and how we would like to spend time. Accidents occur suddenly, unexpectedly, quickly and most often it is very difficult to predict them. Natural disasters such as floods, landslides, volcanic eruptions, earthquakes, snow storms, fires, hurricanes, tornadoes, affect the entire community, or most of it. Such natural cataclysms cause great emotional suffering, human and material losses, medical and social problems, extensive devastation and destruction. Rehabilitation of the consequences requires the engagement of the whole society, in material and psychological sense.
Objective: Our goal is to point out the necessity and importance of coordinated cooperation of the medical service of the Gendarmerie and the medical team on the ground in emergency situations.
Case study: In May 2014 the Republic of Serbia faced catastrophic floods caused by heavy rain. A state of emergency was declared initially in five cities and fourteen municipalities, and from May 15 to May 23 was in force throughout the territory of our country. Rapid rise in water level caused rivers to overflow their banks, leading to devastating consequences in Kolubara, Macva, Morava, Pomoravlje and Belgrade municipality of Obrenovac. Firemen-rescuers, the police (Gendarmerie, the SAJ, PTJ, the Helicopter unit), Serbian Armed Forces, the Red Cross, Mountain Rescue Service evacuated and saved over 31 thousand people, and from the most vulnerable municipality of Obrenovac more than 25 thousand people have been evacuated (it was reported by MUP). On 15th of May, 2014 at 6:00 the first medical teams and police officers of the Gendarmerie, who were sent to Obrenovac, belonged to the Command and the Second and Third Squad. In its work, the medical teams of special police units, both here and abroad, as opposed to emergency medical services, respond to emergencies in the so-called red zone - imminent danger area.
Conclusion: The floods that took away many lives and inflicted enormous material damage, have highlighted the necessity of training the staff for providing medical aid in situations of natural disasters. Connecting all the services and adhering to medical emergency response plan, gives adequate results.
Key words: emergency situation, calling, medical care.

Abstract number: 011

Abstract type: poster

Options to improve the diagnosis of acute appendicitis in children, in ambulatory settings

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Introduction: Acute appendicitis (AA) is the most common cause of acute abdominal pain in children and the reason for even one-third of hospitalizations. Although the classic presentation of AA is well known, accurate and timely diagnosis of AA in children is not yet possible in every patient. Clinical presentation of AA in children depends on the age of the little patient and can very from minimally symptomatic child, to severe clinical presentation (with a picture of acute abdomen and signs of endotoxemic shock). The

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rate of negative appendectomies is still around 10%, while the form of perforate (despite the use of modern radiological techniques) is still too much - up to 35%.

A particular problem is the diagnosis of AA in an ambulatory setting, with a very limited possibility for further tests. Diagnostic accuracy of AA in children can be increased only by integrating clinical findings and the results of laboratory findings- primarily of blood count (BC) and the values of C-reactive protein (CRP).

Objective: To evaluate the importance of examining clinical signs of AA (12 in total), as well as elements of BC (total leukocyte count, count of neutrophils, the ratio of neutrophils / leukocytes and CRP values, to improve the diagnostic accuracy of AA inambulatory setting).

Materials and Methods: A months-long prospective study enrolled a total of 200 patients which were randomized into two groups. The first group (100 patients) included the patients who underwent appendix surgery, second (100 patients) children with acute abdominal pain of non surgical genesis.

All 12 clinical signs of AA were examined in all patients (Mc Barney sign, Bloomberg sign, Grassmano's sign, Rovsigno's sign, psoas sign, obturator sign, Lanz-Horn's sign, Rosensteino's sign, Markleo's sign, Giordano's sign, Owingo's sign, Ben Ashero's sign), as well as the results of the BC and CRP. Quantitative statistical analysis was carried out on the computer.

Comparison of the mean values of numerical characteristics between the two groups was performed by Student's t test or Mann-Whitney U test (Mann-Whitney U test). Comparison of the frequency of attribute characteristics between groups was performed Mantel-Hencelovim Hi kvatrat test (Mantel-Haenszel chi square test). For the assessment correlation factor of interest and AA was used logistic regression analysis (univariate and multivariate).

Results: In the first group were significantly higher (P <.001) were all tested positive physical signs. Also in the first group were significantly increased values of all examined laboratory parameters. Multivariate logistic regression analysis as the most important characteristics associated with a significant increase in the probability of the existence of AA confirmed: Grassmano's sign, Markle total leukocyte count greater than 12, 70 and the neutrophils / leukocytes ratio greater than 4, and CRP greater than the 16.

Conclusion: Diagnosis AA ambulatory practice remains a challenge, primarily because of the often nonspecific presentation of this disease in children. Relying often only on limited diagnostic capabilities, the clinician can have benefits form examination of the physical characters, but also the integrated analysis of several available laboratory parameters.

Key words: appendicitis, children, ambulatory settings

Abstract number: 012
Abstract type: poster

Hyperkalaemia-case report

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Introduction: The normal physiological cells work and human organism as a whole is conditioned by the permanence of the internal environment with a strict limits of concentration of the electrolyte. Any disturbance of the water balance by pathological disorders may be one of the causes of lethal outcome if they are not timely identified and adequately treated.

Potassium - the main intracelulalrni cation is responsible for transmembrane action potential, intracellular glucose transport, electroneutrality and osmotic balance. Hyperkalemia (more than 5.5 mmol/l) is rare disorder but extremely dangerous because of the direct effect on muscles and conductive system of the heart. Symptomatology, such as palpitations, fatigue, cramping and abdominal pain indicates a broader spectrum of differential diagnosis which further complicates the work of EMS doctors. In the shortest possible time, guided by intuition, experience and knowledge thay must justify the doubt about the possible hyperkalemia. ECG findings will guide the diagnosis in the prehospital settings and lab results will be just subsequent confirmation.

The aim is to highlight the importance of early recognition of hyperkalemia based on changes in the ECG as it was in the case of our patient.
Case report: A call is received for 30 years old patient already well-known for EMS team (Occasional seizures, abdominal pain type of renal colic and frequent urinary infections as a consequence of SAH at the age 26.) Now, he was complaining of pain for the entire abdomen and persistent vomiting. He was in a wheelchair visibly anxious, febrille, hypotensive and ECG recorded pathognomonic tented T waves. He was transported and hospitalized at the internal department where laboratory had been done and confirmed hyperkalemia (K=7.4 mmol/l). ECG is the framework of the general views and the only possible complementary diagnostic procedure in prehospital setting.
Conclusion: ECG procedures must be an integral part of the examinationof each patient and especially for patients with non-specific symptoms, because in certain situations, as in the case of our patient is very important, reliable, and only certain extra prehospital diagnosis.
Keywords: hyperkalemia, ECG recording, therapy

Abstract number: 013
Abstract type: poster

Statistical overview of patients with febrile convulsions and epilepsy up to 18 years

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Introduction: Febrlilne seizures are usually defined as seizures that occur during fever in children aged 6 months to 5 years, where during diagnostic treatment infection of the central nervous system or the presence of acute or chronic neurological diseases must be ruled out.
Objective: Statistical overview of patients up to 18 years in 2014 with febrile seizures and epilepsy.
Materials and Methods: The descriptive data display. Source: The book of medical intervention of the Emergency Medical Service Nis.
Results: In 2014 in EMS Nis examined 7,406 patients up to 18 years, 6,072 ambulatory, 1334 in the field. Diagnosis "febrile seizures" are given ambulatory in 83,35% and 48% in the field. In ambulatory 25 people were examined born between 2010-2014y.Eight (2005-2009y) two (2000-2004y), eight (1996-1999y). (Up to 2012y,-ten). Of the total number 8 were the first attack. All were marked as third line of emergency. For further treatment 34 patients were referred.
The therapy was given to 20 patients (7 supp. 2mg diazepam, 7 diazepam rectal gel 5mg, 10 supp. Efferalgan 150mg and 9-O_2). On the field there were 43 patients born between 2010-2014y, 4 (2005-2009y), 1(1996-1999y) (maximum 2012 year-18).
With the first attack four children. Of the 47 patients in the field, 15 were rated as a first line of emergency, 20 second and 13 third line of emergency. 16 patients received following therapy: 2pt supp. Diazepam 2mg, 5mg diazepam rectal gel 5pt, 5pt supp. efferalgan 150mg, 10pt-O_2. Diagnosis of "epilepsy" has appeared at 45 children, 37 in the field, 8 ambulatory. In the field, there were 5 (2010-2014y.), 14(2005- 2009y.), 7 (2000- 2004y), 10(1996-1999y.) Of the total number of 5 has appeared for the first time. Of all calls 4 were erated as a first line of emergency, 21 second and 12 third line of emergency.
For further treatment 21 patients were sent. Therapy was given 12, (6 tabl. Valium 5mg, 6-O2, 4 iv cannula). Ambulatory total number of 8 patients was examined: 2 (2010-2014y.), 2 (2005-2009y.), 1 (2000-2004y.), 3 (1996-1999y.) All were rated as a third line of emergency and refered for further evaluation. Therapy: 1 supp.efferalgana 150mg, 1 diazepam rectal gel 5mg and 1 iv cannula placement.
Discussion: The biological basis of febrile seizures is still unknown and is ascribed to a number of factors. It occures with sudden body temperature raise to more than 38,5ºC, and often represent the first symptom of the disease. The most common cause of body temperature rise are viral upper respiratory tract infections, bacterial infections of the gastro intestinal tract, the urinary tract etc. The clinical picture is dramatic and frustrating for any parent. In these attacks the child turne and fix eyeballs to one side, lose consciousness and begin to shake. Longer pauses in breathing create greate panic and fear in parents. They differ in the typical

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and atypical febrile convulsions. Typical generalized seizures are seen in children aged 1 to 5 years, last less than 15 minutes and are not recurring within 24 hours. Atypical seizures are seizures that last more than 15 minutes and occur several times a day and often are focal or hemi generalized. After the attack transient or permanent neurological deficit can be observed (Todd's paresis).

Conclusion: Febrile seizures are the most common seizures which are usually benign. In -almost 50% of children thay may recurre. Rarely are accompanied by subsequent development of epilepsy. Although the pathogenesis is unknown, research suggests genetic predisposition.

Key words: statistics, febrile convulsions, epilepsy

Abstract number: 014
Abstract type: poster

The deadly duo: mixing alcohol and Xanax can lead to bad habits or unexpected death

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Introduction: Xanax (alprazolam) is a benzodiazepine indicated for short-term relief of anxiety disorders as well as treatment of panic attacks. The efficiency for the treatment of anxiety can be explained by their pharmacological action in the brain at specific receptors. Receptors are specific locations on the membrane of nerve cells, which receive a signal from neurochemical neurotransmitters. Once locked neurotransmitter receptor changes to electric or other chemical signal and travels along the neuron. Receptors (location) where benzodiazepines cause their effect are located in different regions of the brain. The reaction of the benzodiazepine receptors facilitates the inhibitory action of the neurotransmitter γ-aminobutyric acid (GABA) in the brain region. It seems that the action of benzodiazepines on GABA receptors produces its anxiolytic, sedative, and anticonvulsant action and is effective as a hypnotic. The usual starting dose of Xanax in the treatment of depression and anxiety disorders is 0.25-0.5 mg three times a day. The dose may be increased to 4 mg per day and in the treatment of panic attacks may be increased up to 6-8mg per day. Side-effects of sedation are somnolence, decreased concentration and memory as well as the reduced movement coordination.

The aim is to show that patients who take Xanax should not take other CNS depressants such as alcohol, narcotics, hypnotics, barbiturates and even antihistamines, which can lead to increased sedation, disorders of breathing and respiratory depression and death.

Case: Patient age 26 years was admitted to the emergency internal department of KBC Zvezdara-Belgrade. He was confused, somnolent, had discordant movements (ataxia), weakened reflexes, impaired breathing movement, bradycardia, cyanosis, hypotension, and already during the examination of the initial signs indicative of loosing consciousness and respiratory arrest. From relatives we obtained the information that the patient is on therapy with xanx and that he was at a party where he consumed alcohol. He was intubated (from the mouth the smell of alcohol can be felt) and admited at the surgical intensive care unit of KBC Zvezdara-Belgrade. He was in need for respiratory support, (invasive mechanical ventilation).Arterial blood gas analysis showed high values of $PaCO_2$>48 mmHg, hypercapnia. The patient was on invasive mechanical ventilation (MV-IV) form BIPAP, the set PEEP = 5cmH_2O, and ventilatory support with lung protective ventilation. Blood biochemistry values were within normal limits and the further measures were taken on the principles of therapy for poisoned patient: 1.Maintenance of vital functions (heart and lungs) 2.The prevention of absorption of toxins 3.The elimination of poison 4. Symptomatic treatment 5.Antidote. The content of the nasogastric tube and blood were sent to the toxicological center of VMA. After 24 hours of mechanical ventilation of the lungs patient reached recovery and was referred to the psychiatric department of KBC Zemun. The report of the poison center VMA Belgrade confirmed the presence of Xanax and blood alcohol in gastric contents.

Results and discussion: The primary and most important in intoxicated patients is to improve ventilation and oxygenation as in our patient.

During mechanical ventilation, adjustable fan is based on the "ideal body weight" and gas analysis of the arterial blood. The patient was successfully removed of respiratory support after 24 hours of hospitalization in the surgical intensive care unit and was sent to psyhiatric department.

Conclusion: Overdose with the oral administration of only benzodiazepine is generally not fatal. In the world literature most letal outcomes are described as a result of consumption of benzodiazepines along with other CNS depressants such as alcohol, narcotics or barbiturates.

Keywords: Xanax, alcohol overdose, respiratory failure, mechanical ventilation

Abstract number: 015

Abstract type: poster

Emergency treatment of near-fatal acute asthma – case report

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Background: Asthma is defined as a chronic inflammation of the airways, which causes their increased sensitivity to external agents. They cause constriction of the airways, which couses feeling of difficult breathing, cough, feeling of oppression and wheezing. Problems are usually occure at night and /or early in the morning, but can also appear during the day. Number of patients with asthma over the last two decades of steadily increasing, especially in children, teenagers, and in high-income countries (particularly allergic asthma) and has been defined as a disease of modern societies and the epidemic of the 21st century. It is estimated that about 350 million people worldwide have the disease, and that another 150 million fall ill for the next 10 years. Our country is among the others with an average rate of asthma illnes.

The aim is to point that the patients in the acute phase of severe asthma who do not respond to intensive bronchodilator therapy could have letal outcome if they are not placed on mechanical ventilation(MV): noninvasive mechanical ventilation (NIV) or invasive mechanical ventilation (IV).

Case report: The patient aged 30 years was admitted to the emergency department of KBC Zvezdara-Belgrade conscious but agitated, unable to lie down, with signs of respiratory ditress and the use of auxiliary respiratory muscles. He was not able to speak, only single words. Auscultation of lungs bilaterally found depressed respiration with severe diffuse and bilateral wheezing. There was no other incidental physical findings of the examination. Vital signs showed: blood pressure 145/80 mmHg, heart rate 140/min, SpO_2 70% on room air, BT 36,8°C, respiratory rate 40/min. The patient was immediately transfered to surgical intensive care KBC Zvezdara-Belgrade because there was a need for respiratory support, ie. mechanical ventilation (MV) of the lungs. Arterial blood gas analysis showed pH7.14, elevated $PaCO_2$ 77mmHg, PO_2 44,2mmHg, HCO_3 28,4mEq/l, lactate 2.8mg/dl. Patient was treated with inhalation, salbutamol (β_2-adrenergic receptor agonist), iv methylprednisolone, aminophilline iv, im epinephrine, iv magnesium sulfate.

Due to severe respiratory distress and severe acute respiratory acidosis we began noninvasive mechanical ventilation (NIV) by face mask with the parameters 5cm H_20 PEEP, FiO_2 100%. The patient well tolerated NIV. Chest X-ray showed enhanced bronchovascular drawing without pulmonary hemorrhage, cardiovascular profile was normal. After 30min. NIV blood gas analysis was: pH 7.22, $PaCO_2$ 66mmHg, PaO_2 110 mmHg, SpO_2 99%, vital parameters were stabil. NIV is continued with reduced FiO_2 50% and after 3 hours arterial blood gas analysis were pH 7.37, $PaCO_2$ 45 mmHg, PO_2 87, HCO_3 25.4. The patient was transferred to the department of pulmonology, where he was on nasal cannula with O_2 4L/min and continued therapy (bronchodilators and steroids). The patient was discharged from hospital in good general condition after 6 days.

Discussion: The primary and principal in asthmatic patients is to improve ventilation and oxygenation as like it was achived in our patient. Patient parameters are monitored during (MV-NIV) and when gas analyzes of arterial blood showed improvement there was no need for invasive mechanical vetilation (MV-IV).

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Conclusion: Mortality in the severe asthmatic attack, is coused by asphyxia in exacerbation of respiratory distress-a. It is caused by "air trapping" in the alveoli and reduced ventilation which is accompanied by hypoxia and acidosis. Often known triggers are psychological stress, lifestyle, smoking, obesity, allergens etc.

Keywords: asthma, respiratory failure, mechanical ventilation

Abstract number: 016
Abstract type: poster

Non-operative treatment of blunt kidney injury in children-a case report

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Introduction: Genitourinary injuries in 50% include kidney, and in 90% of the cases the cause is blunt abdominal trauma. The main goal of treatment of these injuries is to preserve functional renal parenchyma and reduce the rate of morbidity. Parallel with progress in diagnosis and hemodynamic monitoring, scoring systems are developed and they contribute to more successfull methods of non-operative treatment of renal preservation. Non-operative treatment, reduces repeated hemorrhage and hemodynamic instability. These treatment modalities are ureteral stenting and percutaneous drainage

Objective: To present patients with renal injury who is treated by uretheric retrograde stenting.

Case report: A 13-year-old girl was injured by falling down the stairs. She was sent from another hospital, due to persistent hematuria and vomiting, more than 20 times. Status on admission: conscious and actively mobile. Abdomen soft, tenderness in the left lumbar region. Laboratory diagnosis: CBC: (Ht 36). In urine: mass of fresh red blood cells. All biochemical parameters were normal. Ultrasound at the admission: subcapsular hematoma of the left kidney. CT findings: softness and rupture of the lower pole of the left kidney, subcapsular, intraparenchymal and perirenal hematoma.

Treatment: cystoscopic, in general anesthesia retrograde approach to left ureteral orifice JJ stent was placed. Position the proximal end of the stent in the renal pelvis of the left kidney was confirmed by radiography and ultrasound. Further Conservative treatment includes antibiotic and antifungal therapy, rehydration, correction of electrolyte disbalance, analgesia, implementation of the SAA and washed red blood cells, to correct low hematocrit values. ECHO findings after seven days: Regression of subcapsular and perirenal hematoma, regression of ascites intraperitoneally. 3 weeks after the injury: Left kidney voluminous, hematoma in almost complete resorption. Scintigraphy (DMSA), after two weeks of injury absent intracortically accumulation of the drug in the distal third of the left kidney, which corresponds with a scar change. Distribution: 59% right, left 41%-DTPA, 3 weeks of injury: Left kidney reduced craniocaudal diameter, preserved contours. In the lower third moderate photon deficient zone. Radiorenogramm shows that it is slightly lower than the right, shows the normal flow of radiopharmaceuticals, rapid transit and parenchymatous swift and proper elimination. Both kidneys appear symmetrical and good intensity in vascular and parenchymal phase. There is no significant delay in the elimination stage. The individual participation in the global kidney function is left 44%, right 56%. After 27 days the girl was discharged from hospital without microhematuria without pain. Regular clinical and ultrasound controls were made.

Discussion: Kidney injuries in children have their own peculiarities considering the anatomical characteristics: larger kidneys relative to body size, less developed perinephric adipose tissue and capsule, poorly ossified chest, greater mobility. The usual V degrees injury staging determines the procedure: From I to III conservative, V is mainly surgical and IV is the subject of controversy. Retrospective studies have shown that conservative treatment in children can be safe for degrees IV and V. In our patient hemodynamic stability was of crucial importance. The positive sides of internal drainage: the child does not wear a catheter, urine bag, and has less risk of infection, and is socially more acceptable. Possible complications:

obstruction, infection and hypertension are rare. For the extraction of a stent requires an additional general anestesia.
Conclusion: endoscopic tretaman of blunt kidney injury (IV level) in children can be successful and safe, and lead to a significant resolution and preservation of renal function.
Key words: trauma, kidney, non-operative treatment.

Abstract number: 017
Abstract type: poster

Syncope in children and adolescents - a medical emergency or not?

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Introduction: Syncope is a sudden loss of consciousness associated with loss of muscle tone. Of all hospitalized patients 6-7% with syncope, namely 3-6% is emergency admission. Potentially lethal, syncope creates great fear in parents, patients and doctors, and children are often exposed to unnecessary often prolonged clinical examinations.
Objective: to show the importance of anamnestic data and monitoring guidelines to identify the cause of syncope and risk stratification and distinction of potentially deadly from harmless cases.
Materials and Methods: retrospective analysis of children aged 6 months to 18 years, in a period (from June 2010y. to June 2015y) which were hospitalized due to a short-term loss of consciousness at the Children's Hospital Clinical Hospital at Gracanica. The diagnosis was made according to well-taken history data and a detailed description of the quality of the attack, thorough physical examination and routine laboratory analysis (CBC, glucose, standard ECG). Additional tests were selectively done: Holter ECG / a stress test, tilt table test, echocardiogram, NMR, EEG.
Results: In the five-year period, we received 116 children or 6.4% of total hospitalized with symptoms of short loss of consciousness. The average age of children was 12.2 years (usually between the ages of 15-18 years). There was statistically significant occurrence of syncope in relation to sex, girls 61.8%, boys 38.8% ($p < 0.01$). Syncope has been divided into 3 groups according to etiologic causes, within which we made subgroups (Table 1). The cause of syncope was identified in 88/116 or 75.8% of patients. Cardiac cause of syncope was significantly rarest, $p < .001$. Autonomous cause 70.4%; the non-cardiac 27.2%; cardiac 2.3%; vasovagal 52%; neurological 42.4%; cardiomyopathy 50%; orthostatic syncope 25%; mental 38.4%; arrhythmias, 50%; situational syncope 13%; Affective repetitive crisis 7.7%; Enhanced vagal tone, 10%; Metabolic 11.5%. Most children had only one attack. The largest number of attacks was 5 at two children.
Conclusions: The largest number of syncope in children are benign. Cardiac syncope is rare but potentially dangerous. Diagnostic protocols for syncope is the fastest way to diagnosis, risk stratification, reduced fear and rationalize costs.
Key words: syncope, children, causes, risk

Abstract number: 018
Abstract type: poster

Infectiones at region of Nuchae in patients with comorbidities

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Introduction: Anatomic region of nuchae represents a zone that provides solid foundation for the development of furunculosis and carbunculosis, especially in patients burdened with contributing comorbidities. Their treatment almost uniformly consists of simple or cross excisions, drainage and appropriate antibiotic therapy. This type of treatment yields often more than satisfactory results in patients with regular immune status. However,

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recommended therapy as such, rarely provides adequate results in patients with weaken immune status, i.e. diabetics, when even banal infection could result in occurrence of phlegmona.

Objective: To present our solutions and considerations of this issue in order to determine an optimalsurgical solutions for patients who have turned to us for help .

Method: In the period of 7 years (2008 /2015), 13 patients with diabetes who developed carbuncle at region of nuchae with progressive phlegmona were treated in our ward. Most of the patients (9) were aware of their chronic disease but were administered insufficient therapy and had poor diet regime until admission at our ward. Others, however, are diagnosed for the first time at admission and than introduced to the adequate therapy from that point on. Due to the extent and intensity of the inflammatory process in the majority of cases 10 patients underwent extensive skin excision , fascia and muscle tissue of affected region, with multiple divisions of muscle tissue for the purpose of drainage.

Results: Postoperatively, we applied multiple daily dressing of the wound with antiseptic topical agents along with maximum dose of antibiotics by the antibiogram, vigorous adjuvant therapy. Moreover, within the third day of hospitalization patients have been exposed to active O2 – (hyperbaric chamber) therapy, along with optimal corrections and balanced antidiabetic therapy. After the regression of the inflammatory process, and once healthy granulation was established, scarred surface was reconstructed with Thiersch skin grafts.

Conclusion: By applying aforementioned therapy procedure curable effects were achieved in 12 patients (93%). In one case, local curing was achieved, but the patient suffered lethal outcome 9 months after the beginning of treatment due to developed pulmonary miliary abscess as a result of sepsis, which had occured on the 12th day of hospitalization. Average treatment time was approximately 19 days.

Key words: anatomic region of nuchae, furunculosis, carbunculosis, infection.

Abstract number: 019

Abstract type: poster

Location and importance of tracheotomy in patients with craniofacial injuries

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Introduction: The size of traumatic force that is received by polytraumatized patient is frightening, which greatly exceeds the minimum force required to fracture each part of the facial skeleton and endocranium. This extensive traumatic force crash bones. This happens together with destructive changes in the skin layer and soft structures, with very often impressive abundant hemorrhages, hematomas, and everywhere present edema in the first 48 hours.

Objective: To describe early and late indications that guide the decision for tracheotomy and to present our experience.

Method: In all extensive fractures in midface airway is compromised due to dislocation of fractured segments and edema of soft tissues. Patient material of treated patients in intensive care units of emergency surgery and Neurotraumatology Emergency Center in Belgrade for the period January 01, 2014 to January 01, 2015, there were 250 patients with craniofacial injuries within polytraumatism. We did early and delayed tracheotomy according to general condition of the patient and their Glasgow Coma Score.

Results: In some patients rubber nasopharyngeal air way can be placed, while in others intubation is indicated or more often urgent tracheotomy. Sometimes the cause of airway obstruction was:

broken teeth, aspirated blood, dentures, parts of the bone... In the observed period the number of patients with craniofacial injuries in the Emergency Center was 250, and of that number, in 100(40%) a tracheotomy was indicated, emergency tracheotomy in 29(29%), and in comatose patients and long beded done 48 (48%) of these interventions, while 23(23%) patients were done for therapeutic purposes. Of this number of polytrauma patients cured and discharged was 223(89.2%), with the need for further treatment at one of the rehabilitation centers 14(5.6%) and 13 died (5.2%).

Conclusion: Maintaining of airways is the most important primary measure for patients who have suffered high-energy injuries to the face and endocranium. Patients with associated head injuries, especially when they are unconscious, have to be intubated within the initial care. At extensive midfacial injury there is a significant disorder of anatomy so intubation can be extremely difficult in a patient who is actively bleeding, in emergency situations and with compromised airway. If intubation fails, tracheotomy must be performed without delay. At high-energy injuries that caused the complex injuries of the craniofacial region, the middle third of the face or multifrgament fractures of the lower jaw, early tracheotomy is indicated, as dramatic face edema during the first 48 hours is expected, and significantly simplifies the definitive surgical care.

Key words: tracheotomy, emergency tracheotomy, craniofacial injuries, high-energy injuries, polytrauma

Abstract number: 020
Abstract type: poster

Pleomorphic adenoma in the sub mandibular salivary gland

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Introduction: In the submandibular gland tumor (pleomorphic adenoma) is a rare tumor (5%). It is much more common in other salivary glands. Also it is the most common benign tumor of the salivary gland (45-74%). It is most common in the 4th and 5th decade, more often in women. This tumor has the ability of malignant alteration in 3-15% after 10-15 years. Treatment is surgical.

The objective of this paper is to present the clinical-pathological characteristics of the submandibular gland tumors.

Methods: We analyzed the history of 8 patients with tumors of the submandibular gland treated in the period from 01 January 2005 to 31 December 2014. in the Department of Otolaryngology and Maxillofacial Surgery Clinical Center of Montenegro.

Results. There were 5 female patients (62.5%) and 3 males (37.5). Patients were aged from 37 to 57 years, and the average age was 47. These patients were treated surgically, tumor was extirpated together with the submandibular gland, which was necessary because the tumor in some places, the capsule may be incomplete, eg because of recurrence, and the possibilities of malignant alteration.

Conclusion: Pleomorphic adenoma is a rare tumor in the submandibular gland, more common in

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women in the fifth decade of life. What is needed is a better understanding of the clinical and pathological characteristics of these tumors, and to gain access to adequate treatment and improve the health of these patients.

Key words: pleomorphic adenoma of the sub mandibular gland

Abstract number: 021

Abstract type: poster

Optimum usability of skin grafts - Thiersch type

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Introduction: The most popular and most often used for short-term storage of grafts is conservation in a standard refrigerator at + 4C. The need for such preserved grafts ranges from one day up to one month of taking transplant. According to the literature the usability of grafts ranges from 10 days to 21 days.
Objective: to more precisely determine the time to which the applicability of this preserved grafts is safe, we performed a study with 50 samples Thiersch Type grafts.
Methods: The study was done at the ICU of of the Emergency Center. Five patients agreed to give parts of their skin size 3x5cm. Parts of the skin were taken during the operation, preserved in the usual way and in a certain period tested clinically and histologically.Starting from 11th day, 5 preparation was divided into two parts, of which one was applied to a suitable surface for accepting the transplant, while the other was placed in formalin and sent to HP analysis.Then we made a series of five preparations in within which every subsequent prolonged period of conservation by 1 day longer, and continued until 20 day.
Results and Conclusion: The results of the clinical and histological examination were consistent. Are represented by tables. Usability above 50% of the graft is conserved up to 17 days of the preservation, and then falling. From that perspective it is possible that a transplant is used 30 days from the conservation, but as an exception, not the usual state.

Key words: skin grafts, Thiersch

Abstract number: 022

Abstract type: poster

Reconstructive options in closing decubitus ulcers of sacrococcygeal region

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Introduction: Sacrococcygeal decubital ulcers are usually the first decubital wounds that develops in patients related to the long-term immobile lying in bed. Hence their frequency and extensiveness. They are found in patients with plegia and in severe surgical and chronically ill patients. The basis of their surgical treatment is excision of necrotic and devitalized scarring altered soft tissue ulceration and periostitis and osteitis affected parts of the bones on the bottom of ulceration. The closure of the defect is achieved by using high-quality soft tissue cover.
Objective: find an optimal solution for the real problem of patients who are immobile for a long

time with the presence of decubital ulcerations of different degree and extent.
Metod: The study was done at the Surgical ICU of of the Emergency Center. There were 46 patients patients who are in a state of coma, plegia or quadriplegics who were observed for the period from January 01, 2013 to January 01, 2015. There were 21 female and 25 male patients, aged in the range of from 29-83y, and 11 patients who require a more extensive treatment. Classic treatment aproach of these defects with rotary lobe, carries a risk of complications - partial necrosis of peaks lobes, and not healing lobes to the substrate because of formation of large subcutaneous pockets filled with hematoma, seroma or infected content.
Results and Conclusion: The use of myocutaneous gluteus maximus flap is undoubted progress in closing these wounds. Horizontal sliding, an island like, myocutaneous gluteus maximus flap is accepted in our practice because of its numerous qualities.This flap is relatively easy to plan, mobilizes and lifted separating the muscles along its medial insertion of sacral and coccygeal bone and along its upper edge, which allows it to germinate over the midline. The secondary defect is maintained in V-Y procedure. The flap is vital in all its parts. By mobilizing two lobes can close extensively large defects. Defects are closed in three layers, a region exposed to chronic pressure is covered by muscle and full thickness skin. These well vascularised tissues have positiv influences on local infection. We used These lobes in mobile -not plegic patients without disrupting the function, since there is intact innervation, vascularization and functional integrity of the muscles.
Key words: decubital ulcers, reconstructive surgery, sacrococcygeal regia

Abstract number: 023
Abstract type: poster

Our experience in the treatment of fractures of the zygomatico-maxillary complex, zygomatic bone and of the orbit floor

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Introduction: The zygomatic bone is laterally the most prominent bone of the face. Because of that this fractures are the second most common (8-20%), immediately after fractures of the nose. The most common causes of fractures are in fights, falls, traffic accidents and sports injuries.
Objective: The primary objective was to assess the incidence of fractures of zygomatico-maxillary complex, zygomatic bone and the the orbit floor, analysing frequency by sex and age, as well as the etiological factors and treatment choices, all in order to make improvement of care for these patients.
Method: In the period of 3 years, 126 patients were studied with fracture of zygomatico-maxillary complex, zygomatic bone and the of the orbit floor who were treated at the Clinic. Information on demographic, etiologic and clinical data and radiological tests, surgical therapy and postoperative complications data were statistically analysed.
Results: Injuries were more frequent among men, in the third and fourth decade. The most common etiology was violence, followed by traffic accidents, accidents in the home and sports. The clinical picture that dominated were: deformities of the face, paresthesia in the inervation zone of N. Infraorbitalis, double vision and inability to open

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the mouth. The average duration of injuries to hospital admission was 2 days and of injury to the operative treatment 4 days. The most common surgical approach was sub ciliary section.
Zaključak: Fractures of the zygomatico-maxillary complex, zygomatic bone and of the orbit floor are more common in men, occurring most often as a result of violence. Surgical treatment is necessary in most cases. Inadequate injuries assessment leads to inadequate treatment, which results in poor cosmetic outcome or vision problem.

Key words: zygomatico-maxillary complex fractures, zygomatic bone

Abstract number: 024
Abstract type: poster

Cervico-mediastinal hematoma - Compression as life threatening condition for patient

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Introduction: Spontaneous hematoma in the neck (cervico-mediastinal hematoma) caused by rupture of extracapsular parathyroid gland occurs very rarely. There is no standard approach and method of treatment but it is the uniqueness of each individual case.
Objective: We wanted to present this rare case of spontaneous cervical-mediastinal hematoma, where bleeding has occurred from a parathyroid adenoma, which is detected in absolutely healthy patients
Method: There were 5 patients, younger age, 29-38y, two women and 3 men. All were hospitalized within 2 hours after manifestation of the disease, complaining of neck pain and numbness of one side of the neck. Indirect laryngoscopy: there is paresis on one side of the vocal cords. Biochemical analysis of blood showed an increased level of parathyroid hormone compared to normal is 12-15 times higher, while the value of ionized calcium increased slightly. Symptoms of acute compression of neck organs were seen between 5 and 7 hours after hospitalization.
Results: All patients were operated with the evacuation of hematoma where active arterial bleeding was found. Histological examination discovered fragments of parathyroid adenoma in hematoma. The positive dynamics of recovery was observed within 12 hours from administration of anti-inflammatory therapies and interventions. Analysis showed that the level of ionized calcium in the blood was normal 24-hour post-surgery. The patient is regularly controlled and re-examined 6 months after surgery and there was no disphagia, quality of voice was intact, and breathing was without restrictions. The level of parathyroid hormone in the blood ranged within normal levels.
Conclusion: The rarity of this pathology and the variability of treatment do not allow choosing a single uniform medical and diagnostic protocol. Our cases show that radical correction of primary hyperparathyroidism, the evacuation of hematoma and fibrous capsule while preserving the thyroid gland is possible in conditions of strained cervical-mediastinal hematoma with inflammation in the area where there is a manifest bleeding.

Keywords: Hyperparathyroid gland diseases; Acuteneck diseases, extracapsular parathyroid bleeding; hypercalcemia; Tumors of the parathyroid glands; paresis of the larynx

Abstract number: 025
Abstract type: poster

Reasons for visiting Emergency Center in the postoperative period of patients who underwent thyroid and parathyroid glands surgery

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Introduction: A review of the literature data does not have adequate evaluation of postoperative complications of patients treated within 30 days after surgery of the thyroid and parathyroid glands. Description of post-operative condition that requires evaluation of patients who have undergone this type of surgery is missing in the literature. These questions are important because they affect the total cost and efficiency of patient care. We will show the number of patients who have had problems due to the need to contact Emergency Center during the first 30 postoperative days. Reasons for the evaluation at the Emergency Center varied, but a significant number related to electrolyte disturbances. With the exception of patients who underwent lobectomy, all patients began with supplementation of calcium deficit postoperatively, but the quantity, type, as well as the compliance rate varied, and therefore this factor was not evaluated. Magnesium levels were periodically tested and rarely there was a need for its supplementation because hypomagnesaemia was not found. However, it was quite a large number of patients who contacted Emergency Center for paresthesia and had normal levels of ionized calcium, with hypomagnesia and without detectable abnormalities in their serum calcium and magnesium levels. Patients taking proton pump inhibitors (PPI) in the postoperative period were statistically more frequent visitors of Emergency Center in comparison to those who did not take this medicine.

Objective: To describe patients who need evaluation through the Emergency Center within 30 days after thyroidectomy or parathyroidectomy and their associated risk factors.

Material and Methods: Study design, setting tasks for the evaluation and classification of the patient presented as retrospective study of the examinations carried out in a tertiary institution of adult patients aged 42-79y. Patients underwent thyroidectomy or parathyroidectomy in the period from 01 January 2010 until 01. January2015. The documentation is taken from the database of medical history of diseases of the Emergency Center where KCS conducted an institutional exam. These are patients in the postoperative period who visited the clinic Emergency Surgery Emergency Center, Clinical Center of Serbia in the first 30 days after surgery and for this paper the data was selected and compared with a control group of patients who had the same surgery and did not have the need for emergency visit. Demographic data included age, gender, body mass index (BMI). Clinical features are the type of operation, the use of proton pump inhibitors (PPI) and medical comorbidities, such as diabetes mellitus, hypertension, kidney disease and gastroesophageal reflux. We were monitoring the time of arrival at the Emergency Center in relation to the date of the operation. Laboratory values for potassium, ionized Ca, phosphorus, magnesium. All analyzes were performed using SPSS software, version 21.0.

Results: The main results and measures of statistical analysis, were evaluated through the association of demographic and clinical characteristics between patients who require evaluation in Emergency Center and those who did not. Clinical characteristics were evaluated through the type of surgery, medical comorbidities, and use of proton pump inhibitors (PPI). We identified 263 patients, 72 patients had the need to contact Emergency Center, including paresthesias ($n = 19$), early complications ($n = 7$) and weakness ($n = 5$). There were fifteen hospitalizations for treatment of various postoperative complications. A significant association was found between the presence of diabetes ($P = 0.03$), gastroesophageal reflux disease ($P = 0.04$), and current use of proton pump inhibitors (PPI) ($P = 0.03$). During controls of

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diabetes and gastroesophageal reflux disease as a disease, we found that patients taking proton pump inhibitors (PPI) had 1.81 times greater opportunity to visit the Emergency Center than patients who were not taking a PPI (P = 0.04). This corresponds to a rate of 11% reporting to Emergency Center for evaluation within the first 30 days after surgery of thyroid or parathyroid glands and if there were more visits we have not taken it into account.

Conclusion: The causes of patients emergency visits to emergency surgery of the Emergency Center was the fact that patients taking PPIs had 1.81 times higher chance to seek help.This paper describes the risk factors that increase the likelihood of urgent examination within 30 days of postoperative thyroidectomy and parathyroidectomy in tertiary institutions, and gave the reasons for their re-entry at the hospital and some of the medical findings on this group of patients. This problem is more in corelation to the outcome of the applied treatments, which reduces the unexpected need for health care in the postoperative period, which is essential. This paper describes the reasons for the emergency re-entry to the emergency center, evaluation and display of rate of occurrence of these patients in the hospital, and significant risk factors for remission in the postoperative period.

Key words: emergency admission, postoperative period, tiroidectomia, parathyroidectomia, a proton pump inhibitor

Abstract number: 026

Abstract type: poster

Acute acalculous cholecystitis

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Introduction: Acute acalculous cholecystitis represents about 5-10% of all cases of acute cholecystitis. It occurs more often in hospitalized patients, and rarely is in ambulatory conditions.

The aim is to highlight the importance of repeting fast, non-invasive diagnostic procedures in patients with acute abdominal pain.

Methods and Materials: Observational protocol of patients from the Emergency medical Service Nis, discharge papers of Clinic for Surgery.

Case Report: A man, 45 years old, came for a checkup in abulance emergency room on 12 December 2014 due to the pain in the upper abdomen followed by nausea and vomiting. The patient says that he had an operation of inguinal hernia on the right side and an appendectomy one month ago. Problems began while on business trip on 11th December 2014, when he was admitted to the nearest hospital Surgery Department. After admission physicians started with examination, repeated laboratory tests, radiological examinations, abdominal ultrasound, and all of this were normal. He was treated with intravenous solutions, antibiotics, antispasmodics and opioid analgesics. The pain is coupled and the acute surgical disease was excluded. He was discharged in a good general condition.

In our survey the abdomen on palpation is painful and sensitive in the epigastric region, right upper quadrant and the lower right quadrant. Hematologic analysis and abdominal ultrasound was repeated.

Hematological analyzes showed moderate leukocytosis with granulocytosis.

Echo of abdomen showed distended gallbladder, slightly thickened wall. Intraluminal echogenic content is inhomogeneous with no signs of calculosis (suspected empyema). Circularly around the entire gallbladder the greater amount of fluid is present (periholecystitis). Positive Murphy sign. The bladder is full without the urge to urinate (urinary retentio).

Patient was sent to the surgery department of clinical center Nis with Dg: Abdomen acutum where he was operated (Dg: Abdomen acutum. Cholecystitis acuta gangrenosa perforativa. Peryholecistitis. Peritonitis diffusa. Appendicitis acuta consecutiva.)

Discussion and conclusion: Postponement of diagnosis in very rare acalculous cholecystitis increases mortality rate, because it is often not recognizing at an early stage because of the absence of gallstones. To make diagnose of this disease which has a high mortality rate, ultrasound is the method of choice. The sensitivity for acute cholecystitis is 75%, and can be frequently repeated

because of which has a special significance in these patients.

Keywords: acalculous cholecystitis, high mortality, non-invasive diagnostics

Abstract number: 027
Abstract type: poster

Case report of patient with nonspecific clinical presentation in acute myocardial infarction (AMI)

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Introduction: In most cases, AIM as a leading symptom has a severe chest pain with different propagation and with other symptoms attached. However, the literature says that up to 10% of patients at first presentation to the physician have nonspecific problems. In emergency medicine, the contact with the patient is with limited time and if you do not pay attention, you can overlook the first major symptoms.
Case report: Patient K.N. 58y. calls EMS because of nausea, dizziness and cold sweats. The call was received as a first line of emergency and medical team arrives within 7 minutes after the call. The patient is in bed, sitting up and conscious, oriented, pale and cold sweating. He complains of dizziness, unsteadiness and nausea. On the target question: "whether he has chest pain?" - Answers "as it has ... but is not sure." We insist on answer and he confirmes that there is pain, which is a lower intensity. On examination we find the following vital parameters: TA 90/60 mmHg; SF 75/min; SpO_2 98%; glycemia 5,6mmol/L; TT norm. Breathing is bilateral and vesicular breathing. Above the heart, heart beating rhythmical, heart sounds are of lower intensity, murmors are not heard. ECG is done. On the ECG: sinus rhythm with normal heart axis, 5-6mm ST elevation in D2, D3 and AVF; ST elevation 3mm in V3-V5; ST depression in D1, aVL, V1 and V2, 2-3mm, negative T in V6. In right leads in V4 there is ST elevation of 1.5 mm. The diagnosis is infarctus Myocardii parietes infero posterioris cum Ventriculi Dextri. IV line was placed, ECG monitoring and therapy administered was Tbl. ASA 300mg, 300mg Plavix Tbl, amp Clexane 0.3 IV, amp Fentanyl 2 mg, Sol NaCl 0.9%. The patient was transported seeted in ambulance chair to the Department of Cardiology. During transport the patient was hemodynamically stable, without deterioration.
Conclusion: In this study a patient who had a clear clinical picture, but the monitoring protocol for the treatment of patients with chest pain, rapid diagnosis, given adequate therapy and the patient was transferred to the Department of Cardiology where they performed pPCI in the first hour.

Keywords: AIM, nonspecific clinical presentation.

Abstract number: 028
Abstract type: poster

Polytrauma-case report

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Introduction: Polytrauma takes 3-8% of total number of injuries, but it is the leading cause of mortality and has a significant impact on morbidity (mortality in the place of incident is from 50 to 80%). The overall polytrauma patient hospital mortality goes up to 25%. The mortality within the first 6 hours is 50%, in a further 24 hours 30%, and 20% due to secondary damage and complications.
Aim: Case raport of polytraumatized patient.
Case report: Patient A.V. 30y, was admitted to military medical corps. We got the information that after the jump from a plane regular parachute opened but that during the next paratrooper jump (carried by a windblow) there was a collision in the air injuring both paratroopers. Patient A.V. landed with open fracture of the right femur and medical team on call at the airport did primary examination. Right leg was imobilized with Kramer's splint, IV line 20G was placed, no analgesic were added, nor has volume replacement begun. At the Surgical Department after 50 minutes from the event at 10:50, we were announced the arrival and two

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anesthetic teams awaited him in the receiving clinic. On admission the patient was conscious, oriented in time, place and persona. The skin and visible mucous membranes were visibly pale, sweated, occasionally shouting, visibly psychomotorly upset. He gives data himfelfe, but he could not reconstruct the actual event. Head and neck were with no visible injuries, the pupils were equal, cervical collar was placed and O2 7L/min. Thorax is with no visible injuries, respiratory sound is present. Cor: normal heart sounds, no noise. Abdomen is painless to superficial and deep palpation. Vital parameters-TA: immeasurable, SF 110/min; RF: 20/min. Right thigh was bigger in volume. After a quick orientation, two large IV lines were placed, samples taken for complete laboratory and intensive volume replacement of crystalloid and colloids was started. Patient was given fentanyl for pain and further diagnostics were started. MSCT of the whole body, color Doppler of blood vessels of the legs, ECG, echo of heart were done. After the diagnostic tests following dg could be set: Polytrauma, Contusio pulmonis, Contusio cordis, Contusio capitis, fracture femoris dex, Shock haemorrhagicus. With intensive therapy hemodynamic recovery is achieved 2 hours after admission when the patient is brought to operating room so that stabilization of the fracture can be done by placing an external fixator. 24 hours after the injury patient was transferred to a tertiary medical facility - VMA, for final treatment.

Conclusion: Fast and accurate assessment of traumatized patients, rapid diagnosis, adequate final treatment is the key to treating polytraumatized patient. Chain of treatment must not be interrupted.

Key words: polytrauma, chain care

Abstract number: 029

Abstract type: poster

Cardiac injury-frequently neglected diagnosis

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Introduction: Chest injuries are of particular significance for their potential to compromise respiratory and/or circulatory function. Thoracic trauma can result from blunt and penetrating mechanisms. Rescuers in the field usually pay attention to the traumas of the chest wall and the lung tissue, and rarely think about cardiac injury.

Aim.To point out to the importance of cardiac injury in chest trauma.

Data sources and data extraction. A retrospective analysis of the literature with keywords: trauma, chest, and cardiac injury. The search is performed through: PubMed, Medline and electronic journals available through KoBSON as well as publications available in the Faculty of Medicine in Nis Library. (PHTLS Chapter 11 Thoracic trauma).

Results of data synthesis. Blunt cardiac injury often results from cardiac compression due to application of force to the anterior chest causing the following entities:

- Cardiac contusion. Often causes abnormal heart rhythms e.g. sinus tachycardia, premature ventricular contractions, ventricular tachycardia, ventricular fibrillation and intraventricular conduction abnormalities. The contractility of the heart may be impaired, and cardiac output falls, resulting in cardiogenic shock.
- Valvular rupture. Rupture of the supporting structures of the heart valves or the valves themselves causes a reduction in their functions with symptoms and signs of congestive heart failure.
- Blunt cardiac rupture. Occurs in less than 1% of patients with blunt chest trauma. Most of these patients will die at the scene from exsanguination or fatal cardiac tamponade. The surviving patients will present with cardiac tamponade. The increase of pressure in the pericardium prevents the return of venous blood to the heart and leads to a reduction

in cardiac output. With each cardiac contraction this condition deepens and leads to the heart's electrical activity without a pulse. Most frequently, cardiac tamponade occurs due to stab wounds to the heart penetrating to the cardiac chambers or myocardial laceration. Rupture of the chamber due to blunt chest injuries frequently causes massive bleeding. The level of suspicion of cardiac tamponade should be raised to "present until proven otherwise" when the injury occurs is within a rectangle (the cardiac box) formed by drawing a horizontal line along the clavicles, vertical lines from the nipples to the costal margins, and a second horizontal line connecting the points of intersection between the vertical lines and the costal margin.
Physical signs of threatening cardiac tamponade (Beck's triad) are: remote, dull, muffled heart sounds, jugular venous distension, low blood pressure.
Assessment. Assessment of the patient with the potential for blunt cardiac injury reveals a mechanism of injury and physical signs.
Management. The key management strategy is correct assessment that cardiac injury may have occurred and transmission of those data to the receiving facillity. A high concentration of oxygen is to be administered, and IV access established along with fluid replacement. The patient should be connected to the ECG monitor. If arrhythmia is present, standard antiarrhythmic therapy should be administered. In pericardial tamponade, removal of smaller amounts of fluid from the pericardium by pericardiocentesis is an effective temporary measure.
Conclusion. Cardiac injuries may cause serious complications with fatal outcome, requires correct assessment of the mechanism of injury, urgent treatment and rapid, monitored transport to a facility that can perform immediate surgical repair as soon as it is recognized. After a primary survey, the patient should be managed on the way to hospital. Even when there are no outer signs of chest trauma, special care should be taken in the area of the cardiac box because these injuries may cause fatal complications and lethal outcome.
Keywords: trauma, chest, injury

Abstract number: 030
Abstract type: poster

Foreign body in the airway as the cause of cardiac arrest-case report

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Introduction: The most common cause of cardiac arrest is previous heart diseases. Other causes of cardiac arrest are of noncardiac etiology. New etiological clasification is based as 5H (hypoxia, hypovolemia, hypothermia, hydrogen ion-acidosis, hyper/hypokalemia) and 5T (thrombosis-coronary, thrombosis-pulmonary, tension pneumothorax, cardiac tamponade, poisoning) causes of cardiac arrest. These causes of cardiac arrest should always be thought of and if necessary to apply the specific procedures during cardiopulmonary resuscitation in order to correct them.
Objective: Presenting the case report to emphasise the importance of early CPR, as well as the importance of timely eliminating causes of cardiac arrest in the prehospital level.
Materials and Methods: We analyzed the medical intervention protocols of Emergency Medical institute and medical history and discharge letter from the Clinic for Cardiovascular diseases.
Case report: Call was made from Gerontology Center and is classified as first line of emergency, because we received the information that the patient is unconscious. Medical team is dispached in the first minute after the call was received, and was on the scene in 3 minutes. We find the patient in bed unconscious, not breathing and without pulse ower carotid artery. The pupils are dilated, non-reactive. The skin and visible mucous membranes are cyanotic. Heteroanamnestic data taken from ward nurse say that the patient suffers from heart disease and diabetes and regularly takes its medication. We also got the data that the patient coughed during the meal, turned bluish and stopped breathing, which indicated the possible cause of cardiac arrest. We immediately began cardiopulmonary resuscitation with chest compressions and placed the venous line. On the

monitor of defibrillator we register asystole, and resuscitation continued according to the protocol for asystole. While direct laryngoscopy of the oral cavity, oropharynx and hypopharynx we could visualize the foreign body, which was removed Magill forceps, before placing the endotracheal tube. After endotracheal intubation with endotracheal tube 8mm, we continued controlled ventilation with ambu balloon. Six individual doses of adrenaline 1 mg with intervals of five minutes were given intravenous, followed by chest compressions and controlled ventilation. After six ampoules of adrenaline, we got the pulse of the carotid artery, and the monitor registered sinus rhythm. The patient has seldom spontaneous respirations. Medical team transferd patient with the continuous monitoring of vital functions to the Clinic for Cardiovascular Diseases in Nis. During transport the patient was on oxygen therapy with a flow of 10 L/minute, with assisted ventilation continued. During the hospital stay, the stabilization of vital parameters of the patient was achieved. After 15 days of hospital treatment the patient was discharged in good general condition, without neurological deficit.

Conclusion: Although commonly in practice we encounter primary cardiac arrest, we should always think about the other possible causes of cardiac arrest, as in our case was the obstruction of the airway with foreign body. Accessing the patient with acute heart failure and all diagnostic and therapeutic procedures that we perform at that moment are crucial for the success of resuscitation.

Keywords: cardiac arrest, cardiopulmonary resuscitation, foreign body in the airway

Abstract number: 031
Abstract type: poster

Acute pulmonary edema-case report

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Introduction: Acute pulmonary edema (lat. Oedema pulmonis acuta) is a lung disease which is lifethreatening and therefore presents the first line of emergency Emergency Medical Service (EMS) system. It is characterized by the accumulation of extravascular fluid in the lung alveoli due to elevated pulmonary capillary wedge pressure or impaired permeability of the alveolar-capillary membrane of the lungs. Timely management is essential for patient with acute pulmonary edema, as well as the right choice of therapy in a given time.

Case report: On 14.07.2015. (protocol No. 9592) after receiving a call at 14: 35h by an unidentified persons Emergency Department medical team was dispached to a patient M.Z. 1936y. With the first visual contact with the patient, I have noticed that the patient is sitting in a chair, is covered in sweat and has breathing difficulties. His lips were blue and he had very pronounced veins on his neck. After inspection I noted that the patient has a intens shortness of breath, coughing and expectoration of mucous sparkling sputum, rapid shallow breathing, anxiety, central cyanosis, impaired respiratory sound to the mass inspirium diffuse crackles audible on both sides of the lungs to over half of the lung fields. TA 180/100. Immediately after the examination we started with therapeutic procedures. The patient is in a sitting position during transport, IV line is placed and administered therapy was Amp. Furosemide 20mg i.v. and Tbl. Captopril 25mg SL. ECG (sinus rhythm, left axis, HR 100/ min -T D1, aVL, without significant changes in the ST segment), SpO2 70%, BP 170/95. Therapy continued as oxygen support using masks 4 l/min., Spray glyceryl trinitrate 2 doses of 0.4 mg sl. on 5 min. intervals, ½ Amp. Morphine 20 mg i.v. Amp. Furosemide 2X20 mg. i.v. After 15-20 min. there was improvement of the patients condition and SpO2 was 80%, BP 155/90, after which he was transported in a sitting position to the internal medicine ward for further observation and treatment.

Conclusion: After timely and adequate therapeutic procedures by medical team of emergency department, there has been an improvement in the health condition of a person with acute pulmonary edema, after which she was hospitalized in internal department for further treatment and observation.

Key words: edema, prehospital treatment

Abstract number: 032
Abstract type: poster

Prolonged hypoglycemia-attention!

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Introduction: The hypoglycemic coma is the most common complication of diabetes mellitus, with which phusicians of EMS medical team encounter durig interventions. In most cases there is no focal neurological signs and meningeal irritation. Complete recovery of consciousness is usualy seen after adequate therapy. Inadequate response to therapy should always arouse suspicion of other reasons for impairment of consciousness.
Aim: Case report that highlightes the importance of a carefull approach to patients with impaired consciousness with the prolonged hypoglycemia and in which compensation with hypertonic glucose does not bring desired effect.
Materials and methods: We analyzed the protocol of medical team interventions of Emergencz Medical Institute and history chart and discharge letter from the Clinic for Neurosurgery.
Case report: Call to EMS was made for old patient 61y, due to impared level of counsciousness. The call is classified as a call of the second line of urgency and the medical team was dispached in the first minute after call is received, and was on the scene after 10 minutes. We find the patient (large osteomuscular structure) in bed unconscious, with spontaneous breathing and present pulse over the carotid artery that is well filed. Pupils are medium dilated, slowly reactive. The colour of the skin is normal but cold and damp. Heteroanamnestic, his wife, we got data that the patient is diabetic on oral anti-diabetics, poorly regulated, who took his medication irregularly. We got the information that the patient prior to losing consciousness sweated, had nausea and that they tried to solve the problems by sugar intake per os. They measure Gly 2 mmol/L. Vital parameters: BP 170/90mmHg; HR: 75 / min; RF 16/min; SpO2 99%; Gly 6.0 mmHg, TT 36,8C. ECG: sinus rhythm without signs of ischemia. Given that the patient long history of diabetes (poorly regulated) and that before the events entered by increasing the amount of sugar, the idea was that the protracted hypoglycemia led to the slow response to the intake of sugar and providing access Sol. Glycosae 50% 20 + 20 + 20 ml. After given therapy partial recovery was obtained. II Gly 11,0mmol/L. The patient wakes up, answer questions, but is slow and confused. After the reply, immediately falls asleep. He denies the complaints and refused further help. Neurological examination was normal. The patient was accompanied by medical teams, and with the continuous monitoring of vital functions, transfered to the Department of Endocrinology. During transport of the patient oxygen therapy with 4 L/minute was administered. After examination by an endocrinologist and with deterioration of level conciousnessdisorder patient was referred to the Department of Neurology, where CT was performed which confirmed the suspicion of SAH.
Conclusion: In the prehospital treatment, with limited diagnostic posibilities, impairment of consciousness should always be considered in several directions, although the circumstances clearly point to the underlying disease. Trough careful examination we should always sought for signs of other diseases.
Key words: hypoglycemia, impaired consciousness, SAH

Abstract number: 033
Abstract type: poster

Differential diagnosis of chest pain

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Background: Chest pain is one of the biggest differential diagnostic dilemma in medicine. In practice, the pre-hospital settings, we often write working diagnosis "stenocardia, dolor praecordialis" on the basis of history. What we have as the biggest issue is precisely whether the chest pain is directly associated with myocardial infarction, one of the leading causes of death worldwide.
Objective: To examine the incidence of stenocardia in patients with chest pain in the general population from 30 to 70 years.

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Methods: Descriptive data display. Data source: Dispatcher protocol, protocol of Emergency Medical Service Podgorica, Cetinje department, medical reports.
Results: During the period of 10 months we have examined 121 patients in EMS Cetinje, of which 28 patients had AIM, 35 patients had myalgia, 58 patients was with a diagnose of depression. The incidence of AMI in the given period was 23.1%, while with myalgia there were 28.9% and with depressive disorders 47.9%.
Conclusion: We conclude that not every chest pain is of cardiac origin, but considering that the AIM is one of the biggest causes of death in the world, we must pay special attention to every patient with chest pain because of the likelihood that it is AMI.
Key words: Acute myocardial infarction, stenocardia, chest pain.

Abstract number: 034
Abstract type: poster

Arrhythmia absolute in hypertensive crisis

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Background: Objective: To check the frequency of occurrence of the first episode of arrhythmia absolute in hypertensive crisis.
Results: In a period of 10 months in EMS in Cetinje and OB in Cetinje of 100 patients (48 men and 52 women) with hypertensive reaction of BP> 180/120 mmHg there were de novo absolute arrhythmia in 80 patients (36 men and 44 women).
Conclusion: Arrhythmia absolute occurs in a high percentage as a manifestation of hypertensive crisis and can be explained by the high percentage of untreated hypertension in our population.
Key words: arterial hypertension, arrhythmia absolute, hypertensive crisis.

Abstract number: 035
Abstract type: poster

Early defibrillation key to a successful CPR – A case report

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Introduction: The most common cause of acute cardiac arrest, according to statistics up to 80% is the fibrillation that occurs with acute coronary event. DC shock is an integral part of cardiopulmonary resuscitation (CPR) and outcome of CPR depends on of timely and adequate implementation of defibrillation. Early defibrillation is critical to the survival of sudden cardiac death, and the probability of successful defibrillation decreases rapidly with time.
Objective: Case report will highlight the importance of early CPR, which is the first measure of early defibrillation.
Materials and Methods: We analyzed the medical team intervention protocols of Emergency Medical Service and medical charts and discharge letters from the Cardiovascular Clinic.
Case report: The patient calls EMS because of chest pain that lasts about 30 minutes. The pain was noticed after a quarrel with his son. The patient in the course of the conversation shows the nervousness and agitation. Call was received as second line of emergency and medical team was dispatched in the first minute of a call was received and come to the patient after 5 minutes. Police team is present at the patient's home because of previous conflict in which there was no physical contact. The patient M.P. 74 y, was found in bed, conscious, oriented, huffy and irritable, newly diagnosed as suffering from hypertension. Wife, who is present at the scene, is convinced that he simulates problems. The patient was pale and sweating and has never had such pain earlier. Vital parameters: BP 150/100 mmHg; HR 100/min; RR 16/min; SpO2 98%, Gly 5,8mmol/l, TT normal. On the ECG: sinus rhythm, bigeminy, downward depression D2, D3 and aVF, ST elevation V1-V4 of 1-2mm. IV line was placed, monitoring and Therapy: Amp Fentanyl 2 ml IV; Amp Clexane 30 mg IV; Aspirin

Tablets 300mg PO; Plavix 300mg tablets; PO; Amp Ranitidine IV; O_2 - 4 L/min. During the transportation on the monitor frequent polymorphic VES (bigeminy) are still present. Rhythm disorder with VF occurs approximately 30 minutes from the first contact with the patient. DC The first shock was given with the 200J, after which we started chest compressions, as VF continued, we delivered and second DC shock 300J after which the patient starts to breathe spontaneously and opens his eyes. It is slightly confused in answers. We continued monitoring of vital signs and transferred patient to the Clinic for Cardiovascular Diseases in Nis. In receiving outpatient Clinic for Cardiology patient again had FV and was defibrillated by cardiologists 2X200 J. The patient undergone pPCI, with stent placed in the LAD that in the next few hours acutely occludes. The patient is given Brilique. He is discharged home after 6 days of hospitalization in a good general condition.
Conclusion: Early defibrillation will only take effect when and if timely and adequately performed. It must be an integral part of the chain of survival. EMS or measures of ALS (advance life support) are part of the chain which in this case proved to be a good and solid link.
Key words: cardiac arrest, cardiopulmonary resuscitation, early defibrillation.

Abstract number: 036
Abstract type: poster

Geriatric trauma

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Introduction: Advances in medicine during the last several decades have resulted in a significant increase in the percentage of the population over 65 years of age. The changes that occur during aging are reflected in a different response in trauma.
Data source: We considered more than 1250 Medline Geriatric Trauma publications and guidelines and Prehospital Trauma Life Support recommandations published between Jan 2008-Sep 2015. References were selected following the level of evidence.
Synthesis of reviews: During ageing, normal physiologic changes occur and people may have different medical problems. The most important changes in respiratory system are lower efficiency caused by anatomy changes of thorax and spine and reduction in alveolar surface area. The results of age-related changes in cardiovascular system are atherosclerosis, hypertension, myocardial hypertrophy, dysrhythmias etc. Cardiac output decreases and cannot meet the demands of increased myocardial oxygen consumption in trauma. Also, elderly patients usually take medications which may change their response in trauma. Biologic aging of the brain leads to poor cerebral function. Also, vision and hearing difficulties may play independent role in injuring and also cause difficulties in communication and access to an elderly trauma patient. Because of presence of some conditions or illnesses, such as diabetes, or chronic pain syndroms elderly persons may have increased or decreased tolerance to pain. Musculoskeletal system changes include osteoporosis, coupled with reduced muscle strength and it can result in multiple fractures with only mild or moderate force. Elderly patients are more prone to hypothermia and infection than the younger ones. All this age-determined changes cause a need to modify the access and management of elderly trauma patients.
Conclusion: Assessment and management of the elderly trauma patients have some specificities. Numerous medical conditions may predispose individuals to traumatic events and also change their response to trauma. Vital signs are a poor indicator in the elderly patients's state. Early control of airway, ventilation and hemorrhage, adequate immobilization and rapid transport are the essential tasks in geriatric trauma management.
Key words: geriatric, trauma, erderly.

Abstract number: 037
Abstract type: poster

The activation patterns of emergency medical services during out-of-hodpital cardiac arrestand decision to resuscitate - EURECA ONE study 2014

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The A activation patterns of emergency medicical services during out of hospital cardiac arrest and decision to resuscitate - EURECA ONE study 2014
Introduction: Cardiac arrest represents one final cascade of adverse events during many emergencies, often in the prehospital settings. Institute for Emergency Medical Care Niš enroled international EuReCa ONE study with the aim to follow up and investigate the problem of out-of-hospital cardiac arrest (OHCA). AIM: The aim of this study was to evaluate the activation patterns of emergency medical service from dispatch call to decision to resuscitate.
Method: The occurrence and treatment of OHCA during the period 01. October 2014. - 31. October 2014. in the city of Niš using the expanded study protocol based on Utstein style reporting. RESULTS: The average trigger time for all calls was 3 minutes 5 seconds, 13 seconds for 1st, 1 minute 56 seconds for 2nd, 12 minutes 14 seconds for 3rd and 10 minutes 50 seconds for 4th priority of emergency calls ($p<0.05$). When receiving calls, a level of consciousness was possible to specify in 88.9% of cases, while the presence/absence of respirations was determined in 28.6% of cases ($p<0.001$). Using multivariate analysis of parameters which may affect the use of CPR measures in OHCA, priority order of emergency calls ($p<0.001$), information on time of respiration cessation ($p<0.001$), the initial rhythm on the defibrillator monitor ($p<0.05$), information about serious illness ($p<0.05$) and the time from departure to arrival at the scene ($p < 0.001$) were identified as important factors.
Concusion: The trigger time for 1st order of emergency calls is impressive. Emergency calls triage targeted level of consciousness as the main benchmark during the brief interview, with insufficient data about the quality of breathing. CPR measures were not initiated in all cases with confirmed OHCA. Cases that are triaged to the highest priority of urgency calls, with information about the short time of the breathing cessation, with the initial schockable rhythm, with no bystander information about serious illness and with shorter time from departure to arrival of the EMS team at the scene, had a significantly greater chance of CPR measures to be initiated.

Abstract number: 038
Abstract type: poster

A Case report of the trauma patient treatment

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Background: Trauma is the leading cause of death among people aged 1- 44 y. and over 70% of all deaths are people between 15 and 24 years old. The trauma is on the high eight place as a cause of death among elderly. Successful treatment of traumatized person, not only saves the patient's life, but also reduces the high level of disability. The quality of the pre-hospital care depends on the: trained team, good cooperation with other rescue services, quality treatment and adequate transport of the patient to continue to definitive care in the hospital setting.
Objective: To present a patient who was treated timely and efficiently by emergency medical services and fire services. He was medicaly treated on the field and transported to the emergency room.
Material and Methods: Descriptive representation of the patient from the available documentation: medical protocol, protocol book, discharge letter from the hospital.
Case report: EMS was called for a patient who, according to eyewitness, fell into the riverbed. The doctor at the dispatch center tried to get more information but the people who called were aggressive and appeared to be intoxicated by alcohol. The emergency crew was sent to the scene as a first line of emergency. Fire department also

immediately responded after the call. The crew arrived on the scene after 12 min (15km distance from the city). At the scene of an EMS team found the patient who was located in the riverbed, lying on his back, between two rocks, conscious but confused, with visible head wound that was bleeding profusely. The patient accidentally fell from a height of about 3m. There is no data on the fall. Due to the inaccessible terrain to the patient medical nurse first arrives and starts primary trauma examination by the system ABCDE. Injury of the head is in the middle of the forehead, star-shaped with a diameter of about 5cm, and was bleeding profusely. Swelling of the both lids of the left eye is present. Bleeding was stopped by digital compression, airway was intact, breathing bilaterally. Abdomen, pelvis and femur are painless. The cervical collar was placed, venous access was obtained and NaCl 0,9% administered. Patient was placed on board but as there were no safety straps, stability was maintained with improvisation. Extraction of the injured was performed using 4 firefighter and EMS driver. The patient was all the time held by the nurses due to the influence of alcohol and inadequately responding to the situation. Because of difficult field extraction of the patient lasted 1h 05min. During transport secondary trauma examination was performed by a doctor of EMS. During transport to Neurosurgery Clinic patient was hemodynamically stable, without deterioration.

Conclusion: Teamwork in the care of traumatized persons is one of the basic elements for the success and effectiveness of the EMS team. The education and organization of each team member is of particular importance. The nurse, when highly educated and well prepared for this kind of activity, can in large part take responsibility in dealing with the traumatized person. Cooperation with other agencies involved in the care of injured patients is essential and requires joint trainings.

Key words: trauma, the role of medical nurses.

Abstract number: 039

Abstract type: poster

Polytrauma – A case report

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Introduction: Topic is case report of the patient who is treated pre-hospitaly and who had been injured in unusual circumstances.

Objective: To describe a patient case where the mechanism of injury and the clinical presentation indicates a potentially life-threatening condition. Point out the necessity of a proper pre-hospital treatment of the patient as well as the need for additional diagnostic procedures.

Material and Methods: An insight into the medical documentation of the Emergency Medical Service Nis, protocol book for medical intervention and the medical reports from the field. Insight into the medical documentation from the Emergency Center, Clinic of Neurosurgery and Institute of Radiology, Clinical Center Nis and the Clinic for maxillofacial surgery.

Case report: 28.06.2014. at 21:35h the call was made to 194 by patients neighbor. He described that the older man is stuck in an elevator, which is located between floors. He suspected that he was unconscious and knew that he suffers from diabetes. The call was marked as second level of urgency. Dispatch of Institute for Institute for Emergency Medicine sent a medical team to the scene at 21: 37h. Patient Đ.D. 77 y, was caught in a small elevator that has stopped between floors. The patient was not available for review because he was blocked by shelf which he tried to put in the elevator. Hairy part of the head could be visualized and right arm, which had some movements. The patient was suspended from the floor of elevator at about 20 cm and hanged in the air. He did not answer to calls. With the help of firefighters and maintenance services for elevators, patient was extracted with maintaining manual stabilization of the cervical spine and placed on the stretcher. The patient was unconscious and after his placing in a horizontal position regains consciousness and began to vomit. Breathing is adequate on both sides. Vital parameters were within normal limits BP:

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120/80 mmHg, HR 80/min, RR: 10-14/min, Gly: 13.9 mmol /L. General examination of body shows no tenderness of the abdomen, pelvis and extremities. Due to the mechanism of injury and the clinical presentation, patient was assessed as critical and transported to the Emergency Center, Clinical Center Nis. During transport treatment of the patient was continued, IV line was placed and solution of NaCl 0.9%, 500ml was administered, 0_2 12l / min with maintaining manual stabilization of the cervical spine. Referral diagnosis posed doubts on possible contusion injuries of the neck, chest and abdomen. Upon arrival at the emergency center further diagnostics were ordered and consultative examinations of specialist at clinic for neurosurgery and maxillofacial surgery. MSCT of endocranium, cervical spine, chest and abdomen showed no traumatic lesions. After the consultative examinations, the patient was given advice for analgesic therapy and AT protection, after which he was sent to home treatment.

Conclusion: Trough medical records of the patient it is possible to follow sequence of events from citizens calls on the phone 194, medical team activation of the Institute for Emergency Medicine Nis, the course of the interventions and patient management in the field who has been assessed as critical, and treated under that principles, and after arrival of the patient to hospital setting to have insight into the performed diagnostic tests and therapeutic recommendations.

Keywords: trauma, mechanism of injury, diagnosis

Abstract number: 040

Abstract type: poster

Moral and ethical issues regarding CPR

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Introduction: In the entire medical practice there is no more exciting and more dramatic situation than when a medical professional finds itself with a patient who has a sudden deterioration of vital functions.

Objective: This paper presents moral and ethical problems that we encounter prior, during and after cardiopulmonary resuscitation.

Data source: Search materials from web browser Cobson, PubMed; written literature of domestic and foreign professional publications.

Data choice: trough key words and relevance

Data synthesis and discussion: In past times, little could be done to extend human life. The power of today's medicine to postpone death has generated difficult moral and ethical questions. The decision of when to start, when to stop or abandon started cardiopulmonal resuscitation is an important problem of medical professionals, patients, family members and lawyers. In contemporary society, marked by pluralism of supervision operations, where it is not always clear what is good and what is not, it is not easy to be a nurse/technician and be at the service of health and life. The autonomy of conscience and the decision of the patient are rightly emphasized.

Conclusion: It is important to note that the goal of CPR is not to prolong life when there is no hope for healing and good quality of life. Recovery is a goal with restoring dignified life and not just vegetating.

Key words: ethics, morality, cardiopulmonal resuscitation

Abstract number: 041

Abstract type: poster

Ulcus cruris - treatment of open wounds with a fibrin membrane

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Introduction: Ulcus cruris venosum is an open wound caused by poor circulation in the veins, localized in the lower legs. There is an increasing number of patients with this problem in Serbia and worldwide. The main problem in the past treatment of lower leg ulcers was reflected in the way of treatment and especially in the period of recovery that is required from the patient as well as huge engagement by family members.

Objective: To show the benefits of treatment open wounds of lower leg ulcers with fibrin membrane compared to the previous, conventional methods.
Materials and Methods: Retrospective analysis of the literature with key words: ulcus cruris, fibrin membranes, treatment.
Data source and selection of materials: Searching is done through: PubMed, Medline and electronic journals available via Kobson as well as literature available in the Library of the Faculty of Medicine Nis .
The results of the synthesis: In Serbia this problem exists, according to some statistics, in around 2.5-3% of the population. Women suffer more often than men. The most common age is between 40-45 y, and in the working age population. Over 30% of patients with chronic venous ulcers are treated for more than 20 years and about 10% for more than 30 years. Venous ulcers of the lower leg makes up between 57% and 80% of all chronic ulcerations in Serbia. Dermatologists and vascular surgeons recommend medicament treatment or surgical treatment of ulcerations, where they insist on the reconstruction of veins and valves, valvuloplastic (Guidelines for the treatment of chronic venous insufficiency). The common approach to heal the wounds of lower leg ulcers (conventional approach) included treatment with powder boric acid, with the basic aim to create the acidic environment with the goal of healing of wounds. This method is painful and uncomfortable for the patient and it has long recovery period, with a regular toilet wounds, bandaging with a smaller percentage of success in the final healing. The use of fibrin membranes in the treatment of wounds is much more comfortable for the patient with a significantly higher percentage of success in fully healing of open wounds. Fibrin membrane is prepared from the blood of the patient, who has problems with ulcers. Blood samples that are taken are treated trough special procedure by which the end product is obtained as a fibrin membranes enriched with platelets and growth factors and a smaller number of stem cells. Formed fibrin membrane is placed on the cleaned wound, which is not under an inflammatory process. The membrane remains on the wound for 5-10 days, after which it continues with wound bandaging, without antibiotics, povidone-iodine or rivanol in the next few days. The recovery period and healing begins on the fifth day of application of the membrane. In the next two months the treatment can be repeated if necessary. Complete healing, depends on the size of wounds and it is expected in the next two months. The total period of wound healing should not take longer than the 4 months. This method of treatment of open wounds is more comfortable for the patient as compared to the conventional.
Conclusion: Treating of open wounds can be very troublesome and complicated and so far it is mostly difficult and took a long time and was usually unsuccessfully. Treating ulcers with fibrin membrane may represent a new more successful and less expensive way in the treatment of these chronic wounds.
Key words: ulcer cruris, fibrin membranes, treatment

Abstract number: 042
Abstract type: poster

Acute abdomen-prehospital care

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Introduction: Abdominal pain is one of the most common reasons why a medical emergency teams are called, both in the field and at the outpatient clinic, or in observational room. According to our statistics, the percentage varies from 20-45% depending on the period of the year.
Objective: To show the importance of knowing the definition, etiology, the basic characteristics of acute abdomen, recognition, approach and the role of the nurses in the care of patients with abdominal pain and suspected acute abdomen.
Materials and Methods: Retrospective analysis of the literature with the key words: chest pain, acute abdomen, pre-hospital treatment, the role of the nurses/technician.
Data source and selection of materials: Search is done through: PubMed, Medline and electronic journals available via Kobson as well as literature available in the Library of the Faculty of Medicine in Nis.
Results synthesis: The term acute abdomen consists of various clinical entities. It includes all those

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pathological conditions in the abdominal cavity which, due to their clinical presentation, severity of a pathological substrate and progressive evolution, require immediate hospitalization, appropriate procedures for resuscitation and intensive therapy. It must be noted that the set diagnosis of acute abdomen is the result of present and temporary diagnostic insufficiency. While there are a number of definitions that determine the term acute abdomen, we could accept one definition by which this term covers three main syndromes: syndrome peritonitis, intestinal obstruction syndrome, syndrome of intra-abdominal bleeding. The patient with developed clinical picture of acute abdomen is hard movable or completely motionless, exhausted, without appetite, bent at the waist, and with one or both hands holding his stomach. When lying down, the patient holds the legs bent at the knees and hips (takes antalgic position). He is pale, frightened, with a coated tongue, rapid and filiform pulse, rapid breathing, sub-febrile or febrile, with pronounced abdominal face (facies abdominalis Hypoccrati). Only in biliary peritonitis, and due to the inhibitory effect of resorbed bile salts on myocardial conduction system, bradycardia can be seen. Pale sclera may indicate intra-abdominal bleeding, while sub-icterus of the sclera may be a sign of biliary peritonitis. Livid spots on the trunk may indicate a mesenteric thrombosis, acute hemorrhagic-necrotic pancreatitis, but can be found in the terminal (irreversible) states of peripheral circulatory collapse. Visible abdominal bloating in the supine position usually indicates intestinal occlusion (ileus), but can also be a sign of acute intra-abdominal hemorrhage or the presence of other free fluid in the abdomen (ascites). Leading (dominant) local character in acute abdomen is - abdominal pain. The clinical picture of acute abdomen should always distinguish two main groups according to symptoms and clinical signs: general signs and symptoms, local symptoms and signs. Adequate diagnose can be set based on the good judgment of the clinical condition and vulnerability of the patient, patients history and clinical examination. The available diagnostic methods in observation EMS Nis are: EHO abdomen; LAB analysis: (blood tests, Le formula, HCT). The therapeutic method (compensation of circulatory volume) and symptomatic therapy without coupling of PAIN! and emergency transport to the Clinic for Surgery.

Conclusion: Adequate an initial approach to the patient with acute abdominal pain increases the percentage of positive outcomes after hospitalization and surgical treatment. Since the acute abdomen develops diversely, depends upon the cause, medical nurse/technician should be well familiar with the basic symptoms, which would contribute to the proper approach to the pre-hospital care.

Keywords: pain, acute abdomen, prehospital approach

Abstract number: 043
Abstract type: poster

Development of the emergency medical dispatch center in the world

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Introduction: Dispatching emergency medical center is a professional Telecommunicator, with the task of collecting information related to emergency medical care, assistance and voice instruction before the arrival of emergency medical services, sending and supporting EMS teams. To perform the work of dispatchers in the majority of countries requires having a certain certificate, level of education and professional designation, which is acquired through education at the national dispatching academies and other education.

Objective: To show the development of the emergency medical dispatch center in the world.

Materials and Methods: Retrospective analysis of the literature with key wards: the development of dispatching, emergency medical services.

A new era of development dispatch center began the 1950's when the use of radio communication started to be used all over the USA and Canada. In the beginning, the dispatch center was formed depending on the institutions that were involved in providing assistance. It used to be the city, fire department or hospital. In a number of cases with independent emergency medical service dispatcher

would be a family member of the owner and his qualifications did not require additional education besides knowing the street and the local geographic situation. Unique number was introduced in Canada in 1959 and in 1967 in the United States, but the coverage of the entire territory lasted until 2008. Currently a unique number does not cover 4% of the territory of the United States. By calling a single number, call is made to the fire department and the police and it became known as the Public-safety answering point (PSAP). The technology is still developing and at one point introduced 'closed lock' the phone line, which prevents accidentally interrupting the emergency call, as well as Automatic Number Identification / Automatic Location Identification (ANI / ALI), which allows the dispatcher to check the number of (preventing false call), and identifies the location from which call is made. Principle - to send the closest medical team to a patient who has a life threatening condition. This process has caused the need for development of protocols for triage of patients. The first such triage protocol appeared in 1975, the Fenix. Since then, they have developed a Medical Priority Dispatch System (MPDS), APCO (EMD) and PowerPhone's Total Response Computer Aided Call Handling (CACH) system. The first systems were initially quite simple. Development of a system in which information to the medical team comes prior to arriving at the scene and continues further, and other medical teams called for the first line of emergency can arrive in the best of cases within the first 8 minutes of the call. Well educated dispatcher unlike team can provide guidance in the first seconds of the call. It was developed Dispatch Life Support.
Conclusion: The development of dispatching systems largely depends on the development of electronic devices. The need to more adequately respond to the needs of patients has influenced the development of dispatching centers. Knowledge of how dispatcher systems function in the world will affect the decisions in which direction to go in the development of dispatching centers in our country.
Keywords: dispatching center, development

Abstract number: 044
Abstract type: poster

Febrile convulsions – a case report

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Introduction: Seizures are most often tonic-clonic contraction of skeletal muscles, but can also occur as loss of muscle tone, as well as sensory outbursts (paresthesia, pain), vegetative (vomiting, sweating, salivation) or in the form of of the absences. They most commonly occur with higher body temperatures but may occur in drop of temperature. There is often a family history in these patients. It occurs in children age 6 months to 6 years and more among the boys. Repeated seizures appear in 20% to 30%.
Objective: To present a child with generalized febrile seizures, which then changed to partial seizures while maintaining consciousness of the child and the role of nurse.
Materials and methods: Descriptive representation of the patient from the available documentation: medical protocol, protocol book, discharge letter from the hospital.
Case report: In the late afternoon, father and grandmother brought boy aged 4.5 years. At first contact we saw that the child is unconscious with the presence of tonic clonic spasms of the whole body. Its appearance is appropriate and looks normally fed. Gaze fixed to the left. Skin was slightly cyanotic, there was no foam at the mouth. We obtained the data that the same thing happened earlier in the boy's third year, and that too was with high fever. Now they have not noticed that he has a fever, all they saw that he fell. In such a state he was for more than ten minutes. We begin with a quick overview: we registered elevated TT, respiratory infection, and started therapy: Supp Eferalgan 150mg, Supp Diazepam 2mg, secured IV line (22G cannula). Oxygen-therapy 6L/min. During the next ten minutes, generalized seizures stopped but partial seizures on the left side of the body remained and the child was conscious and responding to questions. The child was then transported to the hospital accompanied with the medical team.

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Discussion: Febrile seizures represent a medical emergency that parents find extremely frightening. They can also upset an uneducated and inexperienced medical staff and lead to a superficial and inadequate response. The nurse must know a series of procedures and their role is of the greatest importance. Procedures that are expected of nurse to perform are: measurement of body temperature (rectal - in most cases), to prepare the child for examination, to assist in the examination, to place the IV line, administer oxygen-therapy, airway management, application of the drug, and infusion therapy.
Conclusion: The role of nurses in the care of a child with seizures is of the most significant importance. Their reactions have to be quick, quiet and adequate. Their behavior sends a message to parents that in an unprecedented fear that their child will be all right. Teamwork as well as other management of severe condition has the advantage.
Key words: febrile seizures, the role of nurses

Abstract number: 045
Abstract type: poster

Telephone assisted cardiopulmonary resuscitation

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Background: Out of hospital cardiac arrest is a major health problem in most developed countries. Despite national and international guidelines for cardiopulmonary resuscitation (CPR) overall survival of patients with primary out of hospital cardiac arrest (OHCA) is 7.6% and is unchanged in the last thirty years. Most AHCA happens in the presence of witnesses, and only one of the five eyewitnesses began resuscitation. Telephone assisted CPR (TA-CPR) has proven to be an effective measure to increase survival rates in cases of OHCA. In the United States in 200000 of 300000 cases OHCA eyewitness do not start CPR. Implementation of A-CPR has the potential to save thousands of lives each year.
Objective: Review and analysis of phone guided CPR methods.
Methods and Materials: Database BioMed Central, PubMed, Kobson.
Results and discussion: TA-CPR is defined as a set of instructions that the emergency dispatcher provides trough phone call in order to increase the possibility that an eyewitness starts CPR. EMS Dispatcher should be trained to recognize cardiac arrest and give concrete and clear guidelines from the basic life support. The preferred strategy for primary cardiac arrest resuscitation is chest compressions only. The recommendations also include cases of foreign body airway obstruction. There are two types of protocols: for adults and children. The basic preconditions for making recommendations are: Short messages containing keywords; Easily understood and spoken in plain language; Feasible actions by the lay person in difficult conditions; Poster presentation containing the steps that are easy to follow, with emphasis on key activities.
Conclusion: The first problem that contributes to the low survival rate in OHCA is the unwillingness of eyewitnesses to start resuscitation. Telephone support to eyewitness of cardiac arrest by dispatchers increases the possibility of the survival of these patients. The development of a single protocol for the TA-CPR at the level of all emergency services, is the first step towards achieving greater survival in OHCA, and includes the process of preparing a document with recommendations and instructions for TA-CPR as well as their presentation in the form of posters, banners and billboards, as well as with good media coverage.
Key words: telephone assisted CPR, dispatcher, protocols

Abstract number: 046
Abstract type: poster

Dispather education in emergency medical services in the world and in our country

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Background: In the system of emergency medical services (EMS) in our country, depending on the organization, there are mainly physicians (in Emergency Medical Services), and nurses / technicians in services that cover a smaller areas. In our country there is no formal education for this job position. It is often a case that this job is done by workers who have extensive experience in the field, knowledge of chronic patients and geographical area. Often these workers, because of chronic illness are unable to be part of the medical team in ambulance, and their work as dispatcher is traditionally considered a good solution. However, the rapid development of technology, changes in the mode of communication, the need for the introduction of the protocol as well as higher expectations of the population, point to the need for establishing a clear standings on the education of this profile in health care.
Objective: To show the need to introduce formal education for work dispatcher working position in EMS.
Materials and Methods: Retrospective analysis of the literature with settings: dispatcher training. Data source and selection of materials. Search is done through: PubMed, Medline and electronic journals available via KoBSON.
Results synthesis: Official training for dispatchers in the world exists through certain courses that contribute to the safe and efficient performance of dispatchers in the Emergency Medical System (EMS). Guidelines for basic content of these courses in the USA, are standardized trough the organization of the American Society for Testing and Materials (ASTM). These guidelines provide targets for further training and certification of dispatchers education. In the context of this broad goal, ASTM training is generally at least 24 hours i.e. total (three times, 8 hours a day). A typical course consists of a display of dispatching objectives and mastering the basic techniques as well as directing training to known problem areas. The role of the dispatcher is defined, and concepts of medical action are discussed in detail. The protocol for sending medical teams to the scene is usually introduced by owner EMS agencies. For dispatcher candidates is insisted on testing their abilities to comply with protocol, as well as their ability to provide guidance to the caller until the team arrives. The course analyzes the common health problems, with an emphasis on examining the specifics for each type of problem. It is insisted on accepting the importance of providing adequate instructions to callers in emergency situations until the arrival of the team. During the training, it is important that the student identifies the presence or absence of symptoms (such as "chest pain"). Suspicion of such a diagnosis without these questions does not make any sense. The medical significance of the different levels of urgency for each leading complain give the student the ability to quickly determine the priority of different types of emergencies faced by the dispatching service. Often, courses use simulation tasks so that the dispatcher could have a real sense of the protocol characteristics. The training ends with formal examination and practical exam of understanding and assimilation of the curriculum. This allows for a formal certification.
Conclusion: It is recommended that training should be conducted for all medical dispatchers, that the basic content of the curriculum should not change, and should be formed at the national level. The services must be selected by the medical director of the agency.
Keywords: dispatcher, education, receiving calls.

Abstract number: 047
Abstract type: poster

Acute poisoning in children

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Background: The incidence of poisoning in children is 450/100.000, most common in children younger

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than 6y, slightly more girls and 11% of children with poisoning requires medical treatment. Fortunately deaths from poisoning is small - 0,005%. Acute poisoning occurs as a brief, instant and often one-time intake of large amounts of toxins in the body trough - eating, drinking and inhalation or through the skin. They represent a medical emergency even when the first symptoms are mild require observation and careful approach.
Objective: To show the importance of the dispatcher as the first link in the moment of receiving a call in cases of poisoning in children.
Data source and selection of materials. Search is done through: PubMed, Medline and electronic magazines available via KoBSON.
Results synthesis: The largest number of poisonings occurs in the home or environment in which the child is most often present. This actually shows that the main cause for these events are parents and caregivers, or people who guard them and often they are grandparents. This fact explains the availability of a wide range of different drugs, primarily for cardiovascular disease to children. The role of the doctor or nurse/technician at the call receiving position is to ask targeted questions related to the appearance and behavior of the child, to detect a potential source of poisoning, to give the solution for the given situation (to lay person and all other categories of health workers), to send immediately a trained medical team and if it is possible with pediatrician. A doctor receiving call must instruct the caller to three basic things: if the child is unconscious not to give anything by mouth, to try to determine whether there is a suspicious substance (which they should preserve and bring with them), and if the contact of toxic substances was through the skin, to rinse with plenty of water until the arrival of the team. The calm voice and clear instructions to caller is recommended for all calls and especially for this situation. During the intervention of EMS medical team and if toxic substance is known, dispatcher can save time by calling the institution dealing with poisoning (in Serbia, it is the National Center for poisoning VMA), in order to get closer directions on the cause, symptoms and initial treatment and transfer that information through radio communication. In dispatcher receives information on the cessation of breathing, he can start instructing the caller to begin cardiopulmonary resuscitation procedures.
Conclusion: The dispatcher is the first link in dealing with emergencies. Acute poisoning in children are potentially life-threatening condition, parents and other persons presenting their fear further burden our work. Dispatcher, as a first link, with adequate initial response enables quality management of a poisoned child.

Key words: children, poisoning, call receiving.

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Broj apstrakta: 001
Tip apstrakta: poster

Osnovni principi primene kiseonika u hitnim stanjima

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Kiseonik je najčešće primenjivan lek u hitnim stanjima kod životno-ugroženih bolesnika i koriste ga lekari i medicinske sestre/tehničari gotovo svih specijalnosti. Svrha ovog članka je da upozna medicinsko osoblje sa aktuelnim smernicama za primenu oksigenoterapije koje je objavilo Britansko Torakalno Udruženje (BTS) u oktobru 2008. Za primenu oksigenoterapije neohodno je obezbediti izvor kiseonika (to su najčešće boce sa kiseonikom), sistem za isporuku kiseonika (nazalni kateter ili različite vrste maski), rotametar (flow-metar) i ovlaživač. Sistemi za primenu oksigenoterapije, u zavisnosti od koncentracije kiseonika koju aplikuju, mogu se podeliti na sisteme za isporuku niske, srednje i visoke koncentracije kiseonika. Sistemi za isporuku niske koncentracije kiseonika su: nazalni kateter (protok 1-6 L/min; isporuka 24%-45% kiseonika) i jednostavna (standardna) maska za lice (minimalni protok >5 L/min, isporuka 35-40% kiseonika). Sistemi za isporuku srednje koncentracije kiseonika su: Venturi maska (protok 2-15 L/min; isporuka 24-50% kiseonika) i maska sa rezervoarom bez nepovratnih ventila (protok 6-10 L/min, isporuka 35-60% kiseonika). Za isporuku visoke koncentracije kiseonika (do 95%) koristimo masku sa rezervoarom i nepovratnim ventilima (maska bez rebritinga), kiseonički šator, „jet“ ventilaciju itd. Kod životno-ugroženih bolesnika (akutni zastoj srca, trauma, anafilaksa, masivna krvarenja u plućima, sepsa, šok, konvulzije, hipotermija) treba primeniti visoke koncentracije kiseonika do normalizacije vitalnih znakova a zatim smanjiti isporuku kiseonika tako da ciljna vrednost SaO_2 bude 94-98%. Ukoliko bolesnik ne diše treba ga ventilirati samoširećim Ambu balonom a ako je disanje prisutno kiseonik treba primeniti pomoću maske bez rebritinga sa protokom od 15 L/min. Kod bolesnika sa težim oboljenjima koji su hipoksični (akutna hipoksemija ili centralna cijanoza nepoznatog uzroka, pogoršanje plućne fibroze ili drugih intersticijalnih bolesti pluća, akutno pogoršanje bronhijalne astme, akutna srčana slabost, pneumonija, karcinom pluća, postoperativna dispneja, plućna embolija, pleuralni izliv, pneumotoraks, teška anemija itd.), kod kojih je SaO2<85%, treba primeniti visoke koncentracije kiseonika do normalizacije vitalnih znakova a zatim smanjiti isporuku kiseonika tako da ciljna vrednost SaO_2 bude 94-98%. Oksigenoterapiju treba primeniti pomoću maske bez rebritinga i protokom od 10-15 L/min a kada postignemo vrednost SaO_2>85-93%, možemo zameniti masku bez rebritinga nazalnom kanilom sa protokom 2-6 L/min ili jednostavnom maskom za lice sa protokom 5-10 L/min. Kod bolesnika sa hroničnom opstruktivnom bolesti pluća (HOBP) treba primeniti niske koncentracije kiseonika sa ciljnim vrednostima SaO_2 88-92%. Isporuka kiseonika se izvodi pomoću 28% Venturi maske sa protokom od 4 L/min ili jednostavne maske za lice sa protokom od 5-10 L/min.

Kod nehipoksičnih bolesnika kod kojih je neophodan kontinuirani monitoring (infarkt miokarda i akutni koronarni sindrom, moždani udar, poremećaj srčanog ritma, ne-traumatski bol u grudima, trudnoća i hitna stanja vezana za trudnoću, abdominalni bol, glavobolja, hiperventilacioni sindrom ili disfunkcionalno disanje, trovanja i predoziranja lekovima, metabolički i bubrežni poremećaji, akutna i subakutna neurološka stanja, stanja posle

konvulzija, gastrointestinalna krvarenja, toplotni udar itd.) ne treba primeniti oksigenoterapiju. Ukoliko ovi bolesnici postanu hipoksični (SaO_2<85%) kiseonik se ordinira po prethodno navedenim principima. Iako zdravstveni radnici gotovo svih specijalnosti primenjuju oksigenoterapiju, njihova teorijska i praktična znanja su prilično skromna kako u pogledu rukovanja naizgled jednostavnom opremom tako i upogledu poznavanja aktuelnih smernica za isporuku kiseonika.

Ključne reči: kiseonik, hipoksija, oksigenoterapija

Broj apstrakta: 002
Tip apstrakta: poster

Multimodalni pristup terapiji akutnog postoperativnog bola kod starih pacijenata nakon ugradnje proteze kolena

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Uvod: Po klasifikaciji Evropskog udruženja za regionalnu anesteziju (ESRA) iz 2010. godine bol kod operacije ugradnje proteze kolena predstavlja bol jakog intenziteta. Dobra postoperativna analgezija je jako bitna kod starih pacijenata jer je povezana sa usporenim oporavkom, promenjenim imunološkim odgovorom, mogućnošću nastanka promena u perifernom i centralnom nervnom sistemu sa progresijom u hroničan bolni sindrom, promenjenim odgovorom na stres i nepovoljnim ishodom lečenja. U terapiji bola kod starijih pacijenata najvažniji je koncept individualne analgezije uz redovno merenje postoperativnog bola kao petog vitalnog parametra i primena principa “start low, go slow”. Multimodalni pristup predstavlja kombinaciju više tehnika analgezije radi postizanja optimalnog analgetskog efekta i minimalnih neželjenih efekata.

Materijal i metode: Ispitivanjem su obuhvaćena 63 pacijenta starija od 70 godina ASA klasifikacije II i III kod kojih je urađena operacija ugradnje proteze kolena. Pacijenti su podeljeni u dve grupe. Prvoj grupi pacijenata (PI) je uz opštu endotrahealnu anesteziju urađena intraoperativno periartikularna infiltracija koktelom lekova: lokalni anestetik-Chirokain 100mg + NSAIL (ketrolak-30mg ili ketonal-100mg) + Adrenalin 0,1mg. Postoperativno je primenjeno hlađenje specijalno zaleđenim rastvorom. Druga grupa pacijenata (BI) je dobila samo opštu anesteziju. Postoperativno je praćena pojava i intenzitet bola i potreba za dodavanjem analgetika NSAIL (ketrolak) i tramadola. Procena intenziteta bola vršena je na osnovu Vizuelno analogne skale VAS (od 1 do 10) ili Verbalne skale bola VSB (bez bola do najgoreg mogućeg bola), u zavisnosti od kognitivnih funkcija pacijenata. Vrednosti ove skale su zatim preračunavane u VAS skalu. Merenja su vršena na svaka dva sata u prvih 24 h postoperativno u JIL.

Rezultati: U prvoj grupi (PI) je bilo 35 pacijenata. Maksimalne doze analgetika NSAIL (ketrolak-90mg) i tramadola 400mg dobilo je 5 pacijenta. Minimalnu dozu analgetika ketrolak 60mg i tramadola 100 mg dobila su 19 pacijenta. U drugoj grupi (BI) maksimalne doze analgetika ketrolaka 90mg i tramadola 400mg zahtevalo je 18 pacijenata. Minimalne doze analgetika ketrolak 90mg i tramadol 100mg dobila su 2 pacijenta. Kod 5 pacijenata u PI grupi za procenu intenziteta bola korišćena je VSB skala. Umereni bol su imala 3 pacijenta, srednje jak 1 pacijent i jak 1 pacijent. U grupi BI Verbalna skala bola (VSB) je korišćena kod 4 pacijenta. Dva pacijenta su bol opisala kao srednje jak i 2 kao jak. VAS skor u prvoj grupi (PI) je bio 4,2±0,7, u grupi (BI) 6,32±0,52. Razlika u primeni doze analgetika za kupiranje bola i vrednost VAS skale je statistički značajna.

Zaključak: Multimodalnim pristupom iskoristili smo prednosti kombinovanja različitih lekova i tehnika za postizanje maksimalnog analgetskog efekta kod starijih pacijenata nakon ugradnje proteze kolena. Prve doze analgetika moraju biti u fiksnim intervalima a kasnije doze se prilagođavaju u zavisnosti od potreba pacijenata.

Ključne reči: Akutni bol, proteza kolena, multimodalni pristup

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Broj apstrakta: 003
Tip apstrakta: poster

Atelektrauma – histopatološki, radiološki i patofiziološki aspekt

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Nekoliko potencijalnih mana i komplikacija mehaničke ventilacije pluća nalaze se nasuprot njenim korisnim efektima. Ventilacija koja se karakteriše malim krajnjim ekspiratornim plućnim volumenom, koji dozvoljava ponavljano alveolarno otvaranje i zatvaranje (kolaps) može ispoljiti neželjene efekte u vidu nastanka atelektraume.
Cilj rada: Utvrditi efekat ventilacije malim disajnim volumenom na histopatološki i radiološki nalaz u plućima eksperimentalnih životinja i patofiziološke promene koje prate ventilaciju malim disajnim volumenom.
Materijal i metode: Istraživanje je obavljeno kao prospektivna eksperimentalna studija koja je obuhvatila 20 eksperimentalnih životinja (prasad). Eksperimentalne životinje podeljene su u dve grupe. U kontrolnoj grupi je primenjena CPPV sa malim disajnim volumenom (6-8 ml/kg) i PEEP (7 cmH_2O). U ispitivanoj grupi sprovedena je IPPV sa disajnim volumenom od 6 do 8 cmH_2O i bez PEEP. Trajanje mehaničke ventilacije pluća ograničeno je na 240 min. Monitoring je obuhvatio Vt, Ppeak, Paw.mean, Sa O_2, PaO_2, PaCO_2, pH i odnos Pa O_2/Fi O_2. Parametri monitoringa određivani su u vremenskim intervalima od 60 min. Rendgensko snimanje pluća je obavljeno na početku, nakon 90 i 240-minutnog trajanja mehaničke ventilacije. Druga faza, podrazumevala je uzimanje uzoraka plućnog tkiva eksperimentalne životinje (prasadi) po završetku četvoro-časovnog trajanja mehaničke ventilacije i njihovo slanje na patohistološki pregled. Wilcoxonovim testom sume rangova, procenjena je značajnost razlike ($p<,05$) sume rangova izmešanasti parametarskih podataka obeležja posmatranja dva nezavisna uzorka. statistička značajnost razlika ($p<0,01$) srednjih vrednosti testirana je primenom poznatog t–testa u slučaju uzorka.
Rezultati: Rezultati istraživanja ukazali su na značajne promene u histopatološkom nalazu ventiliranih pluća eksperimentalnih životinja ispitivane grupe (umereni perivaskularni, intersticijalni i alveolarni edem, kolaps alveola i malih disajnih puteva sa naglašenim mikro atelektatičnim poljima) u odnosu na kontrolnu grupu ($p<,05$). Promene su izraženije u dorzalnim (donjim) plućnim regijama. Radiološki nalaz je ukazao na postojanje intersticijalnog edema vidu peribronhijalnog i perivaskularnog mufa obe grupe bez prisutne signifikantne razlike ($p>0,05$). Statistički značajna razlika postoji kada se međusobno uporede parametri monitoringa ventilacije, oksigenacije i acido-baznog statusa, kontrolne i ispitivane grupe ($p<,001$).
Diskusija i zaključak: Primena IPPV malim disajnim volumenom, bez upotrebe PEEP izaziva značajne strukturalne promene u plućima eksperimentalnih životinja. Nastale histopatološke promene (sa dužim trajanjem neadekvatne strategije mehaničke ventilacije) zahvataju sve veće plućne regije odražavajući se negativno u pogledu sposobnosti pluća da održe homeostazu gasne razmene (ventilacije, oksigenacije i perfuzije) i acido-baznog statusa. Povremena radiološka kontrola ventiliranih pluća indirektno može da ukaže na pojavu novih ili pogoršanje već postojećih patoloških promena u plućima. Sve ovo upotpunjuje sliku atelektraume kao vida oštećenja pluća izazvanog primenom neadekvatne strategije mehaničke ventilacije.
Ključne reči: atelektrauma, mehanička ventilacija, mali disajni volumen, histopatološke, radiološke i patofiziološke promene

Broj apstrakta: 004
Tip apstrakta: poster

Sistemska reakcija na ubod insekata

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Uvod: Sistemska reakcija na ubod ili ujed insekata predstavlja značajan medicinski rizik od vaskularnih i respiratornih reakcija koje variraju u zavisnosti od pacijentovog odgovora na ubod.

Lekari urgentne medicine se često sreću sa pacijentima koji se žale na alergijske reakcije na ujed ili ubod insekata.
Cilj: Prikaz pacijenta sa sistemskom reakcijom na ubod insekata.
Materijal i metod rada: Deskriptivni prikaz podataka. Izvor podataka: knjiga poziva, protokol Zavoda za hitnu medicinsku pomoć Niš, lekarski izveštaj i otpusna lista Klinike za hematologiju KC Niš
Prikaz slučaja: Ekipa je pozvana u ambulantu Doma Zdravlja gde je došao pacijent nakon uboda više osa. Pacijent je u ambulanti Doma Zdravlja primio terapiju amp.Synopen N I i.m, amp.Dexason N II i.v i amp.Ranisan N I i.v. Vitalni parametri: TA 80/60mmHg, SF~/90min, RF 16; $SaO_2$93%, ŠUK 5,3mmol/L; TT36,5C. U toku pregleda oseća vrtoglavicu, mučninu, gušenje, profuzno je preznojen i po koži ima crvenilo po tipu urtikarije. U fizikalnom nalazu: Srčana akcija ritmična, tonovi jasni, šumova nema. EKG-b.o. Nad plućima normalan disajni šum. Neurološki nalaz uredan. Abdomen u ispod ravni grudnog koša, palpatorno mek, bolno neosetljiv na površnu i duboku palpaciju. Jetra i slezina se ne palpiraju. Peristaltika čujna. Pulsevi nad a.femoralis su jednaki. Postavljena radna dijagnoza Sistemska alergijska reakcija na ubod insekata. Postavljena IV linija, priključen na kiseonik i monitor, dat Sol.NaCl 0,9%500ml, amp.Lemod solu 40mg i.v, amp.Adrenalin (1:10000) 0,5 ml i.v. Nakon terapije vitalni parametri: TA 120/70 mmHg, SF~ 100/min, RF14; $SaO_2$95%, pacijent se subjektivno oseća bolje, tegobe se povlače. Pacijent transportovan do Klinike za Hematologiju KC Niš, radi dalje opservacije.
Diskusija: Postoje tri tipa reakcije na ubod insekata. Prvi je normalna lokalna reakcija koja se karakteriše bolom, otokom i crvenilom na mestu uboda. Drugi tip veća lokalna reakcija koju karakteriše širenje otoka i crvenila. Treći tip je sistemska alergijska reakcija sa generalizovanim crvenilom, urtikarijom, angioedemom, pacijent može da oseća malaksalost, strah, gastrointestinalne tegobe (grčevi, mučnina povraćanje), vrtoglavica, sinkopa, hipotenzija, stridor, gušenje ili kašalj. Ukoliko reakcija progredira može nastati respiratorna insuficijencija i kardiovaskularni kolaps.
Zaključak: Sistemska alergijska reakcija zahteva brzo i trenutno delovanje. Oko 15-25% populacije izložene ujedu insekata pokazuje serološku i/ ili preosetljivost dokazanu kožnim probama. Samo 1-5% populacije daje podatak o trenutnoj sistemskoj alergijskoj reakciji na ubod insekata a polovina od njih je bila životno ugrožena.
Ključne reči: Sistemska alergijska reakcija, ubod insekata

Broj apstrakta: 005
Tip apstrakta: poster

Edem pluća srčanog porekla, prehospitalni tretman - iskustva SHMP Šabac u 2015 g

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Uvod: Edem pluća je patološko stanje koje se odlikuje povećanom količinom ekstravaskularne tečnosti u plućima. Količina transudirane tečnosti je veća od one koja se može odstraniti limfom. Edem pluća se razvija u tri faze, a postoje dva načina ulaska tečnosti u alveole –a) indirektan i b) direktan. Etiološki se edem pluća deli na: KARDIOGENI (kad je PKP >8 mmHg) i NEKARDIOGENI a) oštećenje kapilara i povećana propustljivost (kod pneumonija, toksičnog dejstva zmijskog otrova, DIK-a, šoknih pluća itd.), b) smanjenje koloidnoosmotskog pritiska u bolestima jetre i bubrega c) poremećaji oticanja limfe iz pluća kod limfangitisa ili karcinomatoze d) posle anestezije, CVI, eklampsija, predoziranje opijatima...U praksi se najčešće sreće plućni edem kardiogenog porekla. Klinička slika počinje prvim stadijumom u kome se javlja dispnea i hiperventilacija uz pojavu vlažnih šušnjeva pri bazama. Drugi stadijum se nastavlja pojačanom dispneom, razvojne mase vlažnih šušnjeva od baze ka vrhu. U trećem staduijumu se pojačava kašalj, ispljuvak je penast sa primesama krvi, obilat nalaz vlažnih nad plućima, uz „wheezing“, tahikardiju i tahiaritmiju, te poremećaj mentalnog stanja bolesnika. Tretman i lekovi koji se koriste zavisno od nalaza su: 1.sedeći položaj 2.toaleta disajnog puta i kiseonik preko maske 3.Morfijum i.v.u podeljenim dozama do max-20-30 mg 4.diuretici i.v. (Furosemid, Bumetanid II-III amp.iv bolus u

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trajanju 2 minuta) 5. NTG u vidu iv bolusa a 1mg ili per infusionem 10-15 mg u 250 ml 5% glucosae 6.venepunkcija do 500 ml. 7.Aminofilin I-II amp.a 250 mg iv polako 8.Digitalis iv I-II amp Dilacor ako postoji AF sa brzim komorskim odgovorom 9.Inotropni lekovi (Dopamin, Dobutrex) iv infuzija.

Materijal i metode: Opservaciona studija uvidom u knjigu protokola i lekarske izveštaje SHMP Šaabac

Rezultati: U SHMP Šabac od 01.01. do 31.08. 2015 zbrinuto je ambulantno 23 pacijenata sa DG J81 (tabelarni prikaz-distribucija po polu i starosti) i terenski 29 pacijenata (tabelarni prikaz distribucija po polu i starosti). Prosečna vrednost TA=186,3/114mmHg, SpO_2:94,5%, SF oko 116/min. Najčešće data TH: Furosemid amp (32 x I amp,16 x II amp,4 x III i više amp iv), Aminofilin amp 35 x I amp; Dilacor amp 5 x Iamp; NTG ling.a 0,5 mg 6 x 1sl; kiseonik 52 x u dozi od 4-12 lit/min. Objektivno poboljšanje u 37 slučajeva (21 terenski i 16 ambulatorno; u ostalim slučajevima stanje nepromenjeno, pogoršanja nema, ni smrtnih ishoda do primopredaje na IO OB Šabac).

Zaključak: rano prepoznavanje kao i pravovremeno data terapija u dozvoljenim dozama povećavanju procenat preživljavanja, smanjuju broj bolničkih dana i doprinose bržem oporavku pacijenata.

Ključne reči: akutno popuštanje srca, dijagnoza, lečenje

Broj apstrakta: 006

Tip apstrakta: poster

Hitna medicinska pomoć na Sea Dance festivalu 2015

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Uvod: Sea Dance Festival 2015 održan je u Crnoj Gori od 15-18. jula na plaži Jaz u Budvi. Tokom četiri dana, ovaj događaj imao je oko 110 000 posjetilaca (do 35000 dnevno). Zavod za hitnu medicinsku pomoć Crne Gore obezbjeđivao je manifestaciju kroz organizaciju i rad poljske bolnice i pet isturenih punktova sa reanimobilima i kompletnim medicinskim timovima, kao i dodatnim vozilima za dalji transport pacijenata.

Metod rada: Podaci o ukazanoj hitnoj medicinskoj pomoći dobijeni su putem protokola poljske bolnice u koji su pregledi upisivani, a statistički analizirani u SPSS-u.

Rezultati: Pregledano je ukupno 330 pacijenata iz 28 zemalja svijeta. Najveći broj sa Balkana: 270 (81,8%) i iz Zapadne Evrope: 35 (10.6%). Najviše pregledanih je iz Srbije 116 (35.2%), Crne Gore 91 (27.6%), Makedonije 20 (6.1%) i Ujedinjenog Kraljevstva 18 (5.5%). Među pregledanima bilo je 210 muškaraca (63.6%) i 120 žena (36.4%). Prosječna starost pacijenata bila je 26 godina, pretježna 19-33 godine, najučestalija 20-25 godina. Najveći broj pacijenata pregledan je između 21-04h (60.7%), sa pikom između 02-03h (13.9%). Najučestaliji pregledi bili su prvog dana od 01-03h. Minimalan broj pregleda bio je između 07-08h (0.3%). Među pregledanim pacijentima bilo je 128 povreda (38.8%) i 202 netraumatska oboljenja (61.2%). Najčešće dijagnoze bile su povrede skočnog zgloba i stopala (19.4%), upotreba psihoaktivnih supstanci (7.6%), opšti simptomi i znaci bolesti (7.3%), respiratorne infekcije (6.1%), povrede koljena i potkoljenice (5.5%). Tri povrede bile su posledica nasilja. U zdravstvene centre transportovano je 6 pacijenata (akutna psihoza, upotreba psihoaktivnih supstanci, povrede glave, koljena i skočnog zgloba). Nije bilo letalnih ishoda.

Zaključak: Svi pregledani adekvatno su zbrinuti, a sprovedena medicinska pomoć bila je efikasna i pravovremena.

Ključne reči: hitna medicinska pomoć, Crna Gora, Sea dance festival 2015

Broj apstrakta: 007

Tip apstrakta: poster

Novo otkrivena aneurizma aorte kao diferencijalno dijagnostički problem kod abdominalnog bola

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Cilj rada: Cilj rada je prikaz slučaja gdje je pacijentu s bolom u abdomenu, pronađeno postojanje aneurizme abdominalne aorte.

Materijal i metode: Metodom prikaza slučaja je predstavljen slučaj pacijenta koji se u ambulantu javio zbog bolova u abdomenu, a pri tom je ultrazvučnim pregledom ustanovljeno postojanje aneurizme abdominalne aorte, za koje se do tada nije znalo.

Rezultati: Pacijent star 69 godina, se javio u ambulantu Službe hitne medicinske pomoći zbog bola u abdomenu u predelu epigastrijuma. Bol se javio 90 minuta prije dolaska kod lekara. Bol je nastao nakon uzimanja veće količine masnije i kaloričnije hrane. Palpacijom je ustanovljena bolna neosjetljivost, leukociti su iznosili 9,8, glikemija je bila 8,9 mmol/l, EKG je bio normalan, renalna sukusija je bila negativna. Obzirom da su dostupne pretrage bile u normalnom rasponu, odmah je započet ultrazvučni pregled abdomena. Jetra je bila hiperehogena ali homogena, žučna kesa je bila prazna, ali se sticao utisak da postoji kalkuloza. Oba bubrega i pankreas su bili uredni. Primećeno je postojanje aneurizme abdominalne aorte, koja je bila promjera 4,9 cm, a duljine 9 cm. Postojao je i zidni tromb. Zbog svega toga je odmah postavljena sumnja da je aneurizma uzrok bola. Nije uočeno postojanje intimalnog flapa, niti je postavljena sumnja na moguće odvajanje zidnog tromba. Nije bilo ni ultrazvučnih znakova rupture. Prema dostupnom nalazu je bilo očito da novootkrivena aneurizma nije uzrok tegoba, već se vjerojatno radilo o holelitijazi. Ponovnim ultrazvučnim pregledom u više različitih pozicija je utvrđeno da ipak postoji kalkuloza žučne kese. Primjenom odgovarajuće terapije tegobe su uskoro prestale. Na sutrašnjem ultrazvuku, rađenom uz odgovarajuću pripremu, je jasno uočeno postojanje višestruke kalkuloze žučne kese.

Zaključak: Iako je tipična klinička slika odmah ukazivala na kalkulozu žučne kese, uočena aneurizma je postavila sumnju da se možda radi o njenoj disekciji. Zahvaljujući postojanju dobre dijagnostičke opreme u Službi za hitnu medicinsku pomoć, dijagnoza je postavljena odmah, a primijenjena terapija dovela do povlačenja tegoba.

Ključne reči: bol u trbuhu, mučnina

Broj apstrakta: 008
Tip apstrakta: poster

AVblok uzrokovan alkoholom kao verovatni uzrok gubitka svesti- prikaz slučaja

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Cilj rada: Cilj rada je prikaz slučaja, gde je intoksikacija alkoholom verovatni uzrok AV bloka višeg stepena, a potom i gubitka svesti.

Materijal i metode: Metodom prikaza slučaja je predstavljen slučaj pacijenta koji je u više navrata gubio svest, uvek nekoliko sati nakon konzumiranja vecih količina alkoholnih pica i uvek nakon buđenja.

Rezultati: Pacijent star 37 godina, se nakon porodičnog veselja vratio kuci i zaspao. Oko 2 časa ujutro se probudio i otišao do toaleta. Pre nego što je stigao do vrata kupatila, on iznenada gubi svest i pada. Pad čuje supruga koja dolazi do njega, pronalazi ga bez svesti i poziva Službu za hitnu pomoc. Do dolaska ekipe, on se budi i nakon pregleda se nalazi sledeci nalaz: pacijent je svestan, orijentisan, pritisak je 120-80 mmHg, puls je 55 u minuti, auskultatorni nalaz na srcu i plucima je uredan, a saturacija kiseonika 98%, a šecer u krvi 5,9. Na EKG-u se beleži sinusni ritam, bez ST promena, ali uz postojanje AV bloka I stepena. Pacijent i supruga navode da to verovatno 8-10 put u poslednjih 5 godina, da pacijent gubi svest, i to uvek nocu, uvek nakon ustajanja iz kreveta i odlaska u toalet, u intervalu između ponoci i 5 časova ujutro. Pacijent je naknadno obavio ultrazvuk srca, rendgen srca i pluca, kompletne laboratorijske analize, i svi ti nalazi su bili u normalnom opsegu. EKG holter koji je pokazao konstantno postojanje AV bloka I stepena. Konsultovan je i neurolog koji je nije pronašao neurološki etiološki faktor kao uzročnika gubitka svesti. Pacijent navodi da skoro svako veče se budi iz sna i ide u toalet da mokri i da nikada nije gubio svest, osim u slučajevima kada popije vecu količinu alkoholnih pica. Pravilo je da uvek kada popije vece količine alkohola (više od 6-8 flaša piva i / ili 10 čašica žestokog alkoholnog pica), on uvek nakon nekoliko sati (ne odmah), gubi svest. Kada popije 1-

2 piva i/ili čašicu žestokog alkoholnog pica, nikada nije gubio svest.
Zaključak: Na osnovu dobijenih podataka, očigledno je jedino stalno postojanje AV bloka I stepena. Pretpostavka je da pacijent zbog velike količine alkoholnih pica upada u prolazni AV blok II stepena tipa mobicom II (ili AV blok III stepena), što uzrokuje duge pauze, koje verovatno, dovode do gubitka svesti.
Ključne reči: AV blok, alkohol, sinkopa

Broj apstrakta: 009
Tip apstrakta: poster

Spontani pneumotoraks - Prehospitalna dijagnoza

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Uvod. Pneumotoraks podrazumeva nakupljanje vazduha u intrapleuralnom prostoru usled prekida kontinuiteta visceralne ili parijetalne pleure, izjednačavanje atmosferskog i intrapleuralnog pritiska te kolaps pluća.
Cilj rada. Prikazati značaj prehospitalno postavljene sumnje na razvoj pneumotoraksa kod pacijenta sa hroničnom opstruktivnom bolešću pluća (HOBP).
Metod. Prikazaćemo slučaj muškarca starosti 58god. kod koga je došlo do razvoja spontanog pneumotoraksa, kao i mere preduzete prehospitalno.
Prikaz slučaja. Iz telefonskog poziva saznajemo da je pacijentu pozlilo, da ima gušenje, bol u grudima, i da je plućni bolesnik. Odmah se upućujemo na teren, na licu mesta smo zatekli pacijenta u ležećem položaju, bledog, hladno preznojenog, dispnoičnog, TA 95/60mmHg, SF oko 115/min. Žali se na probadajući bol sa leve strane grudnog koša nastao nakon fizičkog napora, gušenje i malaksalost. Anamenestički dobijamo podatak da pacijent ima hronični bronhitis, koristi „pumpice", već nekoliko dana oseća pojačano zamaranje i gušenje, da je tog jutra više puta koristio "pumpice" i da je planirao da se javi izabranom lekaru ali je zbog jakog bola odlučio da pozove hitnu pomoć. Inspekcijom, pacijent cijanotičan, bačvastog grudnog koša, koristi pomoćnu disajnu muskulaturu. Auskultatorno nad plućima oslabljen disajni šum, sa leve strane nečujan. Perkutorno, levo hipersonoran zvuk. Pacijent postavljen u polusedeći položaj, dat analgetik i.v, apliciran kiseonik preko maske 5l/min i pod sumnjom na spontani pneumotoraks transportovan na odeljenje hirurgije gde je rentgenskim snimkom potvrđena dijagnoza a pacijent zbrinut torakalnom drenažom.
Zaključak. Pacijenti sa HOBP su česti u radu lekara hitne službe pre svega u ambulanti, ređe na terenu, ali se u konkretnom slučaju na pneumotoraks posumnjalo već pri prijemu telefonskog poziva, a radna dijagnoza postavljena zahvaljujući anamnezi i kliničkom pregledu, što je bilo značajno za brz transport pacijenta na hirurgiju.
Ključne reči: Gušenje, HOBP, spontani pneumotoraks

Broj apstrakta: 010
Tip apstrakta: poster

Značaj saradnje zdravstvene službe žandarmerije i medicinskih ekipa na terenu u pružanju pomoći u vanrednim situacijama

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Uvod: Dobar deo vremena i energije ulažemo u razmišljanje o budućnosti: šta želimo da postignemo, koji su nam ciljevi, gde bismo voleli da putujemo, živimo, s kim da provodimo vreme, na koji način. Nesreće se dešavaju iznenada, neočekivano, naglo i najčešće ih je veoma teško predvideti. Prirodne katastrofe kao što su poplave, klizišta, erupcije vulkana, zemljotresi, snežne oluje, vatra, uragani, tornado, pogađaju celokupnu zajednicu ili njen veći deo. Ovakve kataklizme izazivaju veliku emocionalnu patnju, ljudske i materijalne gubitke, medicinske i socijalne probleme, velika razaranja i uništavanja. Saniranje

posledica zahteva angažovanje čitavog društva, u materijalnom i psihološkom smislu.
Cilj: rada je da ukažemo na neophodnost saradnje i značaj koordinisanog delovanja zdravstvene službe žandarmerije i medicinskih ekipa na terenu u vanrednim situacijama.
Prikaz slučaja: Republika Srbija suočila se u maju 2014. godine sa katastrofalnim poplavama, uzrokovanih obilnim padavinama. Vanredna situacija proglašena je u početku u pet gradova i četrnaest opština, a od 15. maja do 23. maja bila je na snazi na celoj teritoriji naše zemlje. Usled naglog porasta nivoa vode, reke su se izlile što je dovelo to teških posledica u Kolubarskom, Mačvanskom, Moravičkom, Pomoravskom okrugu i beogradskoj opštini Obrenovac. Vatrogasci - spasioci, policija (žandarmerija, SAJ, PTJ, Helikopterska jedinica), Vojska Srbije, Crveni krst i Gorska služba spasavanja evakuisali su i spasli preko 31 hiljadu ljudi a iz najugroženije opštine Obrenovac više od 25 hiljada ljudi je evakuisano (saopštenje MUP-a). Dana 15.05.2014.godine od 06:00 časova prve sanitetske ekipe i policijski službenici žandarmerije koje su upućene u Obrenovac bile su iz sastava Komande i Drugog i Treceg odreda. U svom radu medicinske ekipe specijalnih i posebnih policijskih jedinica, kako kod nas tako i u svetu, za razliku od službe hitne medicinske pomoći, reaguju u takozvanoj crvenoj zoni - zoni neposredne opsnosti
Zaključak: Poplave koje su sa sobom odnele i veilki broj ljudskih života, nanele ogromnu materijalnu štetu ukazale su na neophodnost obuke kadra za pružanje medicinske pomoći u situacijama elementarnih nepogoda. Povezivanje svih službi na terenu i pridžavanje plana zbrinjavanja u vanrednim situacijama omogućava adekvatne rezultate.
Ključne reči: vanredna situacija, pozivanje, zbrinjavanje.

Broj apstrakta: 011
Tip apstrakta: poster

Mogućnosti poboljšanja dijagnostike akutnog apendicitisa kod dece u ambulantnim uslovima

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Uvod: Akutni apendicitis je najčešći uzrok akutnog abdominalnog bola kod dece i razlog za čak trećinu hospitalizacija. Iako je klasična prezentacija AA dobro poznata, tačna i pravovremena dijagnoza AA u dečjem uzrastu još uvek nije moguća kod svakog pacijenta. Klinička slika AA kod dece zavisi od uzrasta malog pacijenta i može jako varirati-od minimalno simptomatskog deteta, do krajnje teške kliničke prezentacije (sa slikom akutnog abdomena i znacima endotoksemijskog šoka). Stopa negativnih apendektomija se i dalje kreće oko 10%, dok je perforativnih oblika (uprkos primeni savremenih radioloških tehnika) i dalje mnogo-čak 35%. Poseban problem predstavlja dijagnostika AA u ambulantnim uslovima, sa vrlo ograničenom mogućnošću za dodatna ispitivanja. Dijagnostička tačnost AA u dečjem uzrastu može se povećati samo integracijom kliničkog nalaza, kao i rezultatima laboratorijskih ispitivanja-u prvom redu nalazom krvne slike (KS) i vrednostima C reaktivnog proteina (CRP).
Cilj rada: Evaluirati značaj ispitivanja kliničkih znakova za AA (ukupno 12), kao i elemenata KS (ukupan broj leukocita-TL, broj neutrofila-NEU, odnos neutrofili/leukociti- N/L) i vrednostima CRPa, radi poboljšanja dijagnostičke tačnosti AA u ambulatnim uslovima.
Materijal i metode: Višemesečna prospektivna studija obuhvatila je ukupno 200 pacijenata, podeljenih u dve grupe. Prvi grupu (100 bolesnika) činili su apendektomirani, drugu (100 bolesnika) deca sa akutnim abdominalnim bolom nehirurške geneze. Kod svih pacijenata ispitivano je 12 kliničkih znakova za AA (Mc Barney znak, Blumbergov znak, Grassmanov znak, Rovsignov znak, psoas znak, obturator znak, Lanz-Hornov znak, Rosensteinov znak, Markleov znak, Giordanov znak, Owingov znak, Ben Asherov

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znak), kao i rezultati KS (TL, NEU, N/L) i CRP. Kvantitativna statistička analiza je sprovedena na računaru. Poređenje srednjih vrednosti numeričkih obeležja između dve grupe ispitanika vršeno je Studentovim t testom ili Man-Vitni U testom (Mann-Whitney U test). Poređenje učestalosti atributivnih obeležja između grupa vršeno je Mantel-Hencelovim Hi kvatrat testom (Mantel-Haenszel Chi square test). Za procenu povezanosti faktora od interesa i AA korišćena je logistička regresiona analiza (univarijantna i multivarijantna).
Rezultati: U prvoj grupi su statistički značajno vise (p<001) bili pozitivni svi ispitivani fizikalni znaci. takođe, kod bolesnika prve grupe su značajno bile povećane vrednosti svih ispitivanih laboratorijskih parametara. Multivarijantna logistička regresiona analiza je kao najvažnija obeležja povezana sa značajnim porastom verovatnoće za postojanje AA potvrdila: grasmanov znak, markle ukupan broj leukocita veći od 12, neutrofila 70 i n />L odnos veći od 4, kao i CRP veći od 16.
Zaključak: Dijagnostika AA u ambulantnim uslovima ostaje pravi izazov, pre svega zbog često nespecifične prezentacije ovog oboljenja u dečjem uzrastu. Oslanjajući se neretko samo na limitirane dijagnostičke mogućnosti, kliničaru od pomoći mogu biti ispitivanje fizikalnih znakova, ali i integrisana analiza nekoliko dostupnih laboratorijskih parametara (TL, NEU, N/L, CRP).
Ključne reči: akutni apendicitis, deca, ambulanta

Broj apstrakta: 012
Tip apstrakta: poster

Hiperkalijemija-prikaz slučaja

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Uvod: Normalan fiziološki rad kako ćelija tako i organizma u celini uslovljen je stalnošću unutrašnje sredine strogo odredjene uskim granicama koncentracija elektrolita. Svaka narušavanja ravnoteže vode patološkim poremećajima koji ukoliko se pravovremeno ne prepoznaju i adekvatno ne leče mogu biti jedan od mnogobrojnih uzroka letalnog ishoda.

Kalijum - glavni intracelulalrni katjon odgovoran je za transmembranski i akcioni potencijal, intraćelijski transport glukoze, elektroneutralnost i osmotsku ravnotežu. Hiperkalijemija (više od 5,5 mmola/l) je ređi poremećaj ali izuzetno opasan zbog direktnog dejstva na radnu muskulaturu i sprovodni sistem srca. Simptomatologija poput palpitacija, malaksalosti, grčeva i bolova u trbuhu upućuje na širi spektar diferencijalne dijagnostike što dodatno opterećuje lekara hitne pomoći koji u najkraćem mogućem vremenu vođen intuicijom, iskustvom i znanjem treba da svoje opravdane sumnje o eventualnoj hiperkalijemiji i dokaže. Kao pristupačniji, u prehospitalnim uslovima, EKG nalaz biće vodič u postavljanju dijagnoze a labaratorijski rezultati samo sledstvena potvrda.
Cilj rada je da ukaže na značaj ranog prepoznavanja hiperkalijemije na osnovu promena u EKG kao na primeru našeg pacijenta.
Prikaz slučaja: Primljen je poziv za već dobro poznatog pacijent starog samo 30 god.(povremeni Epi napadi, bolovi u trbuhu tipa renalne kolike i češte urinarnih infekcija kao posledica SAH u 26-oj god.) zbog bolova u celom trbuhu i upornog povraćanja. Zatečen je u invalidskim kolicima vidno uznemiren, febrilan, hipotenzivan a u EKG zapisu patognomoničan šatorasti T talas. Prevežen i hospitalizovan na interno odelenje naše opšte bolnice gde je dobijena i labaratorijska potvrda K= 7,4 mmola/L. EKG nalaz je rađen u okviru opšteg pregleda i jedina je moguća dopunska dijagnostička procedura u prehospitalnim uslovima. EKG procedura mora biti sastavni deo pregleda svakog pacijenta a posebno za pacijente sa nespecifičnom simptomatologijom jer u pojedinim situacijama kao na primeru našeg pacijenta je vrlo važna, pouzdana i jedina sigurna pomoćna dijagnostika u prehospitalnim uslovima.
Zaključak: EKG procedura mora biti sastavni deo pregleda svakog pacijenta a posebno za pacijente sa nespecifičnom simptomatologijom jer u pojedinim situacijama kao na primeru našeg pacijenta je vrlo važna, pouzdana i jedina sigurna pomoćna dijagnostika u prehospitalnim uslovima.
Ključne reči: hiperkalijemija, EKG zapis, terapija

Broj apstrakta: 013
Tip apstrakta: poster

Statistički prikaz pacijenata sa febrilnim konvulzijama i epilepsijom do 18 godina

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Uvod: Febrlilne konvulzije se najčešće definišu kao konvulzivni napadi koji se javljaju u toku povišene temperature kod dece od 6 meseci do 5 godina, pri čemu se u dijagnostičkom tretmanu mora jasno isključiti infekcija centralnog nervnog sistema ili postojanje akutnog ili hroničnog neurološkog oboljenja.
Cilj: Statistički prikaz pacijenata do 18 godine u 2014.god sa febrilnim konvulzijama i epilepsijom
Materijali i metod rada: Retrospektivna analiza podataka. Izvor podataka: Knjiga poziva, knjiga protokola Zavoda za hitnu medicinsku pomoć Niš.
Rezultati: U 2014. godini u ZHMP Niš je pregledano 7.406 pacijenata do 18 godine, 6.072 u ambulanti i 1.334 na terenu. Dijagnozu „febrilne konvulzije"dobilo je 83 (35 u ambulanti i 48 na terenu). U ambulanti se javilo 25 osoba rođenih između 2010-2014g, 8 (2005-2009), 2 (2000-2004g), 8 (1996-1999g).(najviše 2012g,-10). Od ukupnog broja 8 je prvi napad. Svi su procenjeni kao treći red hitnosti. Na dalje lečenje je upućeno 34 pacijenta.Terapiju je dobilo 20, (7 supp. diazepama 2mg, 7 klizmi diazepama 5mg, 10 supp. efferalgana 150mg i 9-O2). Na terenu je bilo 43 pacijenta rođenih između 2010-2014g, 4 (2005-2009g), 1 (1996-1999g), (najviše 2012 godište-18). Sa prvim napadom 4.dece. Od 47 terena 15 je procenjeno kao prvi red hitnosti, 20 drugi i 13 treći red hitnosti. Terapiju je dobilo 16 pacijenata: 2 supp. diazepama 2mg, 5 klizmi diazepama 5mg, 5 supp. efferalgana 150mg, 10-O2. Sa dijagnozom „epilepsija" se javilo 45 dece, 37 na terenu, 8 u ambulanti. Na terenu je bilo 5 (2010- 2014g.), 14 (2005- 2009g), 7 (2000-2004g), 10 (1996-1999g.) Od ukupnog broja 5 se javilo prvi put. Od svih poziva 4 je procenjeno kao prvi red hitnosti, 21 drugi i 12 treći red hitnosti. Na dalje lečenje je upućen 21 pacijent. Terapiju je dobilo 12 (6 tabl. Bensedina 5mg, 6-O2 , 4 iv kanile). U ambulanti se javilo ukupno 8 pacijenta: 2 od 2010-2014g., 2 (2005-2009g.), 1 (2000-2004g), 3 (1996-1999g). Svi su procenjeni kao treći red hitnosti i upućeni dalje. Terapija:1 supp.efferalgana 150mg, 1 klizma diazepama 5mg i postavljena je 1 iv kanila.
Diskusija: Biološka osnova febrilnih konvulzija još uvek je nepoznata i prepisuje se brojnim činiocima. Ispoljavaju se pri naglom skoku temperature većoj od 38,5°C, i često predstavljaju prvi simptom bolesti. Najčešći uzrok skoka temperature su: virusne infekcije gornjih respiratorinih puteva, bakterijske infekcije gastro intestinalnog trakta, urinarnog trakta itd. Klinička slika je dramatična i frustrirajuća za svakog roditelja. U ovim napadima dete okrene i fiksira očne jabučice u jednu stranu, izgubi svest i počne da se trese. Duže pauze disanja stvaraju povećanu paniku i uplašenost roditelja. Razlikuju se tipične i atipičke febrilne konvulzije. Tipične su generalizovani napadi kod dece uzrasta od 1 do 5godina, kraće od 15 minuta, i ne ponavljaju se unutar 24h. Atipične konvulzije su napadi koji traju duže od 15 minuta i javljaju se više puta u toku dana, često fokalni ili hemigeneralizovani. Posle napada zapažaju se prolazni ili trajni neurološni ispadi (Todova pareza).
Zaključak: Febrilne konvulzije su najčešći epileptički napadi uglavnom benignog toka. Kod gotovo 50% dece mogu recidivirati. Retko su praćene kasnijom pojavom epilepsije. Iako patogenetski mehanizam nije poznat, istraživanja upućuju na nasledniu sklonost.

Ključne reči: statistika, febrilne konvulzije, epilepsija

Broj apstrakta: 014
Tip apstrakta: poster

Smrtonosni duo: mešanje alkohola i xanaxa može dovesti do loše navike ili neočikivane smrti

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Uvod: Xanax (alprazolam) je benzodiazepin indikovan za kratkotrajno olakšanje anksioznih poremećaja kao i lečenje napada panike. Efikasnost za tretiranje anksioznosti može se objasniti

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njegovom farmakološkom akcijom u mozgu na specifičnim receptorima. Receptori su specifične lokacije na membrani nervnih ćelija koje primaju signal od neurohemijskog neurotransmitera. Jednom zaključan neurotransmiter na receptoru menja se u električni ili drugi hemijski signal i putuje duž neurona. Receptor (lokacija) na kojoj benzodiazepini izazivaju njihovo delovanje se nalaze u različitim regionima mozga. Reakcija benzodiazepina za receptore olakšava inhibitorno dejstvo neurotransmitera γ-aminobuterne kiseline (GABA) u tom regionu mozga. Izgleda da akcija benzodiazepine na GABA receptore prozvodi svoju anksiolitičku, sedativnu i antikonvulzivnu akciju a efektivan je i kao hipnotik. Uobičajena početna doza za xanax u lečenju anksiolitičkih poremećaja je 0,25-0,5 mg.tri puta dnevno. Doza može biti povećana do 4 mg na dan a kod lečenja napada panike može se povećati i do 6-8mg.na dan. Sporedni efekti su sedacija i dremljivost, smanjena koncentracija i pamćenje kao i smanjena kordinacija pokreta.

Cilj rada je da ukaže na to da pacijenti koji uzimaju xanax ne smeju da uzimaju druge depresore CNS-a kao što su alkohol, narkotici, hipnotici, barbiturati pa čak i antihistaminici koji mogu dovesti do povećanja sedacije, poremećaja mehanike disanja, respiratorne depresije i smrtnog ishoda.

Materijal i metode: Pacijent starosti 26 godina primljen je na hitnom internističkom prijemu u KBC Zvezdara-Beograd konfuzan, somnolentan, neskladnih pokreta (ataxia), oslabljenih refleksa, poremećene mehanike disanja, bradikardije, cijanoze, hipotenzije, a već tokom pregleda sa početnim znacima gubitka svesti i prestanka disanja. Od rodbine se dobija podatak da je pacijent na terapiji xanx-om i da je sa društvom bio na žurci gde je konzumirao alkohol. Intubiran je (iz ustiju se oseća zadah alkohola) na hitnom internističkom prijemu i smešten u hiruršku intenzivnu negu KBC Zvezdara-Beograd jer je postojala potreba za respiratornom potporom, tj.invazivnom mehaničkom ventilacijom (IV) pluća. Urađene gasne analize arterijske krvi pokazale su povišene vrednosti $PaCO_2$ > 48 mmHg tj. hiperkapniju. Pacijent je na invazivnoj mehaničkoj ventilaciji (MV-IV) oblik BIPAP, sa podešenim PEEP=5 cmH_2O, a ventilatorna podrška je po tipu protektivne plućne ventilacije. Hitno su urađene biohemijske analize krvi čije su vrednosti u fiziološkim granicama i preduzete mere tj.opšti principi terapije trovanja: 1. Održavanje vitalnih funkcija (rad srca i pluća). 2. Prevencija resorpcije otrova. 3. Eliminacija otrova. 4. Simptomatska terapija. 5. Primena antidota. Sadržaji iz nazogastrične sonde i krv u cilju toksikološke analize poslati su u toksikološki centar VMA Beograd. Nakon 24 sata mehaničke ventilacije pluća dolazi do oporavka pacijenta koji je dalje upućen na neuropsihijatrijsko odeljenje KBC Zvezdara. Izveštaj toksikološkog centra VMA Beograd potvrdio je prisustvo xanax-a u gastričnom sadržaju i alkohola u krvi.

Rezultati i diskusija: Primarno i glavno kod intoksiciranih pacijenata je poboljšanje ventilacije i oksigenacije što je kod našeg bolesnika postignuto. Za vreme mehaničke ventilacije podešavanje ventilatora bazirano je na "ideal body weight"i praćeno gasnim analizama iz arterijske krvi. Pacijent je uspešno odviknut od respiratorne podrške nakon 24 sati hospitalizacije u hirurškoj intenzivnoj nezi i upućen na neuropsihijatrijsko odeljenje.

Zaključak: Overdose kod oralnog uzimanja samo benzodiazepina nije generalno fatalan. U svetskoj literaturi većina fatalnih ishoda je kod konzumiranja benzodiazepina zajedno sa drugim CNS depresorima kao što su alkohol, narkotici ili barbiturati.

Ključne reči: Xanax, alkohol, overdose, respiratorna slabost, mehanicka ventilacija

Broj apstrakta: 015
Tip apstrakta: poster

Hitno lečenje blizu-fatalne akutne ashme-prikaz slučaja

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Uvod: Asthma se definiše kao hronična upala disajnih puteva koja izaziva njihovu povećanu preosetljivost na razne spoljašnje uticaje. Oni uzrokuju suženje disajnih puteva, zbog čega se javljaju tegobe u vidu osećaja otežanog disanja, kašlja, osećaja tištanja i zviždanja u grudima.

Tegobe su najččešće noću i/ili u ranim jutarnjim satima, ali mogu biti i tokom dana. Broj obolelih od asthme tokom poslednje dve decenije stalno raste, naročito kod dece, tinejdžera i u visoko razvijenim zemljama (posebno od alergijske asthme) te se ona definiše kao bolest savremenog društva i epidemija 21.veka. Procenjuje se da oko 350 miliona ljudi u svetu ima pomenutu bolest, kao i da će još 150 miliona oboleti za sledećih 10 godina. Naša zemlja ubraja se u one sa srednjom stopom oboljevanja od asthme.

Cilj rada je da ukaže na to da kod pacijenata u akutnoj fazi teške asthme koji ne reaguju na intenzivnu bronhodilatatornu terapiju može doći i do smrtnog ishoda ukoliko se ne preduzmu mere mehaničke ventilacije (MV) bilo da se radi o neinvazivnoj mehaničkoj ventilaciji (NIV) ili invazivnoj mehaničkoj ventilaciji (IV).

Prikaz slučaja: Pacijent starosti 30 godina primljen je na hitnom intrnističkom prijemu u KBC Zvezdara-Beograd svestan ali uznemiren, nemoćan da legne, sa znacima respiratornog distress-a i upotrebom pomoćne disajne muskulature. Nije bio u mogućnosti da govori, samo pojedinačne reči. Auskultatorno obostrano na plućima oslabljeno disanje sa teškim difuznim i bilateralnim wheezing-om. Nije bilo drugog uzgrednog fizikalnog nalaza pri pregledu. Vitalni znaci su pokazivali: krvni pritisak 145/80 mmHg, srčana frekvenca 140/min, SpO_2 70% na sobnom vazduhu, TTemp. 36,8°C, respiratorna frekvenca 40/min. Pacijent je hitno preveden u hiruršku intenzivnu negu KBC Zvezdara-Beograd jer je postojala potreba za respiratornom potporom, tj. mehaničkom ventilacijom (MV) pluća. Urađene gasne analize arterijske krvi pokazale su pH 7,14, povišene vrednosti $PaCO_2$ 77mmHg, PaO_2 44,2mmHg, HCO_3 28,4mEq/l, laktati 2,8 mg/dl. Pacijentu je ordiniran inhalatorno salbutamol (β2-adrenergički receptor agonist), iv metilprednizolon, iv aminophilline, im epinefrin, iv magnezijum sulfat. Zbog teškog respiratornog distress-a i teške akutne respiratorne acidize započeta je neinvazivna mehanička ventilacija (NIV) preko maske na licu sa parametrima PEEP 5cm H_20, FiO_2 100%. Pacijent je dobro tolerisao NIV. Rentgen pluća pokazivao je pojačan bronhovaskularni crtež, bez plućnih izliva, kardiovaskularni profil normalan. Posle 30min. NIV-a gasne analize krvi: pH 7,22, $PaCO_2$ 66mmHg, PaO_2 110mmHg, SpO_2 99%, vitalni parametri stabilni. Nastavljena je NIV sa smanjenim FiO_2 50% i posle 3 sata gasne analize arterijske krvi su pH 7,37, $PaCO_2$ 45mmHg, PaO_2 87, HCO_3 25,4. Pcijent je prebačen na odeljenje pulmologije gde mu je postavljen nazalna kanila sa O_2 4L/min i nastavljena terapija bronhodilatatorima i steroidima. Pacijent je 6 dana nakon prijema otpušten iz bolnice u dobrom opštem stanju.

Rezultati: Primarno i glavno kod asmatičnih pacijenata je poboljšanje ventilacije i oksigenacije što je kod našeg bolesnika postignuto. Za vreme (MV-NIV) kod pacijenta su praćeni parametri u gasnim analizama iz arterijske krvi, koji su pokazali poboljšanje te nije bilo potrebe za invazivnom mehaničkom vetilacijom (MV-IV).

Zaključak: U teškom asmatičnom napadu, smrtnost je praćena asfiksijom za vreme pogoršanja respiratornog distress-a. To je uzrokovano "air trapping-zarobljenim vazduhom" u alveolama i smanjenom ventilacijom koja je praćena hipoksijom i acidozom. Često poznati okidači su psihički stres, način života, pušenje, gojaznost, alergeni itd.

Ključne reči: asthma, respiratorna slabost, mehanička ventilacija (MV-NIV)

Broj apstrakta: 016
Tip apstrakta: poster

Neoperativni tretman tupe povrede bubrega kod dece-prikaz slučaja

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Uvod: Genitourinarne povrede u 50% uključuju bubreg, a u 90% slučajeva uzrok je tupa abdominalna trauma. Osnovni cilj lečenja ovih povreda je da se maksimalno očuva funkcionalni parenhim bubrega i smanji stopa morbiditeta. Paralelno sa napretkom radiološke dijagnostike i hemodinamskog monitoringa, razvijaju se skoring sistemi koji doprinose da se sve uspešnije primenjuju metode neoperativnog lečenja radi renalne prezervacije. Neoperativni tretman, takođe štedi pacijenta od ponovljene hemoragije i hemodinamske nestabilnosti. Modaliteti lečenja su ureteralni stenting i perkutana drenaža.

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Cilj: prikaz renalne povrede lečene retrogradnim ureteralnim stentingom.
Prikaz slučaja: 13-togodišnja devojčica povređena padom niz stepenište, upućena iz drugog ZC, zbog perzistentne hematurije i povraćanja, preko 20 puta. Status na prijemu: svesna i aktivno pokretna, trbuh mek, bolna osetljivost u levoj lumbalnoj regiji. Laboratorijska dijagnostika: KKS: nalaz uredan (Ht 36). U urinu: masa svežih eritrocita. Svi biohemijski parametri uredni. Ultrazvuk na prijemu: subkapsularni hematom levog bubrega. CT nalaz: Konkvasacija i ruptura donjeg pola levog bubrega, subkapsularni, intraparenhimski i perirenalni hematom. Terapija: cistoskopski, u opštoj anesteziji retrogradnim pristupom u levi orificijum uretera plasiran JJ stent, a pozicija njegovog proksimalnog dela u pijelonu levog bubrega potvrđena radiografski i ultrazvučno. Dalji konzervativni tretman podrazumeva antibiotsku i antimikotsku Th, rehidrataciju, korekciju elektrolitnog disbalansa, analgeziju, primenu SSP I opranih eritrocita, radi korekcije niskih vrednosti hematokrita. EHO nalaz nakon sedam dana: Regresija subkapsularnog i perirenalnog hematoma, regresija slobodne tečnosti intraperitonealno. Tri nedelje nakon povređivanja: Levi bubreg voluminozniji, hematom u skoro potpunoj resorpciji. Statička scintigrafija (DMSA), nakon dve nedelje od povređivanja odsutno intrakortikalno nakupljanje radiofarmaka u distalnoj trećini levog bubrega, što odgovara ožiljnoj promeni. Distribucija: desno 59%, levo 41%. DTPA. Tri nedelje od povređivanja: Levi bubreg smanjenog kraniokaudalnog dijametra, očuvanih kontura. U donjoj trećini manja foton deficijentna zona. Prateći radiorenogram je na nešto nižem nivou od desnog, pokazuje uredan dotok radiofarmaka, brz parenhimski tranzit i brzu i pravilnu eliminaciju. Oba bubrega se prikazuju simetrično i dobrim intenzitetom u vaskularnoj i parenhimskoj fazi. U fazi eliminacije nema značajne retencije. Pojedinačno učešće bubrega u globalnoj funkciji je levog 44%, desnog 56%. Nakon 27 dana devojčica je otpuštena na kućno lečenje, bez mikrohematurije, bez bolova. Sprovode se redovne kliničke i ultrazvučne kontrole. Povrede bubrega kod dece imaju svoje specifičnosti obzirom na anatomske karakteristike: veći bubrezi u odnosu na veličinu tela, slabije razvijeno perirenalno masno tkivo i kapsula, slabo okoštali grudni koš, veća mobilnost. Uobičajeni staging na V stepena povreda određuje postupak: Od I do III- konzervativni, V uglavnom hirurški a IV je predmet kontroverzi. Retrospektivne studije pokazuju da kod dece konzervativni tretman može biti bezbedan i za stepene IV i V. Kod naše pacijentkinje od presudne važnosti je bila hemodinamska stabilnost. Dobre strane interne drenaže: dete ne nosi kateter, urin kesu, manji je rizik od infekcije, i socijalno prihvatljivija. Moguće komplikacije: opstrukcija, infekcija i hiprertenzija su retke. Za ekstrakciju stenta potrebna je još jedna opšta anestezija.
Zaključak: endoskopski tretaman tupe povrede bubrega kod dece IV stepena može biti uspešan i bezbedan i dovesti do značajne rezolucije i očuvanja bubrežne funkcije.

Ključne reči: trauma, bubreg, neoperativni tretman

Broj apstrakta: 017
Tip apstrakta: poster

Sinkopa kod dece i adolescenata - urgentno stanje ili ne?

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Uvod: Sinkopa je iznenadni kratkotrajni gubitak svesti udružen sa gubitkom mišićnog tonusa.Pacijenti sa sinkopom čine 6-7% svih hospitalizovanih bolesnika, odnosno 3-6% urgentnih prijema. Potencijalno smrtonosana, sinkopa stvara veliki strah kod roditelja, pacijenata i lekara, pa se deca često izlažu nepotrebnom i često dugotrajnom kliničkom ispitivanju.
Cilj rada je: da se prikaže značaj anamnestičih podataka i praćenja smernica za indetifikaciju uzroka sinkope i stratifikaciju rizika, odnosno razlikovanje potencijalno smrtonosnih od bezazlenih.
Materijal i metodologija: U radu su retrospektivnom analizom obuhvaćana deca uzrasta od 6 meseci do 18 god, koja su u petogodišnjem periodu (od juna 2010g. do juna 2015g) zbog kratkotrajnog gubitka svesti pregledana i hospitalizovana u Dečjoj bolnici KBC Priština u

Gračanici. Dijagnoza bolesti postavljana je na osnovu dobro uzetih anamnestičkih podataka i detaljnog opisa kvaliteta napada, detaljnog fizikalnog pregleda i rutinskih laboratorijskih analiza: (KKS, glikemija, standardni EKG). Dopunska ispitivanja su selektivno rađena: Holter EKG/a, Test opterećenja, Tilt table test, Ehokardiogram, NMR, EEG.
Rezultati rada: U petogodišnjem periodu sa simptomima kratkotrajnog gubitka svesti primljeno je 116-toro dece ili 6,4% od ukupno hospitalizovanih. Prosečni uzrast dece iznosio je 12,2 godine (najčešće uzrasta od 15-18 godina). Postoji statistička značajnost javljanja sinkope u odnosu na pol, devojčice 61.8%, dečaci 38,8 % ($p< 0.01$). Etiološki sinkopa je podeljena u 3 grupe, u okviru kojih je napravljeno više podgrupa. Uzrok sinkope je identifikovan kod 88/116 ili 75,8% pacijenata. Kardijalni uzrok sinkope je statistički značajno najređi, $p<.001$. Autonomni uzrok 70,4%; Nekardijalni 27,2%; Kardijalni 2,3%; Vazovagalna 52%; Neurološka 42,4%; Kardiomipatija 50%; Ortostatska sinkopa 25%; Psihička 38,4%; Poremećaji ritma 50%; Situaciona sinkopa 13%; Afektivne repetitivne krize 7,7%; Pojačan vagusni tonus 10%; Metaboličke 11,5%. Najveći broj dece imao je samo jedan napad. Najveći broj napada je 5 i javio se kod dvoje dece.
Zaključak: Najveći broj sinkopa u dece je benigne prirode. Kardijalna sinkopa je retka ali potencijalno najopasnija. Praćenje dijagnostičkih protokola za ispitivanje sinkope je najbrži put do dijagnoze, stratifikacije rizika, smanjenja straha i racionalizacije troškova.
Ključne reči: sinkopa, deca, uzroci, rizik

Broj apstrakta: 018
Tip apstrakta: poster

Infekcije nuhealne regije pacijenata sa komorbitetom

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Uvod: Nuhealna regija prestavlja zonu koja je odlična osnova za nastanak furunkuloze i karbunkuloze, a naročito znaju da budu ispoljene kod pacijenata opterećenih komorbitetom različite manifestacije. Gotovo unoiformno, tretiraju se jednostavnim ili krstastim incizijama, drenažom i odgovarajućom antibiotskom terapijom. Kod pacijenata sa održanim imunobiološkim statusom to je najčešće i dovoljno. Međutim, preporučena hirurško-medikamentozna terapija najčešće ne zadovoljava u slučajevima oslabljenog imunobiološkog statusa, tipično kod dijabetičara, kada se banalna infekcija komplikuje flegmonom.
Cilj: Prikazati načine našeg sagledavanja ove problematike u svetlu iznalaženja optimalnog hirurškog rešenja za ovu vrstu pacijenata koji su nam se obratili za pomoć.
Metod: U periodu od 7 godina (2008/2015.) lečenih u Urgentnom centru bilo je 13 bolesnika-dijabetičara sa karbunkulozom nuhealne regije komplikovanom flegmonom. Veći deo bolesnika, njih 9, znao je za svoj dijabet i bio najčešće pod insuficijentnom dijabetičkom terapijom i dijetetskim režimom. Kod ostalih dijabet je registrovana pri prijemu na bolničko lečenje i tek tada se započelo sa terapijom. Zbog opsega i inteziteta inflamatornog procesa, u najvećem broju slučajeva 10 bolesnika je tretirano opsežnim ekcizijama kože, fascija i dela muskulatornog tkiva nuhealne regije, uz višestruko raslojavanje mišićnog tkiva u cilju drenaže.
Rezultati: Postoperativno je primenjivana višekratna dnevna toaleta rane sa više antiseptika u

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istoj seansi, maksimalne doze antibiotika po antibiogramu, energična roborantna terapija, od trećeg dana hospitalizacije pacijenti su bili izloženi aktivnom O2–u u barokomori, korekcija i balansiranje antidijabetičke terapije. Po regresiji inflamatornog procesa i dobijanju zdravih granulacija, ranjava površina tretirana je Tiršovim transplantatom.
Zaključak: Postignutim postupcima postignuto je izlečenje kod 12 bolesnika (93%). U jednom slučaju postignuto je lokalno izlečenje, ali je bolesnik egzitirao 9 meseci od početka lečenja zbog milijarnih pulmonalnih apscesa kao posledica sepse koja se javlja 12.dan po hospitalizaciji. Prosečno vreme lečenja iznosilo je 19.dana.
Ključne reči: nuhealna regija, furunkuloze, karbunkuloze, infekcije

Broj apstrakta: 019
Tip apstrakta: poster

Mesto i značaj traheotomije kod pacijenata sa kraniofacijalnim povredama

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Uvod: Veličina traumatske sile koju prima politraumatizovani pacijent je zastrašujuća, koja uveliko prelazi minimalnu silu potrebnu za prelome svakog pojedinog dela facijalnog skeleta i endokranijuma. Ove ekstenzivne traumatske sile smrskavaju kosti. Udruženo dolazi do destruktivnih promena na kožnom omotaču i mekim strukturama, sa vrlo često impresivnim obilnim hemoragijama, hematomima i svud prisutnim edemima u prvih 48 sati.
Cilj: Prikazati rane i kasne indikacije kojima se rukovodimo u odluci za traheotomiju, prikazati naša iskustva.
Metod: Kod svih obimnih fraktura srednjeg masiva lica kompromitovan je vazdušni put usled dislokacije frakturisanih segmenata i edema mekih tkiva. Na bolesničkom materijalu lečenih pacijenata u Intezivnim negama Urgentne hirurgije i neurotraumatologije Urgentnog centra u Beogradu za period 01.januar 2014 do 01.januara 2015.godine bilo je 250 pacijenata sa kraniofacijalnim povredama u okviru politraumatizma. Sprovodili smo rane i odložene traheotomije, kako je nalagalo trenutno opšte stanje pacijenta i njegova Glasgow Coma Skala.
Rezultati: Kod takvih pacijenata nekada može se plasirati nazofaringealni gumeni air way, dok kod drugih indikovana je intubacija ili još češće urgentna traheotomija. Ponekad razlog opstrukcijama disajnih puteva bio je: polomljeni zubi, aspirirana krv, protetska nadoknada, delovi kosti. Za posmatrani period broj pacijenata sa kraniofacijalnim povredama u Urgentnom centru bilo je 250 bolesnika, a od tog broja kod njih 100(40%) indikovana je traheotomija, urgentnih traheotomija bilo je 29(29%), a kod komatoznih i dugoležećih pacijenata urađeno je 48(48%) ovih intervencija, dok je kod 23(23%) bolesnika urađeno u terapijsku svrhu. Od ovog broja politraumatizovanih izlečeno je i otpušteno kući 223(89,2%), sa potrebom za dalje lečenje u neki od rehabilitacionih centara poslato 14(5,6%) i umrlo 13(5,2%).
Zaključak: Zbrinjavanje vazdušnih puteva je najbitnija primarna mera kod pacijenata koji su pretrpeli visokoenergetske povrede lica i endokranijuma. Pacijenti sa udruženim povredama glave, naročito kada su bez svesti, treba da su intubirani u sklopu inicijalnog zbrinjavanja. Kod žestokih midfacijalnih povreda dolazi do značajnijih poremećaja anatomije, tako da intubacija može da bude izuzetno teška kod pacijenta koji aktivno krvari, u urgentnim situacijama, kada su ugroženi vazdušni putevi, a intubacija ne uspeva, bez odlaganja se izvodi traheotomija. Kod visokoenergetskih povreda koje su uslovile kompleksne povrede kraniofacijalnog spoja, srednje trećine lica ili multifrgamentarne prelome donje vilice indikovana je rana traheotomija, gde se očekuje dramatičan edem lica

tokom prvih 48 sati,a istovremeno značajno pojednostavljuje definitivno hirurško zbrinjavanje.

Ključne reči: traheotomija, urgentna traheotomija, kraniofacijalne povrede, visokoenergetske povrede, politrauma

Broj apstrakta: 020
Tip apstrakta: poster

Miksni tumor u submandibularnoj pljuvačnoj žlijezdi

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U submandibularnoj žlezdi Miksni tumor (adenoma pleomorphe) je redak tumor (5%). Znatno češći je u drugim pljuvačnim žlezdama, a najčešći je benigni tumor pljuvačnih žlezda (45-74%). Najčešće se javlja u 4.i 5.deceniji, češće kod žena. Ovaj tumor ima sposobnost maligne alteracije u 3-15% nakon 10-15 godina. Lečenje je hirurško.
Cilj ovog rada je prikazati kliničko-patološke karakteristike Miksnog tumora submandibularnih žlezde.
Metod: Analizirali smo istorije bolesti 8 pacijenta sa Miksnim tumorom submandibularne žlezde lečenih u periodu od 01. januara 2005. god do 31. decembra 2014.god. u Klinici za Otorinolaringologiju i Maksilofacijalnu hirurgiju Kliničkog centra Crne Gore.
Rezultati: Miksni tumor je bio jedini benigni tumor submandibularne žlezde u navedenom periodu. Bilo je 5 pacijenata ženskog pola (62,5%), a 3 muškog (37,5). Pacijenti su bili starosti od 37 do 57 godina, a prosečna starost je bila 47. Ovi pacijenti su lečeni hirurški, tako što je tumor ekstirpiran zajedno sa submandibularnom žlezdom, što je neophodno, jer tumoru u pojedinim mestima, iako je benigan može kapsula da bude inkopletna, zbog recidiva, a i mogućnosti maligne alteracije.
Zaključak: Miksni tumor je redak tumor u submandibularnoj žlezdi, češći kod žena i u petoj deceniji života. Potrebno je što bolje poznavanje kliničko-patoloških karakteristika ovih tumora, kako bi se pristupilo adekvatnom lečenju i unapredilo zdravlje ovih pacijenata.

Ključne reči: Miksni tumor, submandibularna žlijezda, liječenje

Broj apstrakta: 021
Tip apstrakta: poster

Optimum upotrebljivosti kožnih graftova tipa Thiersch

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Uvod: Najpopularniji i najčešće korišćeni za kratkotrajno čuvanje graftova je kozerviranje istih u standardnom hladnjaku na temperaturi od +4C. Potrebe za tako čuvanim graftovima se kreće od jednog dana, pa do i posle mesec dana od uzimanja transplantata. Prema literaturi upotrebljivost istih kreće se od 10 dana do 21 dan.
Cilj u želji da preciznije odredimo vreme do kog je upotrebljivost ovako konzerviranih graftova sigurna, izvršili smo ispitivanje sa 50 uzoraka na ovaj način konzervisanih transplantata tipa Thiersch.
Metod: na bolesničkom materijalu Urgentnog centra intezivne nege njih 5 uz njihov pristanak uzeti su delovi kože veličine 3x5cm, i to su uzimani prilikom operativnih zahvata, konzervisani su na uobičajeni način i po određenom periodu testirani klinički i histološki. Počev od 11.tog dana, po 5

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preparata je bilo deljeno na dva dela, od kojih je jedan aplikovan na pogodnu površinu za prihvatanje transplantata, dok je drugi plasiran u formalin i poslat na HP analizu. Potom je pravljena serija od po pet preparata u okviru koje je svakoj sledećoj produžavan period konzervacije za po 1 dan duže, zaključno sa 20tim danom.

Retultati i Zaključak: Rezultati kliničkog i histološkog ispitivanja su saglasni i predstavljeni tabelarno. Upotrebljivost iznad 50% konzerviranih transplantata se nalazi do 17 dana kod konzerviranja, a potom pada. Tako gledano moguće je da neki transplantat bude upotrebljen i 30 dana od konzerviranja, ali je to izuzetak, a ne uobičajeno stanje.

Ključne reči: transplantat kože,Thiersch

Broj apstrakta: 022

Tip apstrakta: poster

Rekonstruktivne mogućnosti u zatvaranju sakrokcigealnih dekubitalnih ulceracija

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Uvod: Sakrokokcigealne dekubitalne ulceracije su obično prve dekubitalne rane koje se stvaraju u bolesnika vezanih za dugotrajno nepomično ležanje u postelji. Odatle njihova učestalost i ekstenzivnost. Nalaze se kako kod plegičnih bolesnika tako i kod teških hirurških i hroničnih bolesnika. Osnovu njihovog hirurškog lečenja čini ekcizija devitalizovanih nekrotičnih i ožiljno izmenjenih mekih tkiva ulceracije i periostitisom i osteitisom zahvaćenih delova kosti sa dna ulceracije i zatvaranje defekta kvalitetnim mekotkivnim pokrivačem.

Cilj: naći optimalno rešenje za vrlo aktuelan problem dugoležećih pacijenata sa ispoljenim dekubitalnim ulceracijama različitog stepena i obima.

Metod: Na Kliničkom materijalu pacijenata koji se nalaze u Hirurškim intezivnim negama Urgentnog centra sa stanjima kome, plegije ili kvadriplegije koji su opservirani za period od 01.januar 2013 do 01.januar 2015. bilo je 46 pacijenata od toga 21 ženskog pola i 25 muškog, starosne dobi u rasponu od 29-83.god. Pacijenti koji su zahtevali opsežniji tretman bilo ih je 11. Klasično rešavanje ovih defekata rotacionim režnjem nosi rizik komplikacija delimične nekroze vrhova režnjeva, kao i nesrastanja režnjeva za podlogu zbog stvaranja velikih potkožnih džepova ispunjenih hematomom, seromom ili inficiranim sadržajem.

Rezultati i zaključak: Miokutani gluteus maksimus režnjevi predstavljaju nesumnjiv napredak u zatvaranju ovih rana. Horizontalni klizajući ostrvasti miokutani gluteus maksimus režanj prihvaćen je u našoj praksi zbog svojih brojnih kvaliteta. Ovaj režanj se relativno jednostavno planira, odiže i mobiliše odvajanjem mišića duž njegove medijalne insercije za sakralnu i kokcigealnu kost i duž njegove gornje ivice, što omogućava njegovo klijanje preko srednje linije. Sekundarni defekt zbrinjava se V-Y postupkom. Režanj je vitalan u svim svojim delovima. Mobilizacijom dva režnja mogu se zatvoriti ekstenzivno veliki defekti. Defekti se zatvaraju u tri sloja, a regija izložena hroničnom pritisku pokriva mišićem i kožom pune debljine. Dovođenjem ovih dobro prokrvljenih tkiva pozitivno utiče i na saniranje lokalne infekcije. Ove režnjeve smo upotrebljavali i kod pokretnih–neplegičnih bolesnika bez remećenja funkcije, budući da ostaje očuvana inervacija, vaskularizacija i funkcionalni integritet mišića.

Ključne reči: dekubitalne ulceracije, rekonstruktivni zahvati, Sakrokokcigealni predeo

Broj apstrakta: 023
Tip apstrakta: poster

Naša iskustva u liječenju preloma zigomatiko-maksilarnog kompleksa, zigomatične kosti i poda orbite

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Uvod: Zigomatična kost je bočno najisturenija kost lica i zato su prelomi drugi po učestalosti (8-20%), odmah nakon preloma nosa. Najčešći uzroci preloma su tuče, padovi, saobraćajni udesi, kao i sportske povrede.
Cilj: osnovni cilj je bio procjena učestalosti preloma zigomatikomaksilarnog kompleksa, zigomatične kosti i poda orbite, praćenje učestalosti po polu i uzrastu, kao i etioloških faktora i izbora liječenja, a sve u cilju što boljeg zbrinjavanja ovih pacijenata.
Metod: U periodu od 3 godine, ispitivano je 126 pacijenata sa prelomom zigomatko-maksilarnog kompleksa, zigomatične kosti i poda orbite liječenih u Klinici za ORL i MFH KCCG. Praćeni su demografski, etiološki i klinički podaci kao i radiološka ispitivanja, hirurška terapija i postoperativne komplikacije uz statistički obradu podataka.
Rezultati: Povrede su bile češće kod muškaraca, u trećoj i četvrtoj deceniji. Najčešći etiološki faktor bio je nasilje, potom saobraćajni udes, zades i sport. U kliničkoj slici su dominirali: deformiteti lica, parestezija u inervacionoj zoni n.Infraorbitalisa, diplopije i ograničeno otvaranje usta. Prosečan period od povređivanja do prijema u bolnicu bio je 2 dana a od povredjivanja do operativnog lečenja 4 dana. Najčešći hirurški pristup bio je subcilijarnim rezom.
Zaključak: Prelomi zigomatiko-maksilarnog kompleksa, zigomatične kosti i poda orbite su češći kod muškaraca, najčešće nastaju u nasilju. Hirurško liječenje je u većini slučajeva neophodno. Neadekvatna procjena povrede vodi neadekvatnom liječenju, što ima za posljedicu loš kozmetski rezultat ili problem sa vidom.
Ključne reči: zigomatiko-maksilarni kompleks, prelomi, zigomatična kost

Broj apstrakta: 024
Tip apstrakta: poster

Cerviko-medistijalni hematom kompresija opasna po život pacijenta

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Uvod: Spontano nastali hematom na vratu (cervikalno-medijastinalni hematom) uzrokovan rupturom ekstrakapsularno paratiroidnih žlezda javlja se vrlo retko. Ne postoje standardni pristup i postupak tretmana već je to posebnost svakog pojedinačnog slučaja.
Cilj: Želeli smo da ukažemo na ovaj retke slučajeve spontanog cervikalno-medijastinalnog hematoma gde je došlo do krvarenja iz paratiroidnog adenoma, koji je otkriven kod do tada apsolutno zdravih pacijenata.
Metod: Radi se o 5 bolesnika, mlađeg životnog doba 29-38.godina, od toga 2 žene i 3 muškarca. Svi su hospitalizovani u 2 sata nakon manifestacije bolesti, žaleći se na bol u vratu i utrnulost jedne strane vrata. Indirektnom laringoskopijom: postojala je pareza na jednoj od strana glasnica. Biohemijska analiza krvi ukazala na povećani nivo paratitiroidnih hormona u odnosu na normalne vrednosti 12-15 puta više, dok je vrednost jonizovanog kalcijuma neznatno uvećana.

Simptomi kompresije organa vrata akutno su se ispoljili između 5 i 7og sata po hospitalizaciji.
Rezultati: Svi pacijenti su operisani sa evakuacijom hematoma gde se uočilo aktivno arterijsko krvarenje. Histološkim pregledom otkrili su se fragmenti paratireoidnog adenoma u hematomu. Pozitivna dinamika oporavka uočena je tokom 12 sati od sprovedene protiv zapaljenske terapije i izvršene intervencije. Analizom se pokazalo da je nivo jonizovanog kalcijuma u krvi bio normalan i to 24 sata nakon operacije. Pacijenti su redovno kontrolisani, 6 meseci nakon operacije nisu imali disphagiju, kvalitet glasa je bio netaknut, a disanje bez ograničenja. Nivo paratiroidnih hormona u krvi kretao se u granicama referentnih vrednosti.
ZAKLJUČAK: Retkost ove patologije i varijabilnost lečenja ne dozvoljavaju da se izabere jedinstveni uniformni medicinski i dijagnostički protokol. Naši slučajevi pokazuju da radikalna korekcija primarnog hiperparatireoidizma, evakuacija hematoma i vlaknaste kapsule uz očuvanje štitne žlezde je moguće u uslovima napetosti zbog cervikalno-medijastinalnog hematoma sa upalnim procesom u području gde je ispoljeno krvarenje.
Ključne riječi: Parathiroidna žlezda, akutne bolesti vrata, ekstrakapsularno paratiroidno krvarenje, hiperkalcijemija.

Broj apstrakta: 025
Tip apstrakta: poster

Razlozi poseta Urgentnom centru pacijenata u postooperativnom periodu onih koji su operisali štitnu i paraštitne žlezde

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Uvod: Pregledom literaturnih podataka nema adekvatne evaluacije pitanja postoperativnih komplikacija lečenih unutar 30 dana nakon operacija tireoidne i paratireoidnih žlezda opisanih kroz komplikacije. Nedostaje među literaturom opis postoperativnog stanja koja zahtevaju evaluacije u okviru urgentne hirurgije pacijenata koji su prošli operaciju ovog entiteta. Ova pitanja su važna jer utiču na ukupne troškove i efikasnost brige o pacijentu. U ovom radu biće prikazan broj bolesnika koji su zbog tegoba imali za potrebu da se jave Urgentnom centru tokom postoperativnih prvih 30 dana. Razlozi za evaluaciju su bili raznovrsni, ali značajan broj odnosio se na poremećaje elektrolita. Uz izuzetak pacijenata koji su podvrgnuti lobektomiji, svi pacijenti su počeli sa nadoknadom deficita kalcijuma postoperativno, ali količina, vrsta, kao i stopa usklađenosti je varirala, a time i ovaj faktor nije ocenjen. Nivo magnezijuma smo povremeno testirali i retko je postojala potreba za njegovom dopunom jer nismo dijagnostikovali njegov manjak. Velik broj pacijenata koji su se javljali zbog parestezija, a imali su normalni nivo jonizovanog kalcijuma sa hipomagnezemijumom ili bez detektibilne abnormalnosti njihovih seruma sa sadržajem kalcijuma i magnezijuma. Pacijenti koji su uzimali inhibitore protonske pumpe (PPI) u postoperativnom periodu bili su statistički češće javljali od onih koji ne uzimaju ovaj lek.
Ciljevi rada: opisati pacijente kojima je potrebna evaluacija kroz Urgentni centar u roku od 30 dana od dana tiroidektomije ili paratroidektomije i njihovih povezanih faktora rizika.
Materijal i metode: Retrospektivna studija pacijenata starosti od 42.-79.godina koji su bili podvrgnuti tiroidektomiji ili paratiroidektomiji u periodu od 01.01. 2010.god do 01.01. 2015.god. uzetih iz baze medicinskih istorija bolesti Urgentnog centra KCS. To su pacijenti iz postoperativnog perioda koji su javili u prvih 30 dana nakon operacije, za rad su odabrani i komparirani podacima sa kontrolnom grupom pacijenta koji su imali identične operacije a nisu imali za potrebu i hitnost javljanja. Demografski podaci prikupljeni uključuju starost, pol, indeks telesne mase (BMI). Kliničke karakteristike cenili smo kroz vrstu operacije, korišćenje inhibitora protonske pumpe (PPI) kao i izraženih medicinskih komorbiditeta, kao što su dijabetes mellitus, hipertenzija, bubrežne bolesti i gastroezofagealni refluks. Pratili smo vreme javljanja Urgentnom centru u odnosu na datum operacije. Laboratorijske vrednosti za kalijum, jonizovani kalcijum, fosfor,

magnezijum. Sve analize provedene su pomoću SPSS softvera, verzija 21.0.
Rezultati: Glavni rezultati i mere statističke analize ocenili smo kroz udruženost demografskih i kliničkih karakteristika između pacijenata koji zahtevaju evaluaciju u Urgentnom centru i onih koji nisu. Kliničke karakteristike ocenjene su kroz vrstu operacije, medicinske komorbiditete i korišćenje inhibitora protonske pumpe (PPI). Takvih je bilo 263 identifikovanih bolesnika, 72 pacijenta imali su potrebu da se jave Urgentnom centru, uključujući parestezije (n = 19), rane komplikacije (n = 7) i slabost (n = 5). Bilo je petnaest hospitalizacija radi lečenja raznih postoperativnih komplikacija. Značajna povezanost nađena je između prisustva dijabetesa (P = 0,03), gastroezofagealnog refluksa kao oboljenje (P = 0,04), a trenutna upotreba inhibitora protonske pumpe (IPP) (P=0,03). Kod kontrola za dijabetes i gastroezofagealni refluks kao oboljenja, otkrili smo da je kod pacijenata koji su uzimali inhibitore protonske pumpe (PPI) 1,81 puta postojala veća šansa za javljanje nego kod pacijenata koji nisu uzimali IPP (P=0,04). To odgovara stopi od 11% javljanja radi evaluacije unutar prvih 30 dana nakon operacije štitne žlezde ili paratireoidne operacije, ako je bilo veći broj poseta nismo uzimali to u obzir.
Zaključak: Kod uzimanja IPP 1,81 je puta veća šansa da zatraže pomoć. Ovaj rad opisuje faktore rizika koji povećavaju verovatnost za javljanje u roku od 30 dana nakon postoperativne tiroidektomije i paratiroidektomije, a iznosimo neke njihove razloge za javljanje i neke od nalaza o ovoj grupi pacijenata. Ovaj problem je sve više vezan za ishod primenjenih mera, čime se smanjuje neočekivana potreba za zdravstvenom zaštitom u postoperativnom periodu koja je od suštinskog značaja. Takođe, rad opisuje razloge za hitna javljanja Urgentnom centru i vrednovanje i prikaz stope javljanja ovih pacijenata u bolnicu, a značajni faktori rizika za remisiju u postoperativnom periodu.
Ključne reči: hitnost javljanja, postooperativni period, tiroidectomia, parathyroidectomia, inhibitor protonske pumpe

Broj apstrakta: 026
Tip apstrakta: poster

Akutni akalkulozni holecistitis

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Uvod: Akutni akalkulozni holecistitis predstavlja oko 5-10% svih slučajeva akutnog holecistitisa. Češće se javlja kod hospitalizovanih bolesnika, a ređe se sreće u ambulantnim uslovima.
Cilj rada je da ukaže na značaj ponavljanja brzih, neinvazivnih dijagnostičkih procedura kod akutnog bola u abdomenu.
Metode i material: Opservacioni protokol bolesnika Zavoda za hitnu medicinsku pomoć, otpusne liste hiruških klinika.
Prikaz bolesnika: Muškarac, star 45 godina, dolazi na pregled u ambulantu hitne pomoći 12. decembra 2014 godine zbog bola u gornjim partijama trbuha, praćen mučninom i povraćanje. U ličnoj anamnezi navodi operaciju desnostrane ingvinalne kile i slepog creva. Tegobe su počele na službenom putu 11.decembra 2014 godine, zbog kojih je primljen na odeljenje hirurgije najbliže bolnice. Uvidom u medicinsku dokumentaciju, saznajemo da su na prijemu i ponavljane laboratorijske analize, rendgengrafija i ultrazvuk abdomena bili urednog nalaza. Tretiran infuzionim rastvorima, antibioticima, spazmoliticima i opoidnim analgeticima. Bolovi su kupirani i isključeno je akutno hiruško oboljenje. Otpušta se u dobrom opštem stanju. Pri našem pregledu abdomen palapatorno bolno osetljiv u epigastrijumu, pod desnim rebarnim lukom i donjem desnom kvadrantu. Ponavljamo hematološke analize i ultrzvuk abdomena. Hematološke analize pokazuju umerenu leukocitozu sa granulocitozom.
Eho abdomena: Žučna kesa disteditana, blago zadebljanog zida. Intraluminalno je nehomogeni ehogeni sadržaj bez znakova za kalkulozu (suspektan empijem). Cirkularno, oko cele žučne kese prisutna je veća količina periholecistične tečnosti (periholecystitis). Pozitivan Murphy-ev znak. Mokraćna bešika puna bez nagona na mokrenje (retentio urinae).
Upućen pod dg. Abdomen acutum u Urgentni centar hirurgije Kliničkog centra Niš gde je istog

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dana operisan (Dg: Abdomen acutum. Cholecystitis acuta gangrenosa perforativa. Peryholecistitis. Peritonitis diffusa, Appendicitis acuta consecutiva.)
Diskusija i zaključak: Odlaganje dijagnoze u vrlo retkom akalkuloznom holecistitisu povećava stopu smrtnosti, jer se često ne prepoznaje u početnoj fazi zbog odsustva žučnih kamenaca. Za dijagnozu ove bolesti sa visokim mortalitetom, ultrazvuk je metoda izbora. Senzitivnost za akutni holecistitis je 75% i može se često ponavljati zbog čega ima poseban značaj kod ovih bolesnika.
Ključne reči: akalkulozni holecistitis, visok mortalitet, neinvazivna dijagnostika

Broj apstrakta: 027
Tip apstrakta: poster

Prikaz slučaja pacijenta sa nespecifičnom kliničkom slikom u akutnom infarktu miokarda (AIM)

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Uvod: U najvećem broju slučajeva AIM kao vodeći simptom ima jak bol u grudima sa različitom propagacijom i uz druge pridodate simptome. Međutim u literaturi se navodi da do 10 % pacijenta se pri prvoj prezentaciji doktoru javi sa naspecifičnim tegobama. U urgentnoj medicini, kontakt sa pacijentom je vremenski limitaran i ukoliko se ne posveti pažnja, mogu se prevideti prvi važni simptomi.
Prikaz slučaja: Pacijent K.N. star 58 god., poziva HMP zbog mučnine, nesvestice i hladnog preznojavanja. Poziv je primljen kao prvi red hitnosti i lekarska ekipa stiže u roku od 7 min od poziva. Pacijent zatečen na krevetu, u sedećem položaju, svestan, orjentisan, bled i hladno preznojen. Žali se na vrtoglavicu, nestabilnost, na mučninu. Na ciljano pitanje: „da li ima bol u grudima"?- odgovara „kao da ima...ali nije siguran". Na insistiranje potvrđuje da ima bol koji je slabijeg intenziteta. Pri pregledu nalazimo sledeće vitalne parametre: TA 90/60mmHg; SF 75/min; SpO_2 98%; glikemija 5,6mmol/L; norm TT. Disanje obostano vezikularno, bez propratnih šušnjeva. Nad srcem, akcija srca ritmična, nešto tiši srčani tonovi, šumove ne čujem. Radi se ECG. Na ECG-u: sin ritam normalna srčana osovina, ST elevacija 5-6mm u D_2, D_3 i avF; ST elevacija 3mm u V_3-V_5; ST depresija u D_1, avL, V_1 i V_2, 2-3mm, Neg T u V_6. Rade se desni odvodi gde se u V_4 nalazi ST elevacija od 1,5 mm. Postavlja se dijagnoza Infarctus Myocardii parietes inferoposterioris cum Ventriculi Dextri. Postavljena IV linija, postavljen ecg monitoring, započeta terapija: Tbl: ASA 300mg, Tbl Plavix 300mg, amp Clexane 0,3 IV, amp Fentanil 2 mg, Sol NaCl 0,9%. Pacijent transportovan do Klinike za kardiologiju. U toku transporta pacijent hemodinamski stabilan, bez pogoršanja.
Zaključak: u ovom radu prikazan je pacijent koji nije imao jasnu kliničku sliku, ali je praćenjem protokola za tretman pacijenta sa bolom u grudima, brzo postavljena dijagnoza, data adekvatna terapija i pacijent transportovan do Klinike za kardiologiju gde je u prvom satu urađena pPCI .
Ključne reći: AIM, nespecifična klinička slika.

Broj apstrakta: 028
Tip apstrakta: poster

Politrauma-prikaz slučaja

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Uvod: udeo politraume u ukupnom traumatizmu iznosi 3-8%, ali je vodeći uzrok mortaliteta i značajno utiče na morbiditet (mortalitet na licu mesta je od 50 do 80%). Ukupni hospitalni mortalitet politraumatiziranih pacijenata i do je 25%. Mortalitet u prvih 6 sati iznosi 50%, u sledećih 24 sata 30%, dok je 20% posledica sekundarnih oštećenja i komplikacija
Cilj: Prikaz zbrinjavanja politraumatizovanog bolesnika
Prikaz slučaja: pacijent A.V. star 30 god, dovežen vojnim sanitetom. Dobijamo podatak da se posle skoka iz aviona padobran regularno otvorio ali da je prilikom skoka sledećeg padobranca (koji je nošen vetrom) došlo do sudara u vazduhu i povređivanja obojice. Pacijent A.V se prizemljuje sa otvorenim prelomom desne butne kosti i dežurna lekarska

ekipa na aerodromu ga primarno zbrinjava. Imobilisana desna noga Kramerovom šinom, postavljena IV Linija 20G, nije dodat analgetik, niti je započeta nadoknada volumena. Na Hirurško odeljenje stiže nakon 50 min od događaja u 10:50, najavljen je dolazak i dve anesteziološke ekipe ga čekaju u prijemnoj ambulanti. Na prijemu pacijent svestan, orjentisan u vremenu, prostoru i prema ličnostima. Koža i vidljive sluzokože vidljivo blede, orošen znojem, povremeno viče, vidno psihomotorno uznemiren. Podatke daje sam a događaj ne rekonstruiše. Glava i vrat-bez vidljivih povreda, zenice jednake, postavljena Šancova kragna, dat O_2 7L/min. Grudni koš bez vidljivih povreda, disajni šum obostrano prisutan. Cor: nešto tiši srčani tonovi, šumova nema. Abdomen na površnu i duboku palpaciju bezbolan. Vitalni parametri-TA: nemerljiva, SF: 110/min; RF: 20/min. Desna butina veća u obimu. Nakon brze orjentacije, postavljene dve veće IV kanile, uzeti uzorci za kompletnu laboratoriju i započeta intenzivna nadoknada volumena kristaloidima i koloidima. Pacijent obezboljen fentanilom i započeta dijagnostika. Urađen MSCT celog tela, kolor dopler krvnih sudova nogu, ecg, eho srca. Nakon dijagnostičkih pretraga postavljene su sledeće dg: Polytrauma, Contusio pulmonis, Contusio cordis, Contusio capitis, Fractura femoris lat dex, Shock haemorrhagicus. Intenzivnom terapijom se postiže hemodinamski oporavak 2h posle prijema kada se pacijent uvodi u salu da bi se pristupilo stabilizaciji preloma postavljanjem spoljašnjeg fiksatora. Pacijent je 24h posle povređivanja prebačen u tercijalnu zdravstvenu – VMA, radi konačnog zbrinjavanja.

Zaključak: brza i tačna procena traumatizovanog pacijenta, brza dijagnostika, adekvatno konačno zbrinjavanje je ključ za lečenje i tretman politraumatizovanog pacijenta. Lanac zbrinjavanja ne sme biti prekinut.

Ključne reči: politrauma, lanac zbrinjavanja

Broj apstrakta: 029
Tip apstrakta: poster

Povrede srca-često zapostavljena dijagnoza

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Uvod: povrede grudnog koša su posebno značajne zbog potencijala da kompromituju respiratornu i/ili cirkulatornu funkciju. Mogu biti tupe i penetrantne. Spasioci na terenu najčešće obraćaju pažnju na povredu zida grudnog koša i plućnog tkiva a mnogo ređe razmišljaju o povredi srca.

Cilj: ukazati na značaj povreda srca u traumi grudnog koša.

Izvor podataka i izbor materijala: retrospektivna analiza literature sa odrednicama: trauma, grudni koš, povrede srca. Pretraživanje je vršeno kroz: PubMed, Medline i elektronske časopise dostupne preko KoBSON-a kao i litratura raspoloživa u Biblioteci Medicinskog fakulteta u Nišu (PHTLS Chapter 11 Thoracic trauma).

Rezultati sinteze: tupa povreda srca je najčešće rezultat kompresije srca zbog delovanja sile na prednji zid grudnog koša i daje sledeće entitete:

- Kontuzija srca. Često izaziva poremećaje srčanog ritma npr. sinusnu tahikardiju, ventrikularne ekstrasistole, ventrikularnu tahikardiju, ventrikularnu fibrilaciju i smetnje sprovođenja. Kontraktilnost srca može biti promenjena sa smanjenjem kardijalnog output-a, rezultujući kardiogenim šokom.
- Ruptura valvula. Ruptura potpornih struktura valvula ili samih valvula uzrokuje smanjenje njihove funkcije sa simptomima i znacima kongestivne srčane insuficijencije.
- Tupa ruptura srca. Dešava se u manje od 1% pacijenata sa tupom traumom grudnog koša. Najveći broj ovih pacijenata će umreti na licu mesta zbog iskrvavljenja ili fatalne srčane tamponade. Preživeli će se prezentovati kliničkom slikom tamponade srca. Povećanje pritiska u perikardu sprečava povratak venske krvi u srce i dovodi do smanjenja kardijalnog output-a. Sa svakom srčanom kontrakcijom ovo stanje se produbljuje i dovodi do električne aktivnosti srca bez pulsa. Najčešće, tamponada srca nastaje zbog ubodnih rana u srce sa penetracijom u srčane komore ili

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laceracijom miokarda. Ruptura komora zbog tupe povrede grudnog koša češće uzrokuje jako iskrvarenje. Nivo sumnje na tamponadu srca treba podići na "prisutna dok se ne dokaže drugačije" kada je povreda u pravougaoniku (srčana kutija) koji formiraju horizontalne linije duž klavikula, vertikalne linije od klavikula preko bradavica do ivica rebara, i donja horizontalna linija koja spaja vertikalne linije na mestu spoja sa ivicom rebara. Fizički znaci preteće tamponade srca (Beck-ova trijada) su: udaljeni, mukli, prigušeni srčani tonovi, jugularna venska distenzija, nizak krvni pritisak.
Procena: procena pacijenta sa potencijalom za tupu povredu srca uključuje mehanizam povređivanja i fizikalne znake.
Pristup lečenju: ključ u strategiji je dobra procena da je trauma grudnog koša izazvala povredu srca i prenošenje tih podatka pri prijemu pacijenta u bolnicu. Daje se visoka koncentracija kiseonika, uspostavlja se IV linija uz nadoknadu tečnosti. Pacijenta treba monitorirati – EKG. Kod pojave aritmije daje se standardna antiaritmijska terapija. Kod tamponade perikarda ispuštanje manje količine tečnosti iz perikarda perikardiocentezom je često efikasna privremena mera.
Zaključak: povrede srca daju ozbiljne komplikacije sa fatalnim ishodom zahtevaju dobru procenu mehanizma povrede, urgentno lečenje i brz transport. Posle kratkog primarnog pregleda pacijenta treba zbrinjavati na putu za bolnicu. Ove povrede treba zbrinjavati u ustanovama za definitivno hirurško zbrinjavanje. Čak i kad nema spoljnih znakova povrede grudnog koša, posebno u predelu srčane kutije treba uvek ozbiljno shvatiti zbog potencijala da izazovu fatalne komplikacije i smrtni ishod.
Ključne reči: trauma, grudni koš, povrede srca

Broj apstrakta: 030
Tip apstrakta: poster

Strano telo u disajnom putu kao uzrok akutnog zastoja srca-prikaz slučaja

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Uvod: najčešći uzrok akutnog zastoja srca su prethodna oboljenja srca. Ostali razlozi srčanog zastoja su nesrčane etiologije. Nova etiološka podela jeste podela na 5H (hipoksija, hipovolemija, hipotermija, hidrogen jon-acidoza, hiper/hipokalijemija) i 5T (tromboza-koronarna, tromboza-plućna, tenzioni pneumotoraks, tamponada srca, trovanja) uzroke akutnog zastoja srca. Na ove uzroke akutnog zastoja srca treba uvek misliti i u slučaju potrebe primeniti specifične postupke tokom kardiopulmonalne reanimacije, a u cilju njihovog otklanjanja.
Cilj rada. Prikazom slučaja ukazati na značaj rane kardiopulmonalne reanimacije, kao i na značaj ranog otklanjanja uzroka akutnog zastoja srca na prehospitalnom nivou.
Materijali i metode: analiziran je protokol terenskih intervencija Zavoda za hitnu medicinsku pomoć i istorija bolesti i otpusna lista Klinike za kardiovaskularne bolesti.
Prikaz slučaja: poziv hitnoj pomoći je upućen iz Gerontološkog centra i klasifikovan kao poziv prvog reda hitnosti, jer je dobijen podatak da je pacijentkinja bez svesti. Ekipa hitne pomoći kreće u prvoj minuti od prijema poziva i dolazi na lice mesta nakon 3 minuta. Pacijentkinju zatičemo u krevetu bez svesti, disanja i pulsa nad karotidnom arterijom. Zenice su srednje dilatirane, nereaktivne. Koža i vidljive sluzokože su cijanotične. Heteroanamnestički, od dežurne medicinske sestre, dobijamo podatak da je pacijentkinja srčani bolesnik i dijabetičar i da redovno uzima svoju terapiju. Takođe dobijamo i podatak da se pacijentkinja zakašljala u toku obroka, pomodrela i prestala da diše, što nas upućuje na mogući uzrok akutnog zastoja srca. Odmah je započeta kardiopulmonalna reanimacija, masažom srca i istovremenim otvaranjem venske linije. Na

monitoru defibrilatora se registruje asistolija, pa se reanimacija nastavlja po protokolu za asistoliju. Prilikom direktne laringoskopije u usnoj duplji, orofarinksu i hipofarinksu se vizuelizuje strano telo, koje je odstranjeno Magilovim hvataljkama, pre plasiranja endotrahealnog tubusa. Nakon endotrahealne intubacije tubusom 8mm, nastavlja se kontrolisanom ventilacijom. Intravenski je dato šest pojedinačnih doza adrenalina od 1 mg sa razmacima od pet minuta, praćenih masažom srca i kontrolisanom ventilacijom. Nakon šeste ampule adrenalina, dobijamo puls nad arterijom carotis, a na monitoru se registruje sinusni ritam. Pacijentkinja ima i retke spontane respiracije.

Pacijentkinja je u pratnji ekipe hitne pomoći, a uz kontinuirani monitoring vitalnih funkcija, transportovana na Kliniku za kardiovaskularne bolesti. Tokom transporta pacijentkinja je na oksigenoterapiji sa protokom 10 L/minuti, nastavlja se sa asistiranom ventilacijom.

Tokom hospitalizacije dolazi do stabilizacije vitalnih parametara pacijentkinje. Nakon 15 dana hospitalnog lečenja pacijentkinja se otpušta kući u dobrom opštem stanju, bez neuroloških posledica.

Zaključak: iako se najčešće u praksi srećemo sa primarnim cardiac arrestom, uvek treba misliti i na druge moguće uzroke srčanog zastoja, kao što je u našem slučaju bila opstrukcija disajnog puta stranim telom. Pristup pacijentu sa akutnim zastojem srca i svi dijagnostički i terapijski postupci koje ćemo izvesti u tom momentu su presudni za uspeh reanimacije.

Ključne reči: akutni zastoj srca, kardiopulmonalna reanimacija, strano telo u disajnom putu

Broj apstrakta: 031
Tip apstrakta: poster

Akutni edem pluća-prikaz slučaja

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Uvod: Akutni edem pluća (lat. Oedema pulmonis acuta) predstavlja plućno oboljenje opasno po život pacijenta te stoga spada u prvi red hitnosti zbrinjavanja Službe hitne medicinske pomoći (SHMP). Karakteriše ga ekstravaskularno nakupljanje tečnosti u plućnim alveolama zbog povišenog plućnog kapilarnog pritiska ili poremećene propustljivosti kapilarno-alveolarne membrane pluća. Od ključnog je značaja brzina zbrinjavanja pacijenata sa akutnim edemom pluća kao i pravi izbor terapije u određenom trenutku.

Prikaz slučaja: Dana 14.07.2015. (br. protokola 9592) nakon dobijenog poziva u 14:35h od strane NN lica ekipa SHMP izlazi na teren gde se nalazio M.Z. 1936 god. Pri prvim vizuelnim kontaktom sa pacijentom primetio sam da pacijent sedi na stolici, obliven znojem i otežano diše. Usne su mu bile modre i imao je jako izražene vene na vratu. Nakon obavljenog pregleda konstatovao sam da pacijent ima gušenje jakog intenziteta, kašalj sa iskašljavanjem sluzavog penušavog ispljuvka, ubrzano plitko disanje, anksioznost, cijanozu centralnog tipa, oslabljen disajni šum sa masom inspirijumskih pukota difuzno obostrano čujnim nad plućnim krilima do iznad polovine plućnih polja. TA 180/100mmHg. Odmah nakon pregleda započeo sam sa terapijskim procedurama. Pacijentu je plasirana braunila i prilikom transporta u sedećem položaju data terapija amp.Furosemid 20mg i.v. i tbl. Kaptoprila 25mg s.l. Uradjen je EKG (sinusni ritam, leva osovina, SF 100/min, -T u D1, aVL, bez bitnijih promena u ST segmentu), SpO_2 70%, TA 170/95mmHg. Nastavljenja je terapija u vidu oksigene potpore pomoću maske 4 l/min., sprej Gliceril trinitrat 2 doze po 0,4 mg s.l. na po 5 min., ½ Amp. Morfina od 20 mg i.v. Amp. Furosemid 2 od po 20 mg. i.v. Nakon 15-20min. dolazi do poboljšanja zdravstvenog stanja pacijenta SpO_2 80%, TA 155/90mmHg, nakon čega je on transportovan u sedećem položaju na odeljenje interne medicine radi dalje opservacije i terapije.

Zaključak: Nakon brzo primenjenih adekvatnih terapijskih postupaka u SHMP, došlo je do poboljšanja zdravstvenog stanja osobe sa akutnim edemom pluća, nakon čega je ona hospitalizovana na internom odeljenju radi dalje terapije i opservacije.

Ključne reči: edem, prehospitalno lečenje

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Broj apstrakta: 032
Tip apstrakta: poster

Produžena hipoglikemija-oprez!

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Uvod. Hipoglikemijska koma je najčešća komplikacija DM, s kojom se lekar HMP sreće na terenu. U najvećem broju bez fokalnih neuroloških znakova i meningealnog nadražaja. Nakon adekvatne terapije uobičajno dolazi do potpunog oporavka svesti. Neadekvatna reakcija na terapiju uvek mora da pobudi sumnju na druge razloge poremećaja stanja svesti.
Cilj rada: Prikazom slučaja ukazati na značaj obazrivog pristupa pacijentima koji imaju poremećaj svesti uz protrahovanu hipoglikemiju i kod kojih nadoknadom hipertone glukoze ne dolazi do željenog efekta.
Materijali i metode: Analiziran je protokol terenske intervencije Zavoda za hitnu medicinsku pomoć i istorija bolesti i otpusna lista Klinike za Neurohirurgiju.
Prikaz slučaja: Poziv hitnoj pomoći je upućen zbog pacijenta starog 61 god, zbog poremećaja nivoa svesti. Poziv je klasifikovan kao poziv drugog reda hitnosti, a ekipa hitne pomoći kreće u prvoj minuti od prijema poziva i dolazi na lice mesta nakon 10 minuta. Pacijenta (krupne osteomuskularne građe) zatičemo u krevetu bez svesti, spontanog disanja i prisutnog pulsa nad karotidnom arterijom koji je dobro punjen. Zenice su srednje dilatirane, sporo reaktivne. Koža, je normalne prebojenosti ali hladna i vlažna. Heteroanamnestički, od supruge, dobijamo podatak da je pacijent dijabetičar na oralnim antidijabeticima, loše regulisan, da neredovno uzima svoju terapiju. Dobijamo i podatak da je pacijent neposredno pre gubitka svesti, imao preznojavanje, mučninu, i da su tegobe pokušali da reše unosom šećera per os. Oni su izmerili Šuk 2mmol/L. Vitalni parametri: TA 170 /90mmHg; SF: 75/min; RF 16/min; SpO_2 99%; Šuk 6,0 mmHg, TT 36,8C. ECG: sin ritam, bez znakova za ishemiju. S obzirom da je pacijent dugogodišnji dijabetičar (loše regulisan) i da je pre događaja unosio veću količinu šećera, ideja je bila da je protrahovana hipoglikemija dovela do sporog odgovora na unos šećera te se pristupilo davanju Sol.Glycosae 50% 20+20+20ml. Nakon date terapije dolazi do delimičnog oporavka. II Šuk 11,0mmol/L. Pacijent se budi, odgovara na pitanja, ali je usporen i kofuzan. Posle datog odgovora, odmah tone u san. Negira tegobe i odbija dalju pomoć. Neurološki nalaz je uredan. Pacijent je u pratnji ekipe hitne pomoći, a uz kontinuirani monitoring vitalnih funkcija, transportovan na Kliniku za endokrinologiju. Tokom transporta pacijent je na oksigenoterapiji sa protokom 4 L/minuti. Nakon pregleda od strane endokrinologa i uz produbljivanje poremećaja svesti pacijent upućen na Kliniku za neurologiju gde je urađen CT koji je potvrdio sumnju na SAH.
Zaključak: U prehospitalnom tretmanu, gde su sužene dijagnostičke mere, poremećaj stanja svesti treba uvek razmatrati u više pravaca, iako okolnosti jasno navode na osnovnu bolest. Pažljivim pregledom uvek treba tražiti i znake drugih oboljenja.
Ključne reči: hipoglikemija, poremećaj svesti, SAH

Broj apstrakta: 033
Tip apstrakta: poster

Diferencijalna dijagnoza bola u grudima

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Uvod: Bol u grudima predstavlja jednu od najvećih diferencijalno dijagnostičkih dilema u medicini. U praksi, na prehospitalnom nivou, često pišemo radnu dijagnozu "stenocardia, dolor praecordialis" na osnovu uzete anamneze. Ono što nam predstavlja najveći problem jeste upravo da li je bol u grudima direktno povezan sa infarktom miokarda, jednim od vodećih smrti u svijetu.
Cilj rada: Ispitati učestalost stenokardije u pacijenata sa bolom u grudima u opštoj populaciji od 30 do 70 godina.
Metod: Deskriptivni prikaz podataka. Izvor podataka: knjiga poziva, protokol Zavoda za hitnu medicinsku pomoć Podgorica, odsek Cetinje, lekarski izveštaji.

Rezultati: U periodu od 10 mjeseci ispitan je 121 pacijent u hmp na Cetinju od kojih je AIM imalo 28 pacijenata, 35 pacijenata sa mijalgijom 58 pacijenta sa dijagnozom depresije. Učestalost AIM u zadatom periodu iznosila je 23,1% dok je sa mijalgijom bilo 28,9% depresivaca 47,9 %.
Zaključak: Možemo zaključiti da nije svaki bol u grudima kardijalnog porijekla ali s obzirom da je AIM jedan od najvećih uzroka smrti u svijetu, svakom bolu u grudima moramo posvetiti posebnu pažnju upravo zbog vjerovatnoće da se radi o AIM.
Ključne reči: Akutni infarkt miokarda, stenocardia, bol u grudima

Broj apstrakta: 034
Tip apstrakta: poster

Aritmija absoluta u hipertenzivnoj krizi

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Cilj rada: je bio da proverimo učestalost javljanja prve epizode aritmije absolute u hipertenzivnoj krizi.
Rezultati: U periodu od 10 meseci u hitnoj medicinskoj pomoći na Cetinju i Opšte bolnice na Cetinju kod 100 pacijenata (48 muškaraca i 52 žene) sa hipertenzivnom reakcijom KP>180/120 mmHg bilo je de novo aritmije absolute kod 80 pacijenata (36 muškaraca i 44 žene).
Zaključak: Aritmija absoluta se javlja u visokom procentu kao manifestacija hipertenzivne krize što se može objasniti visokim procentom nelečene arterijske hipertenzije u našoj populaciji.
Ključne reči: arterijska hipertenzija, a. absoluta, hipertenzivna kriza

Broj apstrakta: 035

Tip apstrakta: poster

Rana defibrilacija ključ uspešne CPR -prikaz slučaja

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Uvod: Najčešći uzrok akutnog srčanog zastoja, po statističkim podacima i do 80 %, je fibrilacija koja se javlja sa akutnim koronarnim događajem. DC šok je sastavni deo kardiopulmonalne reanimacije (CPR). I od pravovremene i adekvatne primene DC šoka, zavisi i ishod CPR. Rana defibrilacija je od ključnog značaja u preživljavanju iznenadne srčane smrti, a verovatnoća uspešne defibrilacije naglo opada sa vremenom.
Cilj rada: Prikazom slučaja ćemo ukazati na značaj rane kardiopulmonalne reanimacije, u kojoj je prva mera rana defibrilacija.
Materijali i metode: Analiziran je protokol terenskih intervencija Zavoda za hitnu medicinsku pomoć i istorija bolesti i otpusna lista Klinike za kardiovaskularne bolesti.
Prikaz slučaja: Pacijent lično poziva ekipu hitne pomoći zbog bola u grudima koji traje oko 30 min. Bol se javio posle svađe sa sinom. Pacijent u toku razgovora pokazuje nervozu i uznemirenost. Poziv primljen kao drugi red hitnosti a ekipa hitne pomoći kreće u prvoj minuti od prijema poziva i dolazi do pacijenta nakon 5min. U kući pacijenta prisutna i ekipa MUP-a zbog prethodnog sukoba u kome nije bilo fizičkog kontakta. Pacijent M.P., star 74 god, zatičemo u krevetu, svestan, orjentisan, uznemiran i razdražljiv, novodi da boluje od HTA. Prisutna je supruga, koja je ubeđena da on simulira tegobe. Pacijent je bled i preznojen i do sada nije imao ovakve bolove. Vitalni parametri: TA 150/100mmHg; SF 100/min; RF 16/min; $SpO_2$98%, Šuk 5,8mmol/l, TT norm. Na ECG-u: sin ritam, bigeminia, nishodna depresija D_2, D_3 i aVF, STelevacija V1-V4 od 1-2mm. Postavljena IV linija, monitoring i započeta Th: Amp Fentanil 2ml IV; Amp Clexane 30mg IV; tbl Aspirin 300mg PO; Tbl Plavix 300mg PO; Amp Ranitidin IV; O_2- 4 L/min. U toku transporta na monitoru su i dalje prisutne česte polimorfne VES po tipu bigeminije. Poremećaj ritma po tipu VF nastaje otprilike 30

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min od prvog kontakta sa pacijentom. Prvi DC Šok isporučen sa jačinom 200J, posle čeka započeta masaža grudnog koša, kako je i dalje na monitoru VF, isporučen i drugi DC šok 300J nako čega pacijent počinje spontano da diše i otvara oči. Lako je konfuzan u odgovorima. Nastavljen kontinuirani monitoring vitalnih funkcija, transportovan na Kliniku za kardiovaskularne bolesti. U prijemnoj ambulanti Klinike za kardiologiju pacijent ponovo fibrilira, i biva defibriliran od strane kardiologa 2X200 J. Pacijentu se radi pPCI, postavlja se stent na LAD koji u sledećih nekoliko sati akutno trombozira. Pacijent preveden na Brilique. Otpušta se kući posle 6 dana hospitalizacije u dobrom opštem stanju.
Zaključak: rana defibrilacija će imati efekta samo kada je pravovremena i adekvatno izvedena. Ona mora da bude sastavni deo lanca preživljavanja. HMP odnosno mere ALS (advance life support) su deo lanca koji se u ovom slučaju pokazao kao dobra i čvrsta karika.
Ključne reči: akutni zastoj srca, kardiopulmonalna reanimacija, rana defibrilacija

Broj apstrakta: 036
Tip apstrakta: poster

Trauma kod starih

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Uvod: Tokom poslednjih nekoliko decenija napredak u medicini doveo je do značajnog povećanja procenta stanovništva starijeg od 65 godina. Glavne promene koje se događaju tokom starenja mogu dovesti do različitog odgovora na traumu.
Izvor podataka: Razmatrali smo više od 1250 PubMed publikacija o gerijatrijskoj trauma i smernice za prehospitalno zbrinjavanje povređenih objavljene između Jan 2008-Sep 2015. Pri izboru reeferenci rukovodili smo se nivoom dokaza.
Sinteza pregleda: Tokom starenja se javljaju normalne fiziološke promene i ljudi mogu imati različite zdravstvene probleme. Najvažnija promena u respiratornom sistemu je smanjena efikasnost izazvana izmenama u anatomskoj strukturi grudnog koša i kičmenog stuba i smanjenjem alveolarne površine. Promene u kardiovaskularnoom sistemu povezane sa starenjem su: ateroskleroza, hipertenzija, hipertrofija miokarda, aritmije itd. Kardijalni output je smanjen i ne može da zadovolji povećane potrebe miokarda za kiseonikom u traumi. Takođe, stariji pacijenti obično koriste lekove koji mogu izmeniti njihov odgovor na traumu. Biološko starenje mozga dovodi do cerebralne insuficijencije. Takođe, oslabljen vid i sluh mogu da imaju ulogu u povređivanju i da otežaju komunikaciju i zbrinjavanje starijeg pacijenta. Zbog prisustva nekih stanja ili bolesti, kao što su dijabetes ili hronični bolni sindromi, starije osobe mogu da imaju povećanu ili smanjenu toleranciju na bol. Promene u koštano-zglobnom sistemu uključuju osteoporozu, koja zajedno sa smanjenom snagom mišića može dovesti do multiplih preloma usled dejstva slabe ili umerene sile. Stariji pacijenti su takođe, podložniji hipotermiji i infekciji nego mlađi. Sve ove, starenjem izazvane promene, dovode do potrebe da se prilagodi pristup i tretman u zbrinjavanju starijih povređenih pacijenata.
Zaključak: Procena i zbrinjavanje starijih, povređenih pacijenta ima određene specifičnosti. Brojni medicinski činioci mogu predisponirati starije osobe za traumatska dešavanja i mogu izmeniti njihov odgovor na traumu. Vitalni znaci su nedovoljni indikator stanja kod starijih pacijenta. Rana kontrola disajnog puta, ventilacije i krvarenja, adekvatna imobilizacija i brz transport su najvažniji zadaci u zbrinjavanju starijih povređenih osoba.
Ključne reči: gerijatrijski, trauma, stari.

Broj apstrakta: 037
Tip apstrakta: poster

Parametri aktivacije sistema hitne medicinske pomoći u vanbolničkom srčanom zastoju i odluka o primeni mera CPR-studija EURECA ONE 2014

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Uvod: Srčani zastoj predstavlja konačan nepovoljan ishod kaskade događaja kod mnogih urgentnih medicinskih stanja, često u vanbolničkim uslovima.

Zavod za hitnu medicinsku pomoć Niš se uključio u praćenje problema vanbolničkog srčanog zastoja putem učešća u internacionalnom trajalu EuReCa ONE. Cilj: Cilj ovog istraživanja predstavlja praćenje aktivacije sistema hitne pomoći od trenutka poziva hitnoj službi do utvrđivanja faktora koji utiču na odluku o započinjanju KPR mera u srčanom zastoju. METOD: Praćena je pojava, tretman i ishod vanbolničkog srčanog zastoja u periodu 01. oktobar 2014. – 31. oktobar 2014. godine na teritoriji grada Niša putem proširenog protokola studije baziranog na Utstein matrici izveštavanja. REZULTATI: Prosečno aktivaciono vreme za sve pozive iznosilo je 3 minuta 5 sekundi, od toga 13 sekundi za I red, 1 minut 56 sekundi za II red, 12 minuta 14 sekundi za III red i 10 minuta 50 sekundi za IV red hitnosti ($p<0.05$). Prilikom prijema poziva, stanje svesti bilo je moguće odrediti u 88.9% slučajeva, dok je prisustvo/odsustvo disanja bilo moguće odrediti u 46.0% slučajeva ($p<0.001$). Multivarijantnom analizom parametara koji mogu uticati na primenu KPR mera u srčanom zastoju izdvojili su se red hitnosti ($p<0.001$), podatak o vremenu prestanka disanja ($p<0.001$), inicijalni ritam na monitoru defibrilatora ($p<0.05$), heteroanamnestički podatak o teškoj bolesti ($p<0.05$) i vreme od polaska do dolaska ekipe na lice mesta ($p<0.001$).
Zaključak: Aktivaciono vreme za I red hitnosti je impresivno. Trijažiranje poziva uzimalo je kao glavnu odrednicu stanje svesti dobijeno tokom kratkog intervjua, sa nedovoljnim podacima o kvalitetu disanja. Mere KPR nisu započete kod svih pacijenata kojima je konstatovan srčani zastoj na terenu. Slučajevi koji su trijažirani u najviši red hitnosti, sa podatkom o kraćem proteklom vremenu od prestanka disanja, inicijalnim ritmom na monitoru defibrilatora koji je šokabilan, bez heteroanamnestičkih podataka o teškoj bolesti i kraćim vremenom od polaska do dolaska ekipe na lice mesta imali su značajno veću šansu da KPR mere budu primenjene.

Ključne reči: parametri aktivacije, hmp, cpr

Broj apstrakta: 038
Tip apstrakta: poster

Prikaz slučaja zbrinjavanja traumatizovanog pacijenta

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Uvod: Trauma je vodeći uzrok smrti kod osoba od 1- 44 god., preko 70% svih smrti su osobe između 15 i 24 god. Trauma je kod starih osoba zadržala visoko 8 mesto kao uzrok smrti. Uspešan tretman traumatizovane osobe ne samo da spašava život pacijenta nego i smanjuje u velikom stepenu invaliditet. Preduslov za kvalitetano prehospitalno zbinjavanje je uigranost tima, kvalitetna saradnja sa ostalim spasilačkim službama, kvalitetan tretman i adekvatan transport pacijenta na dalje definitivno zbrinjavanje u hospitalnim uslovima.
Cilj: Prikaz pacijenta koji je pravovremnom i efikasnom reakcijom hitne medicinske pomoći i vatrogasne službe bio zbrinut i transportovan u urgentni centar.
Materijal i Metode: Prikaz slučaja pacijenta iz dostupne dokumentacije: lekarski poziv, knjiga protokola, otpusna lista iz urgentnog centra.
Prikaz slučaja: HMP je pozvana da interveniše zbog pacijenta koji je po rečima očevidaca pao u korito potoka. Lekar na prijemu poziva je pokušao da dobije više podataka ali su osobe koje pozivaju bile agresivne i činilo se da su alkoholisane. Ekipa HMP je upućena na mesto događaja kao prvi red hitnosti a pozvana je i vatrogasna služba koja je krenula odmah po pozovu. Na mesto događaja ekipa stiže nakon 12 min. (udaljenost od grada je 15km). Na mestu događaja ekipa HMP zatiče pacijenta koji se nalazi u rečnom koritu, leži na leđima, između dve stene, svestan, ali konfuzan, sa vidljivom lacerokontuznom ranom koja obilno krvari. Heteroanamnestički dobijamo podatak da je pacijent upao slučajno, pavši sa visine od oko 3m. Nema drugih podatka o padu. Zbog nepristupčnog terena do pacijenta prvo stiže med. sestra i započinje primarni trauma-pregled po sistemu ABCDE. Povreda na glavi je na sredini čela, zvezdastog oblika, prečnika oko 5 cm, i obilno krvari. Prisutan otok oba kapka levog oka. Krvarenje je zaustavljeno digitalnom kompresijom,

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disajni put prohodan, disanje obostrano očuvano. Trbuh, karlica i butne kosti su bezbolne. Postavljena Šancova kragna, otvoren venski put i uključen NaCl 09%. Pripadnici vatrogasne službe su po dolasku pristupili izvlačenju povređenog. Pacijent je postavljen na ferno nosila, međutim kako ne posedujemo sigurnosne kaiševe, pacijent dodatno imobilisan priručnim sredstvima. Izvlačenje povređenog je izvršeno uz pomoć 4 vatrogasca i vozača hmp. Pacijent sve vreme pridržavan od strane medicinske sestre obzirom da je alkoholisan i neadekvatno reaguje na situaciju. Zbog otežanih uslova terena izvlačenje pacijenta je trajalo 1h 05min. U toku transporta sekundarni trauma pregled od strane lekara HMP. Do Klinike za neurohirurgiju pacijent hemodinamski stabilan, bez pogoršanja.
Zaključak: Timski rad u zbrinjavanju traumatizovane osobe je jedan od osnovnih elemenata za uspešnost i efikasnost ekipe HMP. Edukovanost i uigranost svakog člana tima je od posebne važnosti. Medicinska sestra, kada je visoko edukovana i dobro pripremljena za ovu vrstu aktivnosti, može u velikom delu da preuzme odgovornost u postupanju sa traumatizovanom osobom. Saradnja sa drugim službama koje učestvuju u zbrinjavanju traumatizovanih pacijenata je neophodna i iziskuje zajedničke treninge.
Ključne reči: trauma, uloga medicinske sestre

Broj apstrakta: 039
Tip apstrakta: poster

Politrauma - prikaz slučaja

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Uvod: Tema rada je prikaz slučaja pacijenta koji je zbrinjavan na terenu u neobičnim okolnostima povređivanja.
Cilj: Prikazati slučaj pacijenta gde mehanizam povređivanja i klinička slika ukazuju na potencijalno životno ugrožavajuće stanje. Ukazati na neophodnost pravilnog prehospitalnog zbrinjavanja pacijenta kao i potrebu za dodatnim dijagnostičkim procedurama.
Materijal i metode: Uvid u medicinsku dokumentaciju Zavoda za hitnu medicinsku pomoć Niš, poziv za lekarsku intervenciju i lekarskog izveštaja sa terena. Uvid u medicinsku dokumentaciju pacijenta iz Urgentnog centra, Neurohirurške klinike i Instituta za radiologiju Kliničkog centra Niš kao i Klinike za maksilofacijalnu hirurgiju.
Prikaz slučaja: 28.06.2014.god u 21:35h je upućen poziv na 194 od strane komšije pacijenta. Dat je opis da je stariji čovek zaglavljen u liftu koji se nalazi između spratova. Postavljena je sumnja da je bez svesti a zna da boluje od šećerne bolesti. Poziv je obeležen kao drugi red hitnosti. Dispečer Zavoda za hitnu medicinsku pomoć u 21:37h upućuje terensku ekipu ka mestu događaja.
Pacijent Đ.D. 77 godina, je zatečen u malom liftu zgrade koji je zaustavljen između spratova. Pacijent nije dostupan za pregled jer se nalazi priklješten policom koju je pokušao da unese u lift. Uočava se kosmati deo glave, vidljiva je i desna ruka koja ima diskretne pokrete. Pacijent je od poda lifta odvojen oko 20 cm i visi u vazduhu. Ne odgovara na pozive. Uz pomoć vatrogasaca i službe za održavanje liftova, pacijent izvađen uz manuelnu stabilizaciju vratnog dela kičme, postavljen na ferno nosila. Pacijent je bez svesti a nakon postavljanja u ležeći položaj vraća svest i počinje da povraća. Disanje je očuvano obostrano. Vitalni parametri su u granicama normale TA:120/80mmHg, SF: 80/min, RF: 10-14/min, ŠUK: 13,9 mmol/L. Opštim pregledom tela nema palpatorno bolne osetljivosti trbuha, karlice i ekstremiteta. Zbog mehanizma povređivanja i kliničke slike pacijent je procenjen kao kritičan i započet je transport do Urgentnog centra Kliničkog centra. Tokom transporta je nastavljeno sa zbrinjavanjem pacijenta, postavljena IV linija i dat rastvor NaCl 0,9% 500ml, 02 12 l/min i održavana manuelna stabilizacija vratne kičme. Uputne dijagnoze su postavljale sumnju na kontuzione povrede predela vrata, grudnog koša i abdomena. Po dolasku u urgentni centar sprovedena dalja dijagnostika i zatraženi konsultativni pregledi specijalista klinike za neurohirurgiju i maksilofacijalnu hirurgiju. Načinjen je MSCT endokranijuma, vratne kičme, toraksa i abdomena na kojem nije utvrđeno postojanje traumatskih lezija. Nakon konsultativnih pregleda, pacijentu je data preporuka za analgetsku

terapiju i AT zaštitu, nakon čega je upućen na kućno lečenje.
Zaključak: Uvidom u medicinsku dokumentaciju pacijenta, moguće je propratiti sled događaja od poziva građana na telefon 194, aktivacije ekipe Zavoda za hitnu medicinsku pomoć Niš, sam tok intervencije i zbrinjavanje pacijenta na terenu koji je procenjen kao kritičan i po tim principima i zbrinjavan a nakon prijema pacijenta ima se uvid u izvedena dijagnostička ispitivanja i terapijske preporuke.
Ključne reči: trauma, mehanizam povređivanja, dijagnostika

Broj apstrakta: 040
Tip apstrakta: poster

Moralna i etička pitanja vezana za kardiopulmonalnu reanimaciju

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Uvod: U čitavoj medicinskoj praksi nema uzbudljivije i dramatičnije situacije od one kada se zdravstveni radnik nađe uz pacijenta kod kojeg je došlo do naglog poremećaja njegovih vitalnih funkcija.
Cilj rada: je prikazati moralne i etičke probleme sa kojima se susrećemo pre, tokom ili posle kardiopulmonalnoj reanimaciji.
Izvor podataka: Pretraga materijala internet pretraživača Cobson, PubMed, pisana literature domaćih i inostranih stručnih publikacija.
Izbor podataka: po ključnim rečima i relevantnosti
Sinteza podataka sa diskusijom: u prošlim vremenima se malo toga moglo učiniti za produženje ljudskog života. Moć današnje medicine da odloži smrt, stvorila je teška moralna i etička pitanja. Odluka kada započeti, kada prestati ili odustati od započete kardiopulmonalne reanimacije važan je problem medicinskih stručnjaka, bolesnika, članova porodice i pravnika. U suvremenom društvu, obeleženom pluralizmom nadzora i delovanja, gde nije uvek jasno što je dobro a šta loše, nije jednostavno biti medicinska sestra tehničar i biti u službi zdravlja i života. Sa pravom se ističe autonomija savesti i odluke pacijenta.
Zaključak: Važno je imati na umu da cilj kardiopulmonalne reanimacije nije produžavanje života onda kada ne postoji nikakva nada za ozdravljenjem, i vraćanjem kvaliteta života. Ozdravljenje je cilj kome se teži uz vraćanje dostojanstvenom životu pacijenta a ne samo puko vegetiranje.
Ključne reči: etika, moral, kardiopulmonalna reanimacija

Broj apstrakta: 041
Tip apstrakta: poster

Ulcus cruris – tretiranje otvorene rane fibrinskom membranom

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Uvod: Ulcus cruris venosum je otvorena rana nastala zbog loše cirkulacije u venskom sistemu, najčešće lokalizovana na potkolenicama. U Srbiji kao i u svetu, sve je veći broj pacijenata sa ovim problemom. Osnovni problem u dosadašnjem tretmanu ulcus crurisa ogledao se u načinu obrade a naročito u period oporavka koji je zahtevao od samog pacijenta ali i članova porodice veliku angažovanost.
Cilj: Ukazati na prednosti obrade otvorene rane ulcus crurisa fibrinskom membranom u odnosu na dosadašnje, konvencionalne metode
Materijal i metodologija: Retrospektivna analiza literature sa odrednicama: ulkus cruris, fibrinska membrane, lečenje.
Izvor podataka i izbor materijala: Pretraživanje je vršeno kroz: PubMed, Medline i elektronske časopise dostupne preko KoBSON-a kao i litratura raspoloživa u biblioteci Medicinskog fakulteta u Nišu
Rezultati sinteze. U Srbiji sa ovim problemom postoji, prema nekim statističkim podacima, oko 2,5-3% stanovništva. Žene boluju češće od muškaraca. Najčešća starosna granica je između 40-45 god, odnosno u populaciji radno sposobnog stanovništva. Preko 30% pacijenata sa hroničnim venskim čirom se leči duže od 20 godina a oko 10% duže od 30 godina. Venski čir potkolenice čini između 57% i 80% svih hroničnih ulceracija u Srbiji.

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Preporuka dermatologa i vaskularnih hirurga u lečenju ulceracija je medikamentozna ili hirurška, gde se insistira na rekonstrukciji vena i zalistaka, valvuloplтka i sl. (Vodič za lečenje hronične venske isuficijencije Prim. Dr.Javorka Delić, spec.dermatologije). Dosadašnji pristup lečenju rana ulcus crurisa (konvencionalni pristup) podrazumevao je tretman prahom acidi-borici sa osnovnim ciljem stvaranja kisele sredine a sve u cilju zarastanja rane. Ova metoda je bila bolna i neprijatna za samog pacijenta i podrazumevala je dug period oporavka uz redovnu toaletu rane, previjanje uz procentualno manju uspešnost u konačno izlečenje. Korišćenje fibrinske membrane u obradi rane je znatno konforniji za pacijenta sa znatno većim procentom uspešnosti u potpuno zarastanje otvorenih rana. Fibrinska membrane se dobija iz krvi pacijenta, koji ima problem sa ulcusom. Uzeti uzorak krvi se tretira posebnom procedurom kojom se kao krajnji proizvod dobija firbinska membrane obogaćena trombocitima i faktorima rasta i manjim brojem matičnih ćelija. Formirana fibrinska membrane postavlja se na očišćenu ranu, koja nije pod upalnim procesom. Membrana ostaje na rani 5-10 dana nakon čega se nastavlja sa previjanjem, bez primene antibiotika, povidon-joda ili rivanola sledećih nekoliko dana. Period oporavka i zarastanja kreće petog dana od postavljanja membrane i nastavlja se ubrzano u sledeća dva meseca kada je neophodno ponoviti tretman. Potpuno zarastanje, zavisno od veličine rane, očekuje se u sledeća dva meseca. Ukupan period zarastanja rane ne bi trebalo da traje duže od 4 meseca. Ovakav način tretmana otvorenih rana je konforniji za samog pacijenta u odnosu na konvencionalni.

Zaključak: Otvorene rane ulcus crurisa mogu biti vrlo problematične i komplikovane i do sada su se uglavnom teško i dugo lečile i najčešće neuspešno. Tretiranje ulcusa fibrinskom membranom može prestavljati novi uspešniji ali i jeftiniji način u lečenju ovih hroničnih rana.

Ključne reči: ulkus cruris, fibrinske membrane, lečenje

Broj apstrakta: 042
Tip apstrakta: poster

Akutni abdomen-prehospitalno zbrinjavanje

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Uvod: Bol u abdomenu je jedan od najčešćih razloga zbog čega timovi hitne medicinske pomoći intervenišu, kako na terenu tako i ambulanti, odnosno opsevaciji hitne medicinske pomoći. Prema našoj statistici, taj procenat varira od 20-45% u zavisnosti od perioda u godini.

Cilj: Ukazati na značaj poznavanja definicije, etiologije, osnovnih karakteristika akutnog abdomena, prepoznavanje, pristup i ulogu medicinske sestre u zbrinjavanju pacijenata sa bolom u trbuhu i sumnjom na akutni abdomen.

Materijal i metodologija: Retrospektivna analiza literature sa odrednicama: bol u grudima, akutni abdomen prehospitalni tretman, uloga medicinseke sestre/tehničara.

Izvor podataka i izbor materijala.

Pretraživanje je vršeno kroz: PubMed, Medline i elektronske časopise dostupne preko KoBSON-a kao i litratura raspoloživa u Biblioteci Medicinskog fakulteta u Nišu

Rezultati sinteze: Pojam akutnog abdomena podrazumeva skup raznorodnih kliničkih entiteta. On obuhvata sva ona patološka stanja u trbušnoj duplji koja, zbog svoje kliničke slike, ozbiljnosti patološkog supstrata i progresivne evolucije, zahtevaju neodložnu hospitalizaciju, preduzimanje odgovarajućih mera reanimacije i intenzivne terapije. Ipak treba naglasiti da je postavljena dijagnoza akutnog abdomena izraz trenutne i privremene dijagnostičke insuficijentnosti. Iako postoji veliki broj definicija koje determinišu pojam akutnog abdomena, sažeto posmatrano, mogla bi se prihvatiti ona definicija po kojoj ovaj pojam obuhvata tri osnovna sindroma: Sindrom peritonitisa, Sindrom ileusa, Sindrom intraabdominalnog krvarenja. Bolesnik sa razvijenom kliničkom slikom akutnog abdomena je teško pokretan ili potpuno nepokretan, adinamičan, malaksao, bez apetita, povijen je u struku i jednom ili obema rukama drži se zatrbuh. Kada se postavi u ležećipoložaj, noge drži povijene u kolenima i

kukovima (zauzima antalgični položaj). Bled je, uplašen, obloženog jezika, ubrzanog i filiformnog pulsa, ubrzanog disanja, subfebrilan ili febrilan, i sa izraženim abdominalnim facijesom (facies abdominalis s. Hypoccrati). Jedino se kod bilijarnog peritonitisa, a usled inhibitornog efekta resorbovanih žučnih soli na sprovodni system miokarda, javlja bradikardija). Blede beonjače mogu ukazivati na intraabdominalno krvarenje, dok subikterus sclera može biti znak bilijarnog peritonitisa. Lividne mrlje po trupu mogu ukazivati na mezenterijalnu trombozu, na akutni hemoragično-nekrotični pankreatitis, ali se mogu sresti i u terminalnim (ireverzibilnim) stanjima perifernog cirkulatornog kolapsa. Vidljiva nadutost trbuha u ležećem položaju najčešće ukazuje na crevnu okluziju (ileus), ali može biti i znak akutnog intraabdominalnog krvarenja ili prisustva druge slobodne tečnosti u trbuhu (ascites). Vodeći (dominantan) lokalni znak kod akutnog abdomena jeste - bol u trbuhu. U kliničkoj slici akutnog abdomena treba uvek razlikovati dve osnovne grupe simptoma i kliničkih znakova: opšti simptomi i znaci, lokalni simptomi i znaci. Dijagnoza se postavlja na osnovu dobre procene težine stanja i ugroženosti pacijenta, a na osnovu anamneze i kliničkog pregleda. Dostupne dijagnostičke metode u opservaciji ZHMP Niš su: EHO abdomena; LAB.analize: (krvna slika, LE formula, HCT): Terapijski postupak (nadoknada cirkulatornog volumena) i simptomatska terapija bez KUPIRANJA BOLA!, a zatim hitan transport na hirušku kliniku.
Zaključak: Adekvatan inicijalan pristup pacijentu sa akutnim abdomenom, povećava procenat pozitivnog ishoda nakon hospitalizacije i hiruškog lečenja istog. Posto se akutni abdomen različito razvija i zavisi od samog uzroka, od strane medicinskog tehničara potrebno je dobro poznavanje osnovnih simptoma, što bi doprinelo adekvatnom pristupu i prehospitalnom zbrinjavanju istog.

Ključne reči: bol, abdomen, prehospitalni pristup

Broj apstrakta: 043
Tip apstrakta: poster

Razvoj dispečerskog centra u svetu

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Uvod: Dispečerski centar Hitne medicinske pomoći je profesionalni telekomunikator, sa zadatkom prikupljanja informacija vezanih za hitnu medicinsku pomoć, pružanje pomoći i uputstvo glasom pre dolaska hitne medicinske pomoći, slanje i podrška ekipama HMP. Za obavljanje poslova dispečera u najvećem broju zemalja potreban je i određeni certifikat, nivo edukacije i profesionalna oznaka koja se stiče kroz edukaciju u Nacionalnim dispečerskim akademijama i drugim vidovima obrazovanja.
Cilj: Prikazati razvoj dispečerskog centra u svetu.
Materijal i metodologija: Retrospektivna analiza literature sa odrednicama: razvoj, dispečerski centar, hitna medicinska pomoć.
Izvor podataka i izbor materijala. Pretraživanje je vršeno kroz: PubMed, Medline i elektronske časopise dostupne preko KoBSON-a kao i ostale raspoložive literature.
Rezultati sinteze: Dispečerski centar je oduvek bio karakteristika HMP. Prepoznavanje problema, obrada informacija i lociranje pacijenta su osnovni zadaci dispečerskog centra. Na samom početku pozivaoc bi javljao problem, ekipa odlazila na poziv i po završetku se vraćala u stanicu da čeka sledeći poziv. Pedesetih godina dvadesetog veka bilo je retkih pokušaja da se koristi radio veza u komunikaciji. Nova era razvoja počinje 1950 godkada upotreba radio veze počinje da biva korišćena širom USA i Kanade. U samom početku dispečerski centar je formiran zavisno od ustanova koje su se bavile pružanjem pomoći. Nekada je to bio grad, vatrogasna služba ili bolnica. U jednom broju slučajeva kod nezavisnih hitnih pomoći dispečer bi bio član porodice vlasnika te hitne pomoći i njegove kvalifikacije nisu zahtevale dodatno obrazovanje osim poznavanja ulica i lokalne geografske situacije. Jedinstveni broj uveden je u Kanadi 1959 a 1967 u SAD, ali je pokrivanje celokupne teritorije trajalo do 2008. Trenutno, jedinstvenim brojem nije pokriveno 4 % teritorije

SAD. Pozivanjem jedinstvenog broja, poziva se i vatrogasna služba i policija I to je postalo poznato kao Public-safety answering point (PSAP). Tehnologija se dalje razvijala i u jednom trenutku uvedene su 'zatvorene-locked' telefonske linije, koja onemogućavaju slučajno prekidanje hitnog poziva, kao i automatska identifikacija brojeva Automatic Number Identification / Automatic Location Identification (ANI/ALI), koji omogućava dispečeru da proveri broj (sprečavanje lažnih poziva), i identifikuje lokaciju sa kog stiže poziv. Princip - poslati najbližu ekipu koja će intervenisati kod pacijenta koji je životno ugrožen. Ovaj proces je uslovio potrebu za razvojem protokola za trijažu pacijenata. Prvi takav trijažni protokol pojavio se 1975, u Fenixu. Od tada su se razvili Medical Priority Dispatch System (MPDS), APCO (EMD) i PowerPhone's Total Response Computer aided call handling system (CACH). Prvi sistemi su u početku bili prilično jednostavni. Razvoj sistema u kojima informacije ekipi stižu pre stizanja na mesto dogadjaja i dalje ekipe mogu na prvi red da stignu u najboljim slučajevima u okviru prvih 8 min od poziva. Edukovan dispečar za razliku od tima može da pruži uputstva u prvim sekundama od poziva. Tako je razvijen Dispatch Life Support.
Zaključak: Razvoj Dispečerskog centra u mnogome zavisi od razvoja elektromske opreme. Potreba da se što adekvatnije odgovori potrebama pacijenata uslovilo je razvoj sistema za prijem poziva. Saznanje kako sistemi funkcionišu u svetu uticaće na donošenje odluka u kom pravcu će se dispečerski sistem i razvijati u našoj zemlji.
Ključne reči: dispečerski centar, razvoj

Broj apstrakta: 044
Tip apstrakta: poster

Febrilne konvulzije - prikaz slučaja

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Uvod: Konvulzije predstavljaju najčešće toničko-kloničke kontrakcije skeletne muskulature ali mogu da se jave i obliku gubitka tonusa muskulature, kao senzorni ispadi (parestezije, bol), vegetativni (povraćanje, znojenje, salivacija) ili u obliku apsansa. Najčešće nastaju kod porasta temperature ali mogu i kod pada temperature. Često postoji porodično opterećenje ovih bolesnika. Javljaju se u uzrastu od 6 meseci do 6 godina i više kod dečaka. Ponavljene konvulzije se sreću u 20% do 30%.
Cilj: Prikaz slučaja deteta sa generalizovanim febrilnim konvulzijma, koji zatim prelaze u parcijane epi napade uz očuvanu svest deteta i uloga medicinske sestre u lečenju.
Materijal i metode: Uvid u medicinsku dokumentaciju Zavoda za hitnu medicinsku pomoć Niš, poziv za lekarsku intervenciju i lekarskog izveštaja iz ambulante. Uvid u medicinsku dokumentaciju pacijenta sa Dečije Interne Klinike.
Prikaz slučaja: U kasnim popodnevnim satima otac i baka donose u ambulantu ZHMP muško dete staro 4,5 god. Pri prvom kontaktu uočavamo da dete odgovara uzrastu, normalno je uhranjno i bez svesti je sa prisutnim klonično toničnim grčevima celog tela. Pogled je fiksiran u levu stranu. Lako je cijanotično bez pene na ustima. Dobijamo podatak da se slična stvar desila jos jednom u dečakovoj trećoj godini i da je i tada imao visku temperaturu. Sada nisu primetili da ima povišenu temperaturu, samo su videli da je pao. U ovakvom je stanju više od deset minuta. Započet brz pregled, gde se registruje povišena TT, respiratorna infekcija, ordinira se terapija: Supp Efearalgan 150mg, Supp Diazepam 2mg, osiguran IV put IV braunilom 22G. Oxigenoterapije 6L/min. U toku sledećih desetak minuta, generalizovani napadi prestaju ali ostaju parcijalni napadi na levoj strani tela pri čemu je dete svesno i odgovara na pitanja. Dete se zatim u pratnji ekipe transportuje do DIK.
Diskusija: Febrilne konvulzije predstavljaju urgentno stanje koje roditelje izuzetno uplaše a needukovano i neiskusno medicinsko osoblje mogu da uznemire i dovedu do površnog i neadekvatnog odgovora. Medicinska sestra, kod ovih pacijenta, mora da zna niz postupaka i njena uloga je od neprocenjive vrednosti. Postupci koji se očekuju od sestre: merenje telesne temperature (u najvećem broju slučajeva rektalno), priprema deteta za pregled, asistiranje pri pregledu, postavljanje IV linije, oxigenoterapija, obezbeđenje disajnog puta, aplikacija leka, uključivanje infuzione terapije.
Zaključak: Uloga medicinske setre u zbrinjavanju deteta sa konvulzijama je od neprocenljive važnosti. Njene reakcije moraju biti brze, mirne i adekvatne. Svojim ponašanjem šalje poruku i roditeljima, koji

u neviđenom strahu, da će sa njihovim detetom biti sve u redu. Timski rad kao i u drugim zbrinjavanjima teških stanja ima prednost.

Ključne reči: febrilne konvulzije, uloga medicinske sestre

Broj apstrakta: 045
Tip apstrakta: poster

Kardiopulmonalna reanimacija vođena telefonom

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Uvod: Vanbolnički srčani zastoj je značajan zdravstveni problem u većini razvijenih zemalja. Uprkos nacionalnim i internacionalnim vodičima za kardiopulmonalnu reanimaciju (KPR) ukupno preživljavanje pacijenata sa primarnim van bolničkim srčanim zastojem (VBSZ) je 7,6% i nepromenjeno je u poslednjih trideset godina. Većina VBSZ se dešava u prisustvu svedoka, a samo jedan od pet očevidaca započinje reanimaciju. Telefonski vođena KPR (T-KPR) se pokazala kao efikasna mera za povećanje stope preživljavanja u slučajevima VBSZ. U Sjedinjenim Američkim Državama u 200000 od 300000 slučajeva VBSZ očevidac ne započinje KPR. Primena T-KPR ima potencijal da sačuva hiljade života svake godine.

Cilj rada: Prikaz i analiza metode telefonski vođene KPR .

Metode i material: Baza podataka BioMed Central, Pubmed, Kobson.

Rezultati i diskusija: T-KPR se definiše kao niz instrukcija koje dispečer hitne pomoći pruža telefonom kako bi se povećala mogućnost da očevidac pokrene KPR. Dispečer hitne pomoći treba da prođe obuku u prepoznavanju srčanog zastoja i davanju konkretnih i jasnih upustava iz osnovne životne potpore. Preporučena strategija za primarni srčani zastoj je reanimacija samo sa kompresijama grudnog koša. U preporukama su uključeni i slučajevi sa opstrukcijom disajnog puta stranim telom. Izrađene su dve vrste protokola: za odrasle i decu. Osnovni preduslovi za izradu preporuka su: Kratke poruke koje sadrže ključne reči; Lako razumljive i izgovorene prostim jezikom; Izvodljive radnje od strane laika u teskim uslovima; Prezentacija u vidu postera koji sadrži korake koji se lako prate, uz stavljanje akcenta na ključne aktivnosti.

Zaključak: Prvi problem koji doprinosi niskoj stopi preživljavanja VBSZ je nespremnost očevidaca da otpočnu reanimaciju. Telefonska podrška očevicu srčanog zastoja od strane dispečera hitne pomoći povećava mogućnost preživljavanje ovih bolesnika. Razvoj jedinstvenog protokola za T-KPR na nivou svih hitnih službi, je prvi korak ka postizanju veće stope preživljavanja VBSZ, a obuhvata proces pripreme dokumenta sa preporukama i uputstvima za T-KPR kao i njihovu prezentacija u vidu postera, plakata i bilborda kao i uz dobru medijsku

Broj apstrakta: 046
Tip apstrakta: poster

Edukacija dispečera u službama hitne medicinske pomoći u svetu i kod nas

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Uvod: U Službama Hitne Medicinske Pomoći (SHMP) u našoj zemlji, zavisno od organizacije službe, rade uglavnom lekari (u Zavodima za hitnu medicnsku pomoć), a medicinske sestre/tehničari u službama koji pokrivaju manji proctor. U našoj zemlji ne postoji zvanična edukacija za ovo radno mesto. Uobičajeno je da se na ova radna mesto postavljaju radnici imaju veliko radno iskustvo na terenu, poznaju hronične pacijente i geografski prostor. Često su ovi radnici, zbog hroničnih bolesti u nemogućnosti da budu sastavni deo terenske ekipe, te se njihov rad na dispečerskom mestu smatra tradicionalno dobrim rešenjem. Međutim, ubrzan razvoj tehnologije, izmena u načinu komunikacije, potreba za uvođenjem protokola kao i veća očekivanja od strane stanovništva sve vise ukazuju na potrebu za formiranjem jasnih stavova o edukaciji ovog profila u zdravstvu.

Cilj: Ukazati na potrebu uvođenja zvanične edukacije za posao dispečera u HMP.

Materijal i metodologija: Retrospektivna analiza literature sa odrednicama: dispečer, edukacija.

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Izvor podataka i izbor materijala. Pretraživanje je vršeno kroz: PubMed, Medline i elektronske časopise dostupne preko KoBSON-a.
Rezultati sinteze:
Zvanična edukacija za dispečera u svetu postoji kroz određene kurseve koji imaju za cilj da doprinesu bezbednom i efikasnom obavljanju posla dispečera u Emergency Medical System (EMS). Smernice za osnovni sadržaj ovih kurseva u USA, standardizuju se kroz organizaciju American Society for Testing and Materials (ASTM). Ove smernice obezbeđuju ciljeve za dalju obuku i sertifikaciju edukacije dispecera. U kontekstu ovog širokog cilja, ASTM trening je generalno najmanje 24h ukupno tj (tri puta po 8h dnevno). Tipičan kurs se sastoji od prikaza dispečerskih ciljeva i savladavanja osnovnih tehnika, usmeravajući obuku ka poznatim problematičnim oblastima. Uloga dispečera je definisana, a koncepti medicinskog delovanja se raspravljaju u detalje. Protokol za slanje ekipa na teren obično je uveden od strane vlasnika EMS agencije. Kod kandidata za dispčera insistira se na ispitivanju njegove sposobnosti poštovanja tog protokola, kao i na sposobnost pružanje uputstva pozivaocu dok ne stigne ekipa. Na kursu se analiziraju uobičajeni zdravstveni problemi, sa naglaskom na ispitivanju specifičnosti za svaku vrstu problema. Potencira se usvajanje stave o važnosti pružanja adekvatnih uputstava pozivaocu u urgentnim stanjima do stizanja ekipe. Tokom obuke, značajno je da polaznik kursa identifikuje prisustvo ili odsustvo simptoma (kao što su "bol u grudima"). Postavljanje sumnje na takvu dijagnozu bez ovih pitanja nema nikakvog smisla.
Medicinski značaj različitih nivoa hitnosti za svaku vodeću tegobu daju učeniku mogucnost da odredi brzo prioritet različitih vrsta incidenata sa kojima se suočava dispečerska služba. Često, kursevi koriste simulacione zadatke da bi dispečer imao realni osecaj o karakteristikama protokola. Formalnim ispitivanjem i praktičnim delo razumevanja i asimilacija nastavnog plana i programa završava se obuka. Ovo omogucava formalnu sertifikaciju.
Zaključak: Preporučuje se da obuka bude sprovedena za sve medicinske dispečere, da se osnovni sadržaj nastavnog plana i programa ne menja i da bude formiran na nacionalnom nivou. U službama mora biti odabran od stranemedicinskog direktora agencije.

Ključne reči: dispečer, edukacija, prijem poziva.

Broj apstrakta: 047
Tip apstrakta: poster

Akutna trovanja kod dece

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Uvod: incidenca trovanja kod dece je 450/100.000, najčešća kod dece mlađih od 6g, nešto vise devojčica a 11% dece zbog trovanja zahteva medicinski tretman, Na sreću smrtnost usled trovanja je mala– 0,005%. Akutna tovanja nastaju u toku kratkog, često trenutnog jednokratnog unošenja velike količine otrova u organizam – jelom, pićem, udisanjem, dodirom preko kože. Predstavljaju urgentno stanje čak kada su prvi simtomi blagi zahevaju opservaciju i pažljiv pristup.
Cilj: Ukazati na važnost dispečera kao prve karike u trenutku prijema poziva u slučajevima trovanja dece.
Izvor podataka i izbor materijala. Pretraživanje je vršeno kroz: PubMed, Medline i elektronske časopise dostupne preko KoBSON-a.
Rezultati sinteze: Najveći broj trovanja se dese u kući ili sredini u kojoj dete najčešće i boravi. Ovo ustvari i ukazuje da su glavni krivci za ovakve događaje roditelji i staraoci, odnosno osobe koje ih čuvaju a često su to bake i deke. Ta činjenca i objašnjava dostupnost dece širokoj lepezi najrazličitijih lekova, pre svega za kardiovaskularne bolesti. Uloga lekara ili medicinske sestre na prijemu poziva je da postavi ciljana pitanja vezana za izgled i ponašanje deteta, detektuje potencijalni izvor trovanja, da da rešenje za datu situaciju (laicima i svim ostalim kategorijama zdravstvenih radnika), pošalje odmah edukovanu ekipu, ukoliko postoji mogućnost sa pedijatrom. Lekar na prijemu mora da uputi pozivaoca na tri osnovne stvari: da ukoliko je bez svesti ne daju detetu ništa na usta, da pokušaju da utvrde da li ima sumnjive supstance (koju treba da sačuvaju i ponesu sa sobom), i ako je kontakt otrovne supstance preko kože, obilnom količinom vode speru s deteta do dolaska ekipe. Smiren glas i jasna uputstva pozivaocu su preporuka za sve pozive a pogotovu za ovu

situaciju. U toku intervenisanja ekipe HMP i ukoliko je poznata otrovna supstanca dispečer može da uštedi vreme i pozove instituciju koja se bavi trovanjem (u Srbiji, to je Nacionalni centar zatrovanje VMA) kako bi dobio bliža uputstva o uzročniku, simptomima i načinu primarnog tretmana i da radio vezom prosledi informacije. U slučaju da dobije podatke o prestanku disanja, dispečar može da počne sa upućivanjem pozivaoca da započne postupke kardiopulmonalne reanimacije.

Zaključak: Dispečer je prva karika u zbrinjavanja svih urgentnih stanja. Akutna trovanja dece su stanja koja predstavljaju potencijalno stanje opasno po život, roditelji i druge prisutne osobe svojim strahom dodatno opterete naš rad. Dispečer kao prva karika svojim adekvatnim reagovanjem omogućava započinjanje kvalitetnog zbrinjavanja otrovanog deteta.

Ključne reči: deca, trovanja, prijem poziva

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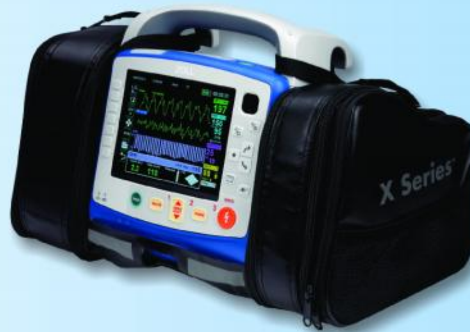

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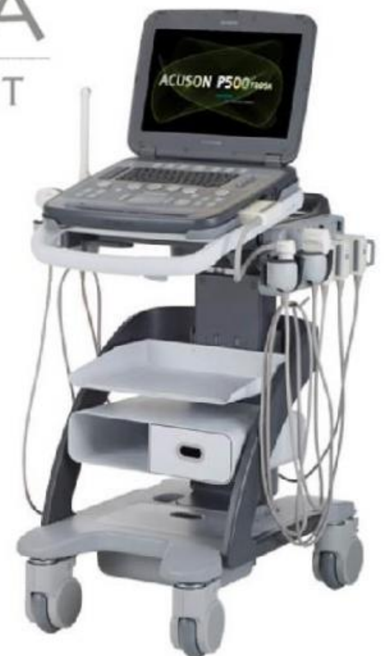

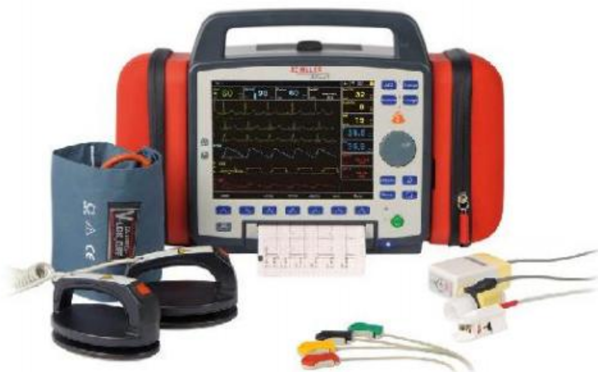

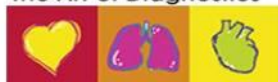

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