P-1

THE MICROCIRCULATORY EFFECTS OF LOW TO MEDIUM DOSE VASOACTIVE AGENTS DETECTED BY TISSUE OXYGENATION IN SEVERELY SEPTIC PATIENTS

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Although microcirculation is the main regulatory mechanism of hemodynamics in septic shock, microcirculation is the one that delivers oxygen to the tissues. We aimed to detect the changes of microcirculation by the usage of vasoactive agents in severe septic shock patients.

Method and Material: 51 patients (18-80 years) with severe sepsis (SAP<90mmHg) were included the study. The subcutaneous microcirculation (StO2) was assessed by using near-infrared spectroscopy (NIRS) at the thenar eminence (InSpectra, Model 300; Hutchinson Tec. Inc., USA).

Hemodynamic variables as well as the microcirculation values were recorded before and after the volume replacement (250ml/hour). Patients in whom the SAP was elevated > 90mmHg after a few hours volume replacement and the ones who died during the study period were excluded from the study (n=11). Vasoactive agents were given in the order below; each regimen for an hour, while recording the hemodynamic and microcirculatory measurements.

Dopamine 5µg/kg/min; Dopamine 7.5µg/kg/min; Dopamine 7.5µg/kg/min+ Nitroglycerine 20 µg/min; Dopamine 7.5 µg/kg/min+ Nitroglycerine 50 µg/min.

Kolmogorov-Smirnov, Chi-Square test and t-test were used for statistical analysis

Findings: Mean arterial pressure (MAP) and StO2 (%) values were recorded as (mean±SS); in basal: 55.7±6,5 / 79.6±2.5; with Dopamine 7.5µg/kg/min; 65.2±7.5 / 82.5±3; with Dopamine 7.5µg/kg/min+ Nitroglycerine 20 µg/min; 71.4±6.8 / 85.6±2.8; with Dopamine 7.5 µg/kg/min+ Nitroglycerine 50 µg/min; 69.5±9.4/ 84.5±3.1.

Results: It has been observed that in the severely septic hypotensive patients, dopamine in increasing dosages has positive impacts on microcirculation by increasing mean arterial pressure (MAP); adding Nitroglycerine 20 µg/min to dopamine has no advantage in terms of microcirculation and adding Nitroglycerine 50 µg/min actually decreases StO2 values by reducing MAP.

References

P-2

THE EFFECT OF ULTRASOUND- GUIDANCE ON CENTRAL VENOUS CATHETER-ASSOCIATED BLOOD STREAM INFECTION IN CRITICAL CARE PATIENTS

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We performed a study to compare USG guided central venous cannulation (CVC) with conventional anatomical landmark approach to CVC in terms of access time, the average number of attempts, the rate of mechanical complications and the incidence of CVC- associated blood stream infection (CVC-BSI).

Method and Material: In this randomized study, after approval from our hospital ethical committee, 97 critical care patients who underwent real-time ultrasound-guided cannulation (Grup II) of the internal jugular vein were prospectively compared with 97 critical care patients in whom the landmark technique (Grup I) were used. The parameters studied included average access time, time for insertion, attempts required, and complications encountered.

Findings: There were no significant differences in gender, age, body mass index, APACHE II, side of cannulation (right or left) or in the presence of risk factors for difficult venous cannulation between the two groups of patients (p>0.005). Average access time (skin to vein), total insertion time, number of attempts, mechanical complication rate, CVC-BSI were significantly reduced in the Grup I of patients compared with the Grup II (p<0.005) (Table I).

Results: The present data suggest that USG guided catheterisation of the JLV offers the advantage of a reduced number of successful attempts and therefore has a lower mechanical complication rate and may result in a lower incidence of CVC-BSI compared with the landmark technique.

Table I: Outcome measures in the Grup I versus Grup II

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Grup I (n = 97)</th>
<th>Grup II (n=97 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (s)</td>
<td>9.9±12.9</td>
<td>18.8±19.3</td>
</tr>
<tr>
<td>Total time (sn)</td>
<td>65.4±16.9</td>
<td>83.1±31.9</td>
</tr>
<tr>
<td>Average number of attempts</td>
<td>1.2±0.5</td>
<td>1.5±0.7</td>
</tr>
<tr>
<td>1. attempt</td>
<td>81 (%83.5)</td>
<td>60 (%61.9)</td>
</tr>
<tr>
<td>2. attempt</td>
<td>10 (%10.3)</td>
<td>21 (%21.6)</td>
</tr>
<tr>
<td>3. attempt</td>
<td>6 (%6.2)</td>
<td>16 (%16.5)</td>
</tr>
<tr>
<td>Mechanical Complications</td>
<td>5(%5.2)</td>
<td>28 (28.9)</td>
</tr>
<tr>
<td>Carotid Puncture 1%</td>
<td>1(%1.0)</td>
<td>15 (%15.5)</td>
</tr>
<tr>
<td>Pneumothorax 0%</td>
<td>2(%2.1)</td>
<td>2 (%2.1)</td>
</tr>
<tr>
<td>Hemorrhage 2(%)</td>
<td>2(%)</td>
<td>2(%)</td>
</tr>
<tr>
<td>Duration of catheter (day)</td>
<td>10.1±5.8</td>
<td>10.5±5.2</td>
</tr>
<tr>
<td>CVC-BSI</td>
<td>2 (%)</td>
<td>10 (%10.3)</td>
</tr>
<tr>
<td>Staph.aureus 0</td>
<td>3 (%1.4)</td>
<td></td>
</tr>
<tr>
<td>KNS 0</td>
<td>4 (%4.1)</td>
<td></td>
</tr>
<tr>
<td>Entererekok 1%(1)</td>
<td>0(%)</td>
<td>0(%)</td>
</tr>
<tr>
<td>Klebsiella 1%(1)</td>
<td>2 (%2.7)</td>
<td>2(%)</td>
</tr>
<tr>
<td>Acinetobacter 0</td>
<td>1(%)</td>
<td>1(%)</td>
</tr>
</tbody>
</table>
THE EFFECTS OF THEOPHYLLINE AND METHYLPREDNISOLONE ON THE BIOMECHANICS AND HISTOPATHOLOGY OF DIAPHRAGMA MUSCLES

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In the current study, we aimed to investigate the effects of theophylline and methylprednisolone, which are frequently used in clinics and which have different effects on the respiratory system and on the biomechanics and histopathology of the diaphragm muscle.

Method and Material: The study included four groups of rats. Group T received 1 mg/kg of intraperitoneal theophylline, Group M received 2 mg/kg of intraperitoneal methylprednisolone, Group TM received 1 mg/kg of intraperitoneal theophylline plus 2 mg/kg of intraperitoneal methylprednisolone, and Group K received 1 ml of intraperitoneal isotonic solution. The medications were continued for 7 days in each group. The rats underwent cervical dislocation under anesthesia on the 8th day, and their diaphragm samples were extracted. The left hemidiaphragm was used for the investigation of biochemical parameters, and the right hemidiaphragm was used for the histopathological evaluation.

Findings: It was observed that the medication administered in Group T increased the contraction strength and duration compared with that in Group M. Additionally, the duration of semi-relaxation was prolonged in Group T compared with Group M. The highest contraction strength and the longest contraction period among all of the groups were observed in Group TM. No difference was observed between the groups regarding the histopathology.

Results: It was concluded that the combined use of theophylline and methylprednisolone had positive effects on the contraction strength and the durations of contraction and semi-relaxation of the diaphragm muscle. In addition, both drugs had synergistic effects on each other.

PREDICTORS OF MULTIDRUG RESISTANT ACINETOBACTER BAUMANNII INFECTIONS IN INTENSIVE CARE UNIT: RETROSPECTIVE ANALYSIS

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In the current study, we aimed to investigate the effects of the Acinetobacter baumannii which is one of the most frequent nosocomial pathogens, has drawn attention in the last years owing to multi-drug resistant strains. Multidrug resistant Acinetobacter baumannii (MDRAB) is an important cause of hospital acquired infection and leads to an increasing morbidity and mortality in intensive care units (ICU).

Method and Material: The charts of the patients who were admitted to the ICU between January 2009 and December 2010 were reviewed to identify patients with MDRAB and NON-MDRAB infection. Recorded data were as follows: age, sex, medical history, underlying surgical pathology, Acute Physiology and Chronic Health Evaluation II score (APACHE II), presence of invasive procedures (intubation, arterial, central venous lines, urinary catheters, and renal replacement therapy), days in ICU, infection site, complications, length of stay (LOS) in the ICU and hospital, and final outcome. Strains of Acinetobacter Baumannii which were non sensitive to multiple antibiotics except colistin has been accepted as multi drug resistant Acinetobacter Baumannii.

Findings: 76 patients were included in these study. MDRAB identified in the in 35% of patients (27/76). In the patients who have been identified MDRAB; median LOS in ICU was 19 and the median LOS in hospital was 30 days. However, median LOS in ICU was 18 and the median LOS in hospital was 27 days in the NON-MDRAB group. The median value of the Apache II score in the group MDRAB was 25, in NON-MDRAB group was 24 and it was 24 when all the patients has considered. Also in diabetes mellitus the rate of NON-MDRAB was much than MDRAB group and it was statistically significant. MDRAB group patients have 33.3% (9/27) TPN and 77.8% (21/27) enteral nutrition during the period in the ICU. There were no statistically significant difference in terms of having TPN and enteral nutrition between groups. The incidence of catheter-related infection in the group MDRAB were statistically significant. (p<0.037*)

Results: The result of our study indicate that APACHE II score is predictors of MDRAB in ICU patients. Also in diabetic patients the rate of identifying MDRAB is less than in NON-MDRAB group. Patients with MDRAB infection tended to have a higher mortality and had a longer LOS in ICU than NON-MDRAB patients.
DOC’S CHALLENGE WITH FLUID: ARE WE BEYOND SO FAR? PROS AND CONS.

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Just whilst latest sepsis guidelines have convinced us about early resuscitative fluid management in sepsis treatment, on the other hand may whispered parameters and numbers have seemed how some foggy. Thus in this study, we objected to re-evaluate effectiveness of fluid resuscitation strategy in sepsis, compared parameters of patients’ daily fluid balances (DFB) and central venous pressure (CVP) records and improvement on patients’ survival.

Method and Material: The project was planned as a retrospective analysis of sepsis patient’s records. The study was conducted in Trakya University Faculty of Medicine Medical Intensive Care Unit (MICU). Total of 100 (one-hundred) sepsis patients records were randomly assigned into study in a blinded fashion, through years 2010 to 2013. Patients’ records were collected in a software database and statistically analyzed for survival function. Among assigned patients, 63 were men and 37 were women, mean age was 64.2±15.5 years (±SD, ranged 16-98), mean APACHE-II score was 23.6±7.7 (±SD, ranged 5-44), 42 were discharged and 58 were lost, mean length of stay (LOS) in MICU was 9.7±10.0 days (±SD, ranged 1-63), mean invasive mechanic ventilation and intubated period was 6.4±8.6 days (±SD, ranged 0-35), mean vasopressor period was 4.7±5.5 days (±SD, ranged 0-34), mean CVP was 10.5±5.5 mmHg (±SD, ranged 3-23), mean fluid balance was 1147.9±1157.6 ml (±SD, ranged -1684 to 5367), the first 24th hrs mean fluid balance was 1150.1±1555.3 ml (±SD, ranged -2864 to 7200).

Findings: Kaplan-Meier survival and COX regression analysis showed that calculated 19 and above APACHE-II scores proposed higher mortality rates in respect of first 5 days, on the other hand, 19 and lower levels were not correlate for better survival. APACHE-II scores of 10 and lower levels were predictive for survival. Shorter intubated days and lower vasopressor needs correlated with higher discharge rates as expected. Intubation period of longer than 24-48 hrs linearly correlated with worse outcome, vasopressor need more than 48 hrs also did. Longer LOS beyond 5 days dramatically increased mortality. CVP levels were significantly predictive for shorter LOS, intubated day, vasopressor needs, and earlier discharge possibility. Levels of 6-9 mmHg and +800 ml DFB were best predictive of within the first 3 day survival. Statistical analysis ensured that mean 7 mmHg CVP levels and mean (+900 ml DFB were best predictive of within the first 3 day survival. The first 24th hrs mean fluid balance was 1150.1±1555.3 ml (±SD, ranged -2864 to 7200).

Results: Of course, current guidelines have the most leading force on treatment approaches, but did nearly whole studies address increasing perfusion and also fluid replacement. Tissue perfusion, microcirculation and capillary filling are the landmarks of sepsis management that is why we inevitably try to full patients-up, for sure. But, here it seemed a little bit like a double-edge-sword. Because, this study results interestingly showed against current evidences that lower DFB and CVP levels had indeed more predictive effect on sepsis patient survival, at least, might be inspiriting for not to increase DFB and CVP levels above some threshold values which should be determined in a better precision for future studies. On the other hand should we also think about to stay in-between a range of fluids and do we drown or fry patients too much?
SEARCHING THE RISK FACTORS OF VRE FOR INTESTINAL COLONIZATION

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Enterococcus are the gram positive cocs which take part in the Streptoptococcaceae family. They are found at soil, water, foods; bowel, biliary tract, mouth and sometimes even on the skin of people and animals’ normal flora. This low-virulenced microorganism causes infections which usually results from the patient’s own endogenic flora. All of the enterococcus, including vancomycin resistant enterococcus (VRE), can contaminate directly from patient to patient or indirectly through contaminated hands, surfaces, medical tools and can spread in or among hospitals.

Method and Material: Our research to identify the predisposing factors for VRE colonization is done at Katıp Celebi University Atatürk Training and Research Hospital Anasthesia Intensive Care Unit between January 2011 and July 2012. In these days, the control group patients, who stayed at anasthesia intensive care unit more than two days and chosen randomly with sampling method, are researched retrospectively with VRE colonization found consecutive cases. During the research 1502 patients are evaluated. In 51 of them VRE and gastrointestinal colonization are found and 49 disease control group is created.

Findings: A statistical and meaningful connection is found between VRE gastrointestinal colonization and age, first Acute Pysiology And Chronic Health Evaluation (APACHE) 2 score and staying period at the hospital. Though, there hasn’t seen a connection between Sequential Organ Failure Assessment (SOFA) score and RIFLE score. At the patients who stayed at the hospital in the last six months, it was statisticaly meaningful to see pozitive VRE frequency.

Results: We think that, the patients who stayed at the hospital for a long time, is at advanced age, diagnosed malnutrition with NRS -2002 score and has high APACHE 2 score, is under risk. And finally we believe that there should be an active surveillance study at the hospitals which Vancomycin Resistant Enterococcus (VRE) infection/ colonization found and to prevent the spread of this, contiguity and isolation technics should be applied.
EFFICACY OF HAEMODIAFILTRATION THERAPY IN OUR CRITICALLY ILL PATIENTS

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Although continuous veno-venous haemodiafiltration (CVVHDF) is a common procedure in critically ill patients with acute kidney injury (AKI), its efficacy remains uncertain. Patients who receive CVVHDF usually have higher mortality rates than those who do not. Our aim was to assess CVVHDF efficacy, with special attention to mortality.

Method and Material:
We performed an analysis using data of Sisli Etfal Training and Research Hospital database between 2007-2012 including critically ill patients accepted to our intensive care unit (ICU). AKI was defined according to RIFLE criteria. The association between CVVHDF and ICU mortality was examined. Data was presented as Mean±SD.

Findings:
During this time period 1542 patients were accepted to our ICU, 99 patients received CVVHDF. 36 were female and 63 were male, age was 59.40±20.26 years, ICU stay was 27.33±24.00 days and CVVHDF was applied on the 15.23±18.10th day of ICU admission. 7.8% of the patients were treated with CVVHDF therapy in the renal-injury-stage, 35.7% in the renal-failure-stage, 47.9% in the renal-loss-stage and 8.6% in the renal-end-stage disease. CVVHDF was continued for 4.89±3.69 days. 11.4% recovered and were discharged from the ICU.

Results:
In our study population, CVVHDF failed to reduce ICU mortality, it was ironical high with 88.6%. This result emphasizes the need for randomized studies comparing CVVHDF to conservative management in selected ICU patients, with special focus on timing of treatment beginning.

INTUBATION WITH STORZ DCI VIDEOLARYNGOSCOPE AND TRUVIEW EVO2 VIDEOLARYNGOSCOPE: IN PATIENTS WITH SUSPECTED DIFFICULT TRACHEAL INTUBATION

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Endotracheal intubation is defined as insertion of a tube into trachea in order to ensure airway patency, and control respiration. Sometimes during the intubation procedure difficulties can be encountered, and hemodynamic parameters of the patients can deteriorate. Herein, we intended to compare Storz DCI, and Truvie EVO2 videolaryngoscopes with respect to the quality of glottis images, intubation times, intubation-related, and postoperative early stage complications, and hemodynamic responses developed following intubation in cases resistant to intubation as predicted by Mallampati tests.

Method and Material:
The study included 60 patients aged between 18-65 years with ASA I-II class based on Mallampati III-IV scale scoring who would undergo elective surgery. The patients were randomly divided into 2 groups. Groups S, and T were intubated using Storz DCI, and Truvie EVO2 video laryngoscopes, respectively. Cormack-Lehane (C-L) score, intubation time, intubation-related, and immediate postoperative complications during intubation were recorded. Perioperative heart rate, systolic, diastolic, and mean arterial pressures, peripheral oxygen saturation measured before, and after induction, immediately, 1., 2., 3., 4., and 5. minutes after intubation were recorded. Also, endtidal carbondioxide was noted immediately, 1., 2., 3., 4., and 5. minutes after intubation.

Findings:
In both groups, any significant difference was not found between C-L grade I, and II as for the quality of glottis images, however C-L grade III was significantly more frequently observed in Group T. In Group S, only 1, and in Group T, 6 patients had attained C-L score III. Intubation time was found to be significantly longer in Group T (36 s) than Group S (31 s), and all intubations were successfully performed in all groups. The only laryngoscopy-related complication was lip laceration in Group T. Early stage intubation-related postoperative complications were coughing ( Group S: n=4; Group T: n=5), and throat ache ( Group S: n=3; Group T: n=2). A significant difference could not be found between hemodynamic parameters, and antihypertensive drug requirement between 2 groups.

Results:
Storz DCI video laryngoscope displayed a successful performance with shortened intubation times, improved, and clearer glottis views relative to Truvie EVO2 video laryngoscope. Therefore, we have concluded that in cases with intubation problems Storz DCI video laryngoscope can be preferred over Truvie EVO2 video laryngoscope.
P-12

MORTALITY PREDICTION AFTER CARDIAC SURGERY: COMPARISON OF CASUS AND EUROSCORE

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Outcome prediction scoring systems are increasingly used in intensive care medicine, but most were not developed for use in cardiac surgery patients. We compared the performance of two intensive care outcome prediction scoring systems; Cardiac Surgery Score (CASUS) and well studied EuroSCORE in patients undergoing open heart surgery.

Method and Material: Between June 1, 2010 and June 1, 2011 we prospectively included all consecutive adult patients (patients age > 18 yrs) admitted to our intensive care unit (ICU) after open cardiac surgery. Both scoring systems were calculated daily from the 1st day in the ICU (day of operation) until the patients discharge or until 7th day of ICU stay. NCSS (Number Cruncher Statistical System) 2007 & PASS (Power Analysis and Sample Size) 2008 Statistical Software (Utah, USA) program was used for statistical analysis. ROC curve analysis was used for evaluating efficacy of EuroSCORE and CASUS scoring systems on mortality prediction.

Findings: In predicting mortality, CASUS was not adequate on postoperative day 0 and day 1, but adequate on postoperative day 2 for long ICU stays. EuroSCORE was not adequate in predicting mortality.

Results: As the length of ICU stay increases the mortality rate increases.
DIALYSIS CATHETER PLACEMENT AFTER PROTHROMBIN COMPLEX CONCENTRATE APPLICATION IN A WARFARIN USING PATIENT

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Serious bleeding and urgent interventions require more than administration of vitamin K in congenital or warfarin associated coagulation deficiency. In such situations, replacement of prothrombin complex concentrate (PCC)(FII, FVII, FIX, FX, protein C and S) can be used. PCC dose is adjusted according to the target INR or the highest INR level at the beginning. This is a case report about the treatment of high INR level in a patient who needs immediately a catheter placement.

Case: A 87 years old woman was accepted to our ICU with respiratory distress. She had diagnosis of decompensated cardiac failure. 6 years ago she had a tricuspid and mitral valve replacement, and that’s why she was using warfarin. On oscultation she had crepitan crackless at the basal lungs and she was using her accessory respiratory muscles. Chest x-ray showed cardio-thoracic index >1/2 and cardiomegaly. Urine discharge indicated oliguria. After non-invasive mechanical ventilation no relieve in respiratory distress could be achieved and she had to be intubated. Haemodynamic unstability and mean arterial pressure decrease were treated with dopamine, dobutamine and noradrenaline. Because urine output was still oliguric furosemide was applied with no success. The patient’s pulmonary edema did not regress and cardiac failure still persisted. The need for central venous pressure monitorization and haemodiafiltration occurred. Because of the INR level >8.02, no catheterization could be proceeded. 10 mg vitamin K and 2 Units of fresh-frozen-plasma were administrated but her INR level did not decrease. Finally, 30 ml (250ü/10 ml) of PCC (COFACT®) were infused intravenously to the patient in 15 minutes, 2 ml/min, which was half of the recommended dose, because the patient had prosthetic valves. After 30 minutes INR was 1.6. At last we were able to place a central venous pressure and a haemodialysis catheter into the patient. Haemodiafiltration continued for 72 hours, diurrhesis begun (>0.5 ml/kg/h), respiratory parameters recovered and the patient was extubate on the 4th day.

Conclusion: PCC is a very useful medication for treatment of acute interventions and to stop serious hemorrhage in warfarin using patients like presented in this case. Some studies indicate, that PCC is more potent than fresh-frozen-plasma in the treatment of coagulation abnormalities due to warfarin usage.

PRETREATMENT WITH CARNOSOL IN LUNG ISCHEMIA/REPERFUSION-INDUCED RENAL INJURY

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Lung ischemia/reperfusion injury may result in mortality and morbidity because of kidney injury in the post-operative period. Carnosol, a major component of rosemary, is reported to exhibit antioxidant and anti-inflammatory effects. The primary aim of this experimental study was to investigate the protective effects of carnosol on kidney injury induced by lung ischemia/reperfusion.

Method and Material: Twenty-four New Zealand white rabbits were randomised into the following three groups: (1) lung ischemia/reperfusion (IR group) (60 min ischemia-60 min reperfusion), (2) bolus injection of carnosol before lung ischemia/reperfusion (CIR group), and (3) sham (S group) (pulmonary hilum was not clamped). Myeloperoxidase activity was used as an indicator of renal neutrophil influx. Intercellular adhesion molecule-1 can attract and/or activate leucocytes, potentiate small vessel occlusion, and promote further production of inflammatory mediators. Therefore, renal Myeloperoxidase and intercellular adhesion molecule-1 levels were evaluated to show the kidney responses and protective effects of carnosol on lung ischemia/reperfusion injury.

Findings: Renal tissue myeloperoxidase and intercellular adhesion molecule-1 levels were significantly higher in the IR group when compared with the CIR and S groups (p= 0.021 and p=0.0001 respectively). No statistically significant difference was detected between the CIR group and the S group.

Results: The data of the present study suggests that lung ischemia/reperfusion-induced kidney injury causes increased myeloperoxidase and intercellular adhesion molecule-1 levels, which are related to activated neutrophil sequestration. The protective effect of carnosol may be dependent, in part, on its inhibitory effect on tissue neutrophil infiltration.
**P-16**

**MEAN PLATELET VOLUME AND PLATELET DISTRIBUTION WIDTH AS A PREDICTOR OF MORTALITY IN ICU PATIENTS; A SINGLE CENTRED RETROSPECTIVE ANALYSIS**

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Mean platelet volume (MPV) and platelet distribution width (PDW), are routinely available parameters in many laboratories. MPV is the most commonly used measure of platelet size. Increased MPV reflects larger platelet and is commonly associated with increased metabolic activity. Previous studies demonstrated the relation between MPV and adverse cardiovascular effects. Also MPV has a close relationship with diabetes mellitus, hypertension, hypercholesterolemia and metabolic syndrome. We aimed to investigate the MPV and PDW parameters in mixed intensive care unit (ICU) population and their relation with mortality in ICU.

**Method and Material:**

Two hundred and eighty four patients, ages varying from 5-101 years were enrolled into this study. All patients were identified retrospectively via the central database of our hospital. MPV and PDW values were recorded daily in patients who spent 10 or more days in ICU and weekly in patients who spent more than 10 days in ICU. Initial and final MPV and PDW values were recorded. The relationship between mortality and initial/final MPV and PDW values were evaluated. Changes in MPV and PDW values with respect to the age and length of stay in ICU were also investigated. The changes in MPV and PDW values, depending on the age and length of stay in ICU were analyzed with Pearson Correlation. Logistic Regression test was used for analysing the significant mortality predictor.

**Findings:**

Mortality increased significantly in parallel with age. Prolongation of stay in ICU was also with higher mortality levels. There was no correlation between age and length of stay in ICU. MPV values towards the end of stay in ICU were significantly higher in patients who died. The relation between mortality and initial MPV and PDW values were not significant. There was a significant correlation between PDW values and age of the patient, however there was no correlation between PDW and mortality.

**Results:**

The initial values of MPV and PDW were not valuable as a predictor of mortality in mixed ICU population. Considering the high platelet volume of the new circulating platelets, our data suggest that more platelets participate in circulation at the end of the mortal process. Further studies are required, in order to detect the value of MPV and PDW as a predictor of mortality.
A CASE OF HASHIMOTO’S ENCEPHALOPATHY

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Introduction: Hashimoto’s Encephalopathy (HE) is a very rare condition associated with Hashimoto’s thyroiditis. Here, we presented a case of a 53-year-old woman with pre-diagnosis of encephalitis which is diagnosed as HE. She responded dramatically to high dose intravenous corticosteroid.

Case description: A 53-year-old Turkish woman with a medical history of hypothyroidism was admitted to the hospital with complaint of fever and confusion. Neurological examinations showed neck stiffness. Cognitive functions and intellectual performance were decreased. Glasgow coma score was 8/15. Ocular movement was full without nistagmus. Deep tendon reflexes were normal and without any pathological reflex. No apparent paresis, extrapyramidal signs or autonomic dysfunctions were found. Within an hour her Glasgow coma score became 6/15. We entubated the patient and started mechanical ventilation. Laboratory results showed normal electrolyte values, renal and liver functions. Lumbar puncture revealed no red or white blood cells, with normal protein and glucose levels. Normal serum thyroid-stimulating hormone of 2.43 mU/mL (normal range 0.350-5.500 mU/mL) and normal free thyroxine fT4 (1.21; normal range 0.9-1.8 ng/dL) was noted. A diagnosis of encephalitis was entertained and serum, CSF urine studies were sent to investigate for a possible infectious process. Antibiotic and an antiviral agent was started. Viral, bacterial studies were normal. PCR detection of CSF herpesvirus DNA was negative. Antithyroperoxidase antibody (anti-TPO-Ab) was obtained exhibiting elevated titers (235 IU/mL; normal range < 9.0 IU/mL). Serum antithyroid antibody concentrations, and response to corticosteroid therapy. Hashimoto’s encephalopathy should always be considered along with acute allergic reactions which is known as Kounis Syndrome. We describe herein a case of Kounis Syndrome in a patient who suffered an anaphylactic reaction after an honeybee sting.

Case Report: A 59-year-old farmer was admitted to the Dursunbey State Hospital Emergency Department following a honeybee sting by his right eye while he was working in his garden. His right eyelid and lips were swollen. The pain, itching and bulging was not relieved after ice pack application and after having difficulty in breathing and coarseness in his voice he had brought to the emergency department immediately. He did not have previous history of allergy, bronchial asthma, dermatitis or eczema. His therapy began with intravenous diphenhydramine (IV) 50 mg of dexamethasone and 40 mg of dexamethasone. The patient was taken to our intensive care unit for close monitoring. During his treatment, he complained of chest discomfort and sweating. The electrocardiogram (ECG) showed 2 mm of ST segment depression in II-III-aVF , and V3 through V6. Troponin I assay revealed elevated levels (0,035 ng/mL). Although his past medical history was unremarkable with no cardiovascular risk factors a possible ACS was suspected and standard anti-platelet therapy (IV 50 mg of acetyl salicylic acid and 2 mg of IV morphine). A repeated ECG showed the same findings and repeated Troponin I assay showed further increase (0,043 ng/mL). Despite the treatment the patients discomfort was not relieved then it was decided to transfer him to the coronary care unit of the Balıkesir State Hospital. The heart catheterization was revealed critical occlusion of proximal right coronary artery with collaterals and the patient offered a by-pass surgery.

Conclusions: The acute onset of chest pain accompanied by allergic symptoms should rise suspicion for the possibility of Kounis Syndrome. Two variants of Kounis syndrome has been described.

A RARE PRESENTATION OF ACUTE MYOCARDIAL ISCHEMIA FOLLOWING A HONEYBEE STING : KOUNIS SYNDROME

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In rural areas honeybee stings are not rare occasions and the treatment usually consists of routine use of antihistamergic drugs and systemic corticosteroids when patients experiences allergic reactions due to these stings. But the situation may not be that simple especially when acute onset chest pain accompany honeybee stings. In treating these patients ACS (Acute Coronary Syndromes) should be considered along with acute allergic reactions which is known as Kounis Syndrome. We describe herein a case of Kounis Syndrome in a patient who suffered an anaphylactic reaction after an honeybee sting.

Introduction: Kounis Syndrome, which was firstly described as allergic angina syndrome in 1991 is the concurrence of acute coronary syndromes with conditions associated with mast cell activation including allergic or hypersensitivity and anaphylactic insults. Anaphylaxis is a reaction to an allergen that occurs in minutes and involves an immediate type hypersensitive reaction. Mast cells and basophils degranulate, releasing histamine, leukotrienes, proteases, pro-inflammatory cytokines and chemotactic factors that cause leukocytes and platelets to aggregate in the microvasculature. Allergic reactions due to these stings. But the situation may not be that simple especially when acute onset chest pain accompany honeybee stings. In treating these patients ACS (Acute Coronary Syndromes) should be considered along with acute allergic reactions which is known as Kounis Syndrome. We describe herein a case of Kounis Syndrome in a patient who suffered an anaphylactic reaction after an honeybee sting.

Conclusions: The acute onset of chest pain accompanied by allergic symptoms should rise suspicion for the possibility of Kounis Syndrome. Two variants of Kounis syndrome has been described.

Type 1 variant includes patients with normal coronary arteries and represents a manifestation of endothelial dysfunction. Type 2 variant of of Kounis Syndrome includes patients with preexisting atheromatous coronary arteries disease. Acute coronary syndromes following allergic reactions are associated with significant morbidity and mortality in hypersensitive individuals. Because of potentially atypical ACS clinical presentations, the ECG is an obligatory diagnostic tool in any allergic reaction. Along with ECG the initial cardiac studies should include the routine cardiac tests. These patients should follow-up in cardiology and allergy clinics following the hospital discharge Kounis syndrome should be considered in young healthy patients with no atherosclerotic risk factors when they develop acute coronary syndrome after administration of potentially allergic agents. Several drugs (antibiotics, analgesics, antineoplastics), foods, environmental exposures ( bee stings, ants, poison ivy, latex contact ) have been reported as capable of inducing Kounis syndrome. Mast cells degranulation and then the subsequent release of vasoactive mediators leads to coronary artery spasm. The manifestations of ACS in sting -induced hypersensitivity reactions could be completely atypical. Insect venoms contain several well-characterized allergens like peptides, proteins, and vasoactive amines including histamine, acetylcholine, norepinephrine and dopamine that can trigger anaphylactic reactions. These substances are responsible for direct venom cardio toxicity. In our case, the patient was stung by a honey bee. The major allergen of honey bee venom is phospholipase A2. Other allergens in the bee venom are melitin, hyaluronidase and apamin. In our country there have been an increased interest in Kounis Syndrome. Although there are many valuable contributions to the current literature by Bitezler et al. with this case report we would like to take attention to possible catastrophic results of seemingly harmless insect bites including honey bees.
MYXEDEMA COMA TRIGGERED BY UROSEPSIS IN A PATIENT WITH HYPOTHYROIDISM

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Objective: Our aim in this case report is to emphasize that myxedema coma can be triggered by a process started with urinary tract infection progressed to urosepsis in a patient with hypothyroidism.

Method and Material: Morbidly obese female patient under age of 30 brought to our emergency clinic in a comatose state. Within 10 minutes of admission cardiopulmonary resuscitation was performed because of respiratory failure and cardiac arrest. After resuscitation patient was admitted to our intensive care unit.

Results: In her medical history it was found that the patient, who has hearing-impairment, was diagnosed with hypothyroidism 3 months ago but did not used steroid and hormone replacement therapy regularly. She has used analgesics and antibiotics intermittently in last two months due to left lumbar pain. During the last week lumbar pain was increased together with swelling in all of her body, especially in her face, eyelids and abdominal region. As learned from her family she was sleepy in last 24 hours. Vital signs were as follow upon admission: Pulse rate: 54/min, TA: 101/47 mmHg, respiratory rate: 7/min, body temperature: 34,5 °C. Physical examination; patient unconscious, GCS 3, pupil size equal, reactive to light bilaterally and cornea reflex positive bilaterally. Patient was intubated endotracheal and invasive mechanic ventilation initiated. Extensive facial swelling, short neck, per orbital edema, ptosis, coarse and sparse hair and macroglossia was determined as typical myxedematous face characteristics. Thyroid was non-palpable, skin was dry, pale and cold; unsplitting edema was positive in entire body. Abdomen was severely distended and bowel sounds were hypokinetic. Cardiac sounds were rhythmic and bradicardic, there were no extra sounds or murmurs. There were extensive rales bilaterally in pulmonary examination, sero-hemorrhagic foamy secretion was aspirated through endotracheal tube. Laboratory workup was as follows: WBC: 20900/µL, Hb: 9,6 g/dL, PLT: 274000/µL, c-reactive protein (CRP): 28,5 mg/L, freeT3: 0,82 pg/mL, freeT4: 0,31 ng/dL, TSH>150mIU/mL, BUN: 87 mg/dL, creatinin: 1,59 mg/dL, AST: 111 U/L, ALT: 77 U/L, CK: 1386 U/L, LDH: 1019 U/L. Arterial blood gas analysis during ventilation with %100 oxygen was pH: 7,065; PaCO2 82 mmHg, PaO2 145 mmHg, HCO3 24 mmol/L, acid-base status was metabolic acidosis and blood gas analysis was as follow: pH: 7,065, PaO2 101 mmHg, PaCO2 82 mmHg, HCO3 24 mmol/L, acute respiratory acidosis determined. Urinalysis depicted pyuria and bacteriuria. There was no hematuria and c-reactive protein (CRP): 28,5 mg/L, freeT3: 0,82 pg/mL, freeT4: 0,31 ng/dL, TSH>150mIU/mL, BUN: 87 mg/dL, creatinin: 1,59 mg/dL, Na: 145 mmol/L, Ca: 8,5 mg/dL, glucose: 178 mg/dL, AST: 111 U/L, ALT: 77 U/L, CK: 1386 U/L, LDH: 1019 U/L. Arterial blood gas analysis during ventilation with %100 oxygen was pH: 7,065; PaCO2 82 mmHg, PaO2 145 mmHg, HCO3 24 mmol/L, acute respiratory acidosis determined. Urinalysis depicted pyuria and bacteriuria. There was no significant pathology in computed brain tomography. ECG revealed no pathology although troponin I was 0.07 ng/mL. Cardiomegaly was determined in chest radiography, in echocardiography minimal pericardial fluid detected. Also bilateral extensive infiltration consistent with ARDS was determined in chest radiography. Multiple stones detected localized to left kidney seen in abdominal USG. Oral levothyroxin and stress dose steroids (hydrocortisone) treatment started immediately.

Conclusion: Myxedema coma is a rare condition which has mortality rate of 30% in intensive care units. Infections, especially urosepsis, are among the most common triggering factors. Important factors in treatment are awareness of clinician, immediate administration of thyroid hormone replacement and hydrocortisone therapy, appropriate support treatment. Despite of high mortality rate early diagnosis can be life saving.

THE RETROSPECTIVE EVALUATION OF THE PEDIATRIC PATIENTS ADMITTED IN BURN INTENSIVE CARE UNIT

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This study aimed to compare the expected mortality rate of the 105 pediatric patients hospitalized in the burn intensive care unit between the years 2008 to 2012 with mortality rate of intensive care unit with respect to ABSI (Abbreviated Burn Severity Index) and PRISM (Pediatric Risk of Mortality) scores.

Method and Material: We reviewed the files of the 105 patients in age group 0-14 hospitalized in the burn intensive care unit between December 2008 to December 2012 in our study. We examined age, gender, hospitalization duration, type of burn, burn grade, living status, connection status to mechanical ventilation, ABSI and PRISM scores and expected mortality data of the patients.

Findings: According to the study data obtained from 105 patients; 39% (41) patients were female while 61% (64) patients were male. Mean age was 3,62±3,3. With respect to type of burns; hot liquid burns, flame burns and electrical burns were found in 65,7% (69), 23,8% (25) and 7,6% (8) of the patients, respectively. Of the patients; 25,7% (27), 26,7% (28) and 17,1% (18) had 11-20%, 21-30% and 31-40% TBSSA, respectively. Burn grades were second degree and second-third degree in 24,8% (26) and 53,3% (56) of the patients, respectively. Mortality was found 16,2% (17) of the patients, 36,2% (38) needed mechanical ventilation. Mean hospitalization duration was 7,67±11,44 (1-68) days. Of the patients burned by hot liquids, 81,4% (61) were alive while 11,6% (8) died. Of the flame burned patients; 72% (18) were alive while 28% (7) died. When hospitalization duration was considered upon living status, 83,7% (72) and 66,7% (4) alive patients had hospitalization duration of 6-10 days, 11-30 days and 31 and more days, respectively. According to ABSI, mean ABSI score of the dead patients was 7,47±2,69 whereas mean ABSI score of the alive patients was found 5,08±1,71. Mortality rate was greater in the cases with higher ABSI score (p<0,001). Mortality was found higher in the cases with greater expected mortality rate according to PRISM (p<0,001). Mortality risk was 1,48-fold (1,06 – 2,07) higher in the cases with higher ABSI score (p<0,05). Mortality risk was 1,26-fold (1,04 – 1,59) higher in the cases with higher PRISM score (p<0,05).

Results: We conclude that ABSI and PRISM scores are not sufficient in determining mortality in burn intensive care units and that novel and further detailed scorings are required in determining intensive care unit.
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MORTALITY RATES OF PATIENTS SCHEDULED FOR POSTOPERATIVE INTENSIVE CARE UNIT

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Sisli Etfal Training and Research Hospital is a multi-disciplinary surgical institution. Though it is a central hospital, also patients with increased ASA status are undergoing different kinds of surgical procedures. We herein aimed to study our mortality rates of patients scheduled for postoperative intensive care unit (ICU) admission.

Method and Material: Retrospectively data of patients who admitted to our postoperative-ICU with 5 bed capacity were recorded including age, gender, discharge status and ICU stay for the time interval 01.01.2007-01.01.2013.

Findings: Totally 328 patients of 528 patients scheduled for postoperative ICU observation, admitted to the postoperative ICU 173 (52.74%) were male and 155 (47.26%) were female. The youngest patient was a newborn and the eldest patient was 107 years old, age was 58.66±23.67 (Mean±SD) years, ICU stay was 4.58±6.12 days. The main reason for postoperative ICU stay was emergency surgery (43%), followed by malignancy (31%) and cardiovascular diseases (18%).

Results: This study showed that patients scheduled for postoperative ICU observation high mortality rate and that these group of patients need attention in every step of hospitalization. But on the other hand only 62% of patients scheduled for postoperative ICU actually did admit. Also, the surgeons should question their operation indications on pro and contra when they are dealing with unstable patients.

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INDICATIONS OF PERCUTANEOUS ENDOSCOPIC GASTROSTOMY IN OUR INTENSIVE CARE UNIT

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Percutaneous endoscopic gastrostomy (PEG) has become the modality of choice for providing enteral access to patients who require long-term enteral nutrition. This study aimed to evaluate indications and complications associated with PEG feeding.

Method and Material: We conducted a retrospective analysis over a period of 5 years of all patients who referred to our intensive care unit (ICU) with 7 bed capacity and were placed a PEG tube. Medical records of 49 patients dealt with PEG tube placement were reviewed to assess demographics, indications and complications. Data were expressed as Means±SD.

Findings: Patients’ age was 62.23±18.87 years, 25 were female and 24 were male. ICU stay was 84.97±53.72 days. PEG was placed in 32.88±21.96 days during ICU stay. 57.9% died in the ICU and 42.1% were discharged alive. The indications for enteral feeding tube placement were central nervous diseases in 85.7% (n=42), of which 32.65% (n=16) patients were suffering of subarachnoid hemorrhage, 30.61% (n=18) of malignancy, 6.12% (n=3) of ischemia and 6.12% (n=3) of Alzheimer disease. Trauma was the main reason of subarachnoid hemorrhage in 68.75% (n=11). In 6.12% (n=3) minor complications occurred which included wound infection (4.08%) and tube blockage (2.04%). 9.16% (n=4) patients experienced major complications including hemorrhage (4.08%), buried bumper (2.04%) and perforation (2.04%). There were no deaths related to PEG procedure placement and the overall 30-day mortality rate due to primary disease was 40.9%. All tubes were placed permanent.

Results: Percutaneous endoscopic gastrostomy is a save and minimally invasive endoscopic procedure associated with an acceptable morbidity (14.28%) rate and easy to follow-up.

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GUIDANCE FOR INTENSIVE CARE PHYSICIANS BY POST-MORTEM FINDINGS PRESENT AFTER A SUCCESSFUL CARDIOPULMONARY RESUSCITATION (CADAVER STUDY)

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Successful applications of Cardiopulmonary Resuscitation (CPR) after a Cardiac Arrest (CA) have been increasing in recent years. As anesthesiologists and reanimation doctors, one of the patient groups we frequently follow in intensive care units is patients receiving a successful CPR. In this study, post-mortem reports of patients who had a cardiac arrest due to non-traumatic reasons, received CPR but died afterwards have been retrospectively examined and the findings and their relation to CPR have been ascertained. It is considered that some opinions can be obtained regarding the localization and severity of iatrogenic traumas of thorax, mediastinum and other body parts in the course of patients’ follow-up and treatments in intensive care units.

Method and Material: After obtaining the scientific committee’s, this study was conducted with examinations on 9534 post-mortem reports in total performed in the Republic of Turkey Ministry of Justice Istanbul Forensic Medicine Institution between January 2011 and August 2012. Post-mortem findings of the total 702 cases which had CA due to non-traumatic reasons, received CPRs and died afterwards were evaluated. The findings including the inscription “reanimation is possible” in the post-mortem reports were recorded. Such data as age, sex, body height and weight and pregnancy of the cadavers whose post-mortem findings had been obtained and the causes of their death were recorded. The team applying the CPR was classified as the ambulance transport and emergency service team (Group ATEST), the clinical team (Group CT) and the intensive care unit team (Group ICU). CPR-induced traumatic findings of the cases were statistically evaluated after classified according to their ages as aged over 65, aged between 19-65 and aged 18 and below.

Findings: 542 of 702 cases which received CPR and underwent autopsy were male (77.2%) and 160 of them were female (22.8%). The most frequent macroscopic finding of CPR-induced trauma was rib fractures with 444 cases (63.2%); the mean number of rib fractures of the 444 cases which had at least one rib fracture was 6.9, while the mean number of rib fractures of all 702 cases receiving CPR was 4.4.

Results: Our purpose in conducting this study is to gain an insight to how we can manage intensive care follow-ups of the cases resuscitated to life after CPR, in the light of the knowledge and findings we acquire from the cases that died after CPR. Our aim is to directly guide the examination and treatment of patients admitted to intensive care units after successful CPRs and to provide care in better conditions for the patients resuscitated to life after a serious effort. The fact that CPR-induced life-threatening major complications are observed rarely, their vital findings in the patient group are generally unstable, and these complications do not cause a significant difference in terms of prognosis demonstrates that routinization of advanced examinations to be conducted will not be much practical and beneficial. The benefit of chest radiography is questionable; however, we can suggest that a bedside monitoring method such as ultrasonography may be more appropriate for intra-abdominal, pleural cavity and pericardial evaluations. Use of prophylactic antibiotics after CPR in ICUs is not suggested; however, 4% possibility of pulmonary aspiration within our findings should not be ignored. Finally, application of analgesic for bone fracture pains should not be ignored for patients with high coma scores who receive chest compression and are admitted to intensive care units.
VENTILATOR-ASSOCIATED PNEUMONIA IN AN INTENSIVE CARE UNIT

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Ventilator-associated pneumonia (VAP), is the most frequent nosocomial infection in the ICU, and it complicates the course of the illness by increasing mortality rate, hospital length of stay, and costs for patients who acquire it. Every ICU should know their own epidemiological features for there are various factors which play a role in isolation of resistant pathogens. The aim of this study was to examine microbial causes of VAP and describe any variability by the timing of VAP onset and antibiotic usage before VAP retrospectively.

Method and Material: This retrospective study was performed in one of the ICUs in Ankara Numune Training and Research Hospital. It was performed between January 2010 and December 2012 with patients undergoing mechanical ventilation. We analyzed demographic data, APACHE II scores, length of stay in ICU, length of mechanical ventilator, time to start of VAP, causative factors and mortality rate.

Findings: Total 52 cases of VAP were encountered among 1101 inpatient cases in our unit in 3 years. Mean age, APACHE II score, length of stay in ICU, length of mechanical ventilator and time to start of VAP were 61.4±22.9 years, 15.0±6.9 points 35.1±23.8 days, 32±21.7 days, 18.2±14.2 days respectively. The rate of VAP (12.88, 7.77 and 18.59 for the years of 2010, 2011 and 2012 respectively) was found to be similar to the mean relevant rates of Turkey. It was seen that the rate of late VAP had high having the leading causative factor to be Acinetobacter Baumannii. There have been a history of use of antibiotics in most of the patients having VAP.

Results: We are in opinion that the preventable risk factors should be reviewed for decreasing the frequency of VAP in our unit which are encountered mostly in the late phases and aroused from resistant bacteria.

References
This retrospective study was conducted to determine the frequency of hospital infections, hospital infection and mortality rate, infectious agents, risk factors for development of infection in a General ICU at Ankara Numune Education and Research Hospital.

Method and Material: This retrospective study was conducted between November, 2009 and August, 2011 at the General ICU of our hospital.

Findings: Rate of nosocomial infection in ICU in this period was determined as 22.5%. Age (p=0.000), hospital stay (p=0.000) and APACHE II score (p=0.000) were determined as significant and independent risk factors for development of infection. The mortality rate in patients who developed nosocomial infection was 72.3% whereas in patients who dose not developed hospital infections the mortality rate was 39.7%. The other risk factors for development of hospital infection were the presence of mechanic ventilation, tracheostomy, arterial cannulation, pleural catheter, central venous catheter and paracentesis. There was no statistically significant difference between patients for the usage of chest tube (p=0.067). Also TPN, enteral feeding days, renal replacement therapy, usage of multiple drug therapies such as sedatives, steroids were also concerned. The diagnosis of hospital infection was made according to the criteria of the Centers for Disease Control and Prevention (CDC) and 159 of 705 patients were determined in whom infectious agents were isolated in this study.

Results: In order to reduce the infection rate in ICU, the studies on the risk factors for development of infection must be developed in every hospital. All invasive procedures, as the risk factors of infections, should carefully be indicated. Investigating the infectious agents and antibiotic susceptibility patterns, will provide more appropriately specific infection control measures.

Nosocomial infections are a prominent problem resulting in high mortality. Intensive care units (ICU) are the areas where nosocomial infections are mostly common. The present study aimed to determine the frequency of hospital infections, hospital infection and mortality rate, infectious agents, risk factors for development of infection in a General ICU at Ankara Numune Education and Research Hospital.

Définitions: Rate of nosocomial infection in ICU in this period was determined as 22.5%. Age (p=0.000), hospital stay (p=0.000) and APACHE II score (p=0.000) were determined as significant and independent risk factors for development of infection. The mortality rate in patients who developed nosocomial infection was 72.3% whereas in patients who dose not developed hospital infections the mortality rate was 39.7%. The other risk factors for development of hospital infection were the presence of mechanic ventilation, tracheostomy, arterial cannulation, pleural catheter, central venous catheter and paracentesis. There was no statistically significant difference between patients for the usage of chest tube (p=0.067). Also TPN, enteral feeding days, renal replacement therapy, usage of multiple drug therapies such as sedatives, steroids were also concerned. The diagnosis of hospital infection was made according to the criteria of the Centers for Disease Control and Prevention (CDC) and 159 of 705 patients were determined in whom infectious agents were isolated in this study.

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Results: In order to reduce the infection rate in ICU, the studies on the risk factors for development of infection must be developed in every hospital. All invasive procedures, as the risk factors of infections, should carefully be indicated. Investigating the infectious agents and antibiotic susceptibility patterns, will provide more appropriately specific infection control measures.
Invasive Device Associated Hospital Infections in the Intensive Care Unit

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As our hospital is an oncology teaching hospital, generally old patients with malignancy and comorbidities are followed in the intensive care unit (ICU). This increases the use of invasive devices and risk of related infections. The objective of this study is to investigate prevalence of invasive device usage and rate of related infections in 4 years period between January 2009 and December 2012 in our ICU.

Method and Material: Laboratory dependent active surveillance data of Infection Control Committee for 4 years were evaluated retrospectively. Hospital acquired infections (HAI) were described according to CDC criteria. Definitions: CA-UTI : Catheter Associated Urinary Tract Infection CVCR-BSI: Central Venous Catheter Related Bloodstream Infection VAP :Ventilator Associated Pneumonia UC : Urinary Catheter CVC : Central Venous Catheter Formules below are used in calculations Invasive device usage rate= invasive attempt / hospitalisation day Device associated HAI rate= invasive device associated infection rate / invasive device attempt day x 1000

Findings: A total of 491 invasive device associated HAIs were detected in 1673 patients that were followed in ICU between 2009-2012. CVCR-BSIs were most frequent HAIs during the first 2 years period (rates:23,01and 19,74); but VAP became prominent in last 2 years (rates:24,10 and 20,39). When evaluated by means of years, while ventilator usage rates increased by time (0,61 - 0,63 - 0,71 - 0,73), VAP rates increased in first 3 years then it decreased in the last year (17,46 -18,23 - 24,10 - 20,39). While urinary catheter usage rate didn’t change by time (0,96) , CA-UTI rate increased in the first 3 years then period it decreased in the last year (9,86 – 11,86 – 14,57 – 12,81). Central venous catheter usage ratio didn’t change by years (0,74) whereas CVCR-BSI rates decreased gradually (23,01 – 19,74 – 12,15 – 11,50).

Results: The majority of the patients hospitalised in our ICU were operated oncology inpatients or bone marrow transplanted hematology patients. For this reason hospitalisation duration was long and invasive device usage rates were high. Therefore invasive device related infection rates seems high as expected. The reasons of decrease in rates of CVCR-BSI during this 4 year period and VAP in last year period are application of infection control precautions as a care bundle, hand hygiene and short duration of invasive device usage. This study shows that infection control programs if carried out effectively, invasive device related infection rates could decrease.

Acinetobacter Infections in ICU

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Hospital acquired infections (HAI) with Acinetobacter species have been a major problem in hospitals since the microorganism is resistant to most of the available antibacterial drugs. The aim of this study is to assess the number of hospital acquired infections in our intensive care unit (ICU) caused by Acinetobacter species and the resistance patterns of the microorganism during a period of four years (Jan 2009-Dec 2012).

Method and Material: HAIs were assessed by using active surveillance method. The HAIs were defined according to Centers for Disease Control and Prevention (CDC) criteria. The isolates were identified by using conventional methods and VITEK 2 system (VITEK 2 Compact, bioMerieux). Antimicrobial resistance patterns were described according to Clinical and Laboratory Standards Institute (CLSI) guidelines. CA-UTI: Catheter Associated Urinary Tract Infection CVCR-BSI: Central Venous Catheter related bloodstream infection VAP :Ventilator associated pneumonia

Findings: 540 HAIs were observed in ICU during this time period. Acinetobacter spp were isolated from 161 (29,8%) of them. Most of the Acinetobacter strains were isolated from VAP. Evaluation of antimicrobial resistance in this microorganism shows that all of them were resistant to Ampicillin-sulbactam, carbapenems, quinolones and piperacillin-tazobactam during these four years period. Cefazidine resistance increased from 59 % ( in 2009) to 96 % (in 2012). While there was no resistance to colistin and tigecycline in 2009, in 2012 resistance rates increased slightly (8 % for colistin and 13 % for tigecycline). Resistance rates were increased for amikacin and gentamicin in the first three years (33%,58%,80% and 3%,72%,82% respectively), but as they were not preferred as the first choice in the treatment of Acinetobacter infections in ICU, aminoglycoside resistance rates decreased in the last year (63% and 49%).

Results: Infections with nonfermentative gram negative bacteria have become a major problem in ICUs. Acinetobacter is one of the most common pathogens isolated from HAIs. The microorganism can spread by hands of health care workers, contamination of environmental surfaces and medical equipments. Colonised or infected patients are the primary reservoirs. As most of the strains are multidrug resistant, it is difficult to treat infections caused by this agent. Active surveillance of infection and colonisation by this microorganism, infection control measures and antibiotic prescribing policies can reduce infections with this pathogen in ICUs.
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READMISSION TO INTENSIVE CARE UNIT AFTER CORONARY BYPASS OPERATIONS
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The purpose of this study is to analyze the outcome results of coronary bypass operations from a single institution. The readmissions to intensive care unit (ICU) have been analyzed in detail in order to find out the risk factors.

Method and Material: In this retrospective study, we analyzed the prospectively collected data of 679 coronary bypass patients. The outcome data of patients was evaluated with logistic regression analysis and the outcome data of patients readmitted to ICU (Group R) were compared with patients not readmitted to ICU (Group N).

Findings: Of these 679 patients, 36 (5.3 %) were readmitted to ICU. Postoperative in-hospital mortality, pulmonary and neurologic morbidity occurred in 43 (6.3 %), 135 (19.9 %) and 46 (6.8 %) patients, respectively. The comparison of Group R and Group N showed that the differences were significant (mortality 16.7 % vs 5.9 %; p=0.029; pulmonary morbidity 66.7 % vs 17.3 %; p=0.0001; neurologic morbidity 38.9 % vs 5.0 %; p=0.0001).

Presence of left ventricular dysfunction preoperatively (Odds ratio (OR)=4.1; 95 % confidence interval (CI)=1.4-12.5; p=0.013), advanced NYHA Class (OR=5.3; 95 % CI=3.2-21.7; p=0.022), pulmonary complications (OR=7.2; 95 % CI=2.1-25.5; p=0.0002) and neurologic complications (OR=4.6; 95 % CI=1.3-16.7; p=0.021).

Results: Patients readmitted to ICU postoperatively have higher rates of mortality, pulmonary and neurologic morbidity after coronary bypass operations. Left ventricular dysfunction, advanced NYHA class, and postoperative pulmonary and neurologic complications are significant risk factors for readmission to ICU.

P-32
BLOOD TRANSFUSION IN CRITICALLY ILL PATIENTS
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Some studies showed that increased blood transfusion is associated with prolonged Intensive Care Unit (ICU) stay and higher mortality rates. However, it is well known that anemia increases tissue hypoxia in the critical ill patient. In this study we aimed to discuss transfusion frequency and threshold values of transfusion in our ICU.

Method and Material: Data of 237 patients hospitalized in the ICU of Sisli Etfal Training and Research Hospital with 7 bed capacity during the year 2011 were analyzed retrospectively. Age, gender, ICU stay, blood transfusion amount, hemoglobin (Hb) level before transfusion and mortality was recorded. Data was presented as Mean±SD.

Findings: Age was 44.76±18.55 years, male:female ratio was 130:108. ICU stay was 10,79± 9,87 days. Totally 185 patients were transfused 252 Units of red blood cells (RBC). 114 patients received one Unit, 69 patients received more than two Units of RBC. The Hb level was 8,62±2,2g/dl in the transfused patients. 68 patients were transfused with Hb<7g/dl, ICU stay was 10,83±8,42 days and mortality was 33,8 % (n=23). 43 patients received transfusion with a Hb <8 g/dl, ICU stay was 10,76±8,96 days and mortality was 41,8 % (n=18) died. 52 patients received transfusion with Hb <9g/dl, ICU stay was 13,63±10,2 days and mortality was 73% (n=38). 20 patients were transfused with Hb <10 g/dl, ICU stay was 19,03±12,67 days and 65% (n=13) died. The ICU stay in not transfused 54 patients was 10,81±7,63 days and 42,5% (n=23) died.

Results: While ICU stay was not prolonged and mortality was not increased in the patients transfused with a Hb level of 7-8 g/dl which was similar to the not transfused patients, it was just the opposite in patients receiving transfusion with Hb level 9-10g/dl. We think, that a restrictive blood transfusion protocol in the ICU might be a better strategy to prolong life. But we also think that further studies on tissue oxygenation should be conducted.

P-33
OCCULT METABOLIC ALKALOSIS: INCIDENCE AND REASONS
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Incidence of metabolic alkalosis is high in ICU. However, detection of it may be problematic by using Henderson-Hasselbalch approach especially when metabolic acidosis accompanies to metabolic alkalosis. We aimed to investigate the incidence and etiology of metabolic alkalosis according to Stewart approach on admission to intensive care unit.

Method and Material: We retrospectively analyzed clinical and biochemical variables of 183 patients on admission to intensive care unit. Data included simultaneous measurement of arterial blood gas, serum electrolytes, albumin, lactate, creatinin and phosphate values. Physiochemical analysis was used to calculate the strong ion difference (SID), total weak acids (Atot) and the corrected base excess (BE). Age, sex, mortality, diagnosis and APACHE II scores were also recorded. Occult metabolic alkalosis was defined as SID>38 mEq/l or Atot<11 mEq/l while BE<2.

Findings: Incidence of metabolic alkalosis was 20% with Henderson-Hasselbalch and 50% with Stewart approach (p<0.05). Occult metabolic alkalosis was detected in 54 patients (30%). Both BE and corrected BE was not a good indicator to determine metabolic alkalosis. The reasons of alkalosis were low Atot (96%) and high SID (4%) (p<0.05).

Results: Incidence of occult metabolic alkalosis is high in the ICU. To detect metabolic alkalosis cases, Stewart method is superior than Henderson-Hasselbalch approach and BE. Hypoalbuminemia was the most common cause of the metabolic alkalosis.

P-34
INCIDENCE OF BRAIN DEATH RELATED CLINICAL FINDINGS IN OUR ICU
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The aim of this clinical study was to define the incidence of brain death related clinical findings during declaration period in our ICU.

Method and Material: 44 brain dead patients who admitted in Akdeniz University Hospital Anesthesia ICU between January 2011 and December 2012 were included in the study.

Findings: Incidence of spinal reflexes was %20. Sympatic storm was defined in 16 patients (%36). 33 patients (%75) revealed Diabetes Insipidus. Hemodynamical compromise requiring vasoactive agent support was obtained in 36 patients (%81). Apnea testing could not be performed in 3 patients because of hypoxia and hemodynamical deterioration during the procedure. Transcranial Doppler Ultrasonography (TDU) (29 patients) or single photon emission computed tomography (SPECT) (15 patients) was performed for declaration of brain death. The duration of declaration period after diagnosing brain death by clinical examination was 25 hours and 12,3 hours, respectively.

Results: Hemodynamical compromise, diabetes insipidus and sympatic storm were the most frequent clinical findings in brain dead patients. The declaration duration was shorter for the patients in whom brain death was confirmed by SPECT in our ICU.
THE MANAGEMENT OF TWO CASES WITH SEVERE OVARIAN HYPERSTIMULATION SYNDROME IN THE ICU
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Objectives of the study: Ovarian hyperstimulation syndrome (OHSS) is a severe complication result from in vitro fertilization (IVF) therapies. The patients may develop multi-organ failure requiring multidisciplinary care in the ICU setting. We report the management of two cases of severe OHSS which required ICU admission in our university hospital.

Materials and methods: A 28 year old patient was admitted in the ICU at day 15 of IVF therapy with periferal oedema, pleural effusion, chest pain, tachypnea, dispnea and oliguria. The second patient was a 29 year old female who was administered follitrophine alpha and chorion gonodotrophine alpha for IVF 10 days ago. She was admitted to ICU with massive pulmonary oedema, central cyanosis and hypoxemia.

Results: The first case was mechanically ventilated for 4 days. Intravenous albumin, diuretics and low molecular weight heparin (LMWH) were administered. Chest tube was inserted in right hemithorax. The patient was discharged from the ICU at day 5. The second patient was emergently intubated and invasive monitoring was performed. At second day of admission, secondary ARDS was defined and she was mechanically ventilated in the following 24 days with pulmonary protective strategies. Diuretics, sedatives and muscle relaxants, broad spectrum antibiotics and LMWH were administered during the ICU stay. The patient were transported to ward at day 29.

Conclusions: OHSS may lead to ICU admission because of extravascular fluid shift, pleural and pericardial effusion, hypovolemic shock, electrolyte imbalance, thromboembolus or multiorgan insufficiencies. Management of Organ Supportive care may be required in severe cases.
P-37

BRUCELLAR SPONDYLODISCITIS IN A CRITICALLY ILL PATIENT WITH PARAPARESIS

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Introduction: Brucellosis is a sporadic disease that is seen in animals and also in humans when contaminated milk or milk products are used by them. The symptoms and clinical findings include fever, headache, myalgia, cough, sweats, back pain, hepato-splenomegaly, lymphadenopathy, osteoarticular manifestation such as arthritis, osteomyelitis, bursitis, and sacroileitis. Herein, we presented a critically ill patient with paraparesis due to spondylodiscitis because of brucella.

Case Report: Eighty-one years old male patient admitted to Emergency Department with symptoms of dyspnea, difficulty of walking and tiredness. Paraparesis was detected at neurological examination. Cranial computerized tomography and magnetic resonance imaging (MRI) were normal. Lumbar puncture was performed to confirm pre-diagnosis of Guillain-Barré syndrome but protein level was found normal in cerebrospinal fluid. Patient was intubated due to hypercarbic respiratory failure. Then he was transferred to intensive care unit (ICU) to perform mechanical ventilation and to research a neurological problem. APACHE II score and Glasgow Coma Scale were 18 and 7, respectively. Antibiotherapy was started because of pneumonia. Blood test and radiological examination were performed. MRI of lumbosacral spine revealed evident findings consistent with spondylodiscitis in level T8-9 and L4-5 vertebrae. Brucella spp. was produced in his blood culture, and doxiciclin and rifampicin were added to his medication. Additionally, Rose Bengal and Brucella agglutination tests were resulted as positive. At 7th day in ICU, he was extubated. Conscious patient with stable hemodynamics was transferred to Infection Disease Clinic at the day of 16th of ICU.

Discussion and Result: Brucellosis is hyperendemic in some countries such as Turkey, Portugal, Greece, India, Mexica. Musculoskeletal system is affected with female dominance and estimated to account for about 2 to 53% of cases. Lumbar vertebrae are the most frequently involved region in brucellar spondylitis. Waist and back pain is seen in this patients, and they may have complaints about difficulty in walking, myalgia and night pain. Difficulties in the diagnosis of brucella spondylitis may cause a delay in appropriate treatment, and the disease may lead to devastating consequences when associated with neurological complications. Our patient had Brucella diagnosis one week after the ICU admission and his progression got better after his medication changed according to the diagnosis. In conclusion, brucellar spondylodiscitis should always be in the differential diagnosis of vertebral pain or neurological symptoms, especially if the patient lives in an endemic area.

P-38

CAN DECUBITUS ULCERS BE PREVENTED?

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Decubitus ulcer is a remarkable reason for morbidity or even mortality. Eventhough the main purpose is protecting the patients from decubitus ulcer during the follow-up and treatment; grade1 decubitus may be overlooked and/or passes through the grade 2-3. Our purpose is determining decubitus at grade1 and prevent from upgrading.

Method and Material: ‘Wound Prevention and Maintanence Committee’ (WPMC) was founded in 2012. The aim of the committee is to improve the awareness of the staff, to identify the decubitus at grade1 phase and make treatment. We use barrier creams, transparent films, position cards for prevention and nonadherented coverings, hydrogel, hydrocolloid mousse, alginate for treatment. The patients who hospitalized with already existing decubits are not included to the study.

Findings:
- RATES OF DECUBITUS ULCERS IN 2012 BY BODY AREAS (%): Sacrum: 31, heel: 15, feet toes: 8, scapula:12, external ear: 8, left gluteal: 31, right gluteal: 4, arm: 4, right ankle: 4, right femoral: 4

Results: The decubitus is seen much more in sacrum and left gluteal area according to our findings. Early treatment in grade 1 ulcers prevent the requirement of greft and/or flep. Five patients passed through grade 2 and those were at the sacral region. After the beginning of the study, no decubits are detected outside the sacral area. There are no patients detected as grade 3. Although the grade 1-2 rates seem to be more than 2011, the awareness of the staff and decubits detected in grade 1 is increased; so the progression to grade 2-3 is decreased. As a result, the occurrence and upgrading of decubitus ulcers were decreased by the working of WPMC and the follow-up of position cards.
KORONER ARTER BYPASS CERRAHISINDE REMIFENTANIL VE FENTANIL İNFÜZYONLARININ HEMODINAMI, YOĞUN BAKIMDA KALIŞ SÜRESİ VE PROPOFOL TÜKETİMINE ETKISİ

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Koroner arter bypass cerrahisi uzun süreli yoğun bakımda yatış süresi ve okullu ilaç kullanımını gerektiren, yüksek maliyetli bir cerrahidir. Kısıt etkili opioider erken uyanmanın yanı sıra, kullanılan ilaç miktarında, yan etki profilinde, yoğun bakım kalış süresinde azalma sağlayabilir (1). Bu çalışmada koroner arter bypass cerrahisi geçiren hastalarda intraoperatif remifentanil ve fentanil kullanımının hemodinami, BIS değerleri, ekstübasyon zamanı, propofol tüketimi, postoperatif yoğun bakımda kalış süreleri, toplam ilaç tüketimi ve maliyeti üzerine etkisini araştırılmaktır.


RISK FACTORS FOR CATHETER ASSOCIATED URINARY TRACT INFECTIONS IN A SURGICAL INTENSIVE CARE UNIT

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Catheter associated urinary tract infection (CAUTI) has been associated with increased morbidity, mortality, hospital cost, and length of stay. Aim of this study was to determine the predictors of the development of CAUTI in surgical ICU patients admitted to Baskent University Hospital.

Method and Material: Following Institutional Review Board approval we performed this retrospective study, including 876 patients admitted to surgical ICU between January 2009 and July 2012. After completing review of patients’ data, 20 patients diagnosed with CAUTI, were compared to 75 appropriate matches who were not. Patients’ demographic features (age, sex, body weight), underlying diseases, etiology for ICU admission, APACHE II (Acute Physiology and Chronic Health Evaluation) and SOFA (Sequential organ failure assessment) scores, duration of hospitalization, organ dysfunctions, fluid balances, laboratory values, use of vasopressors, mechanical ventilation, nutrition, antibiotics, transfusions, features related to central venous catheterization, urinary catheterization, and intubation were the recorded parameters. Patients who did not have an urinary tract catheter and were discharged or died within the 2 days of ICU admission were excluded.

Findings: Out of 95 patients who were included in the final analysis, 20 patients (19%) had CAUTI. When compared to patients who did not have CAUTI, those who did were older, required more blood product transfusions during the first 3 days of ICU admission, had a longer duration of hospital stay prior to ICU admission (p=0.016). Following regression analysis, longer duration of hospital stay prior to ICU admission was determined as a risk factor for CAUTI. Fourteen-day and 28-day mortality rates for CAUTI were 20% (p=0.250) and 25% (p=0.343), respectively.

Results: In conclusion, although age, blood product transfusion, APACHE II and SOFA scores, and duration of hospitalization prior to ICU were different between patients who did and did not have CAUTI, prolonged duration of hospital stay prior to ICU was the only independent risk factor for CAUTI.
ANESTHESIOLOGICAL APPROACH IN A CASE WITH TAR (THROMBOCYTOPENIA – ABSENT RADIUS) SYNDROME

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TAR syndrome is a rare autosomal recessive disease characterized by hypogammaglobulinemia, thrombocytopenia and bilateral radial aplasia with thumbs present which was firstly described in 1951 by Bernhard and defined as a syndrome in 1969 by Hall. Skeletal, gastrointestinal, and cardiac anomalies may accompany thrombocytopenia and bilateral radius absence. The management of children with TAR syndrome can present challenge to anesthesiologists. Children with TAR are at risk for bleeding because of chronic thrombocytopenia and require extensive surgery for orthopedic procedures for correcting the limb deformities associated with this syndrome. In this case report, we intended to present our successful anesthesiological management in a patient who underwent lower extremity genu varum deformity correction surgery under general anesthesia.

Case: The 5-year old girl of 17 kg body weight had the diagnosis of TAR syndrome in her 3rd month of age when she was taken to the hospital due to diffuse rash in her skin with shortness of both arms. In this first admission to the hospital pediatric clinic, her platelet counts were 11,000 K/UL and she was given platelet transfusion. Her ultrasonography, echography, chest X-ray and ECG had revealed no cardiac, lung or gastrointestinal anomalies. In 5th year of her follow up elective lower extremity genu varum correction surgery was planned but surgery was delayed because of low platelet count of 66,000 K/UL. At 6 months follow-up, platelets rose to 112,000 K/UL upon spontaneous remission and surgery was reconsidered. In physical examination performed in preoperative period, it was observed that mental development was normal, and that there was no anatomical pathology leading to any intubation difficulty. Cardiac and respiratory system examinations including ECG and Pulmonary function tests were normal. Her haemodynamics were in normal limits. In musculoskeletal examination, bilateral radius absence (Figure 1), contractures in both 5th fingers, and radial deviation in both wrists were the predominant features. There was no supination in both elbows. Both hip joint motions were natural and both knees revealed genu varum deformity. Laboratory tests were as following: Hgb: 12.4 g/dL; Hct: 37.6 %; P: 112,000 K/UL; Glu: 73 mg/dl BUN: 32 mg/dl Creat: 0.29 mg/dl AST: 48 U/L ALT: 22 U/L Ca: 8.3 mg/dl Na: 138 mEq/L K: 4.1 mEq/L Cl: 104 mEq/L ECG, normal-invasive arterial pressure, and peripheral oxygen saturation (SpO2) monitoring were performed to the case which was operated without application of premedication. Upon preoxygenation with 100% O2 at a rate of 3 l/min with mask, anesthesia was induced with sevoflurane. IV line was established and 1 mcg/kg fentanyl and 0.6 mcg/kg rocuronium were injected. The patients trachea was intubated at first attempt without any difficulty (Figure 2). Anesthesiological maintenance was provided with 50 % O2 – 50 % N2O - 0.8 % Sevoflurane and 0.25 mcg/kg/min remifentanil continuous intravenous infusion. During the surgery, systolic blood pressure was 80-90 mmHg in average, and diastolic blood pressure was 40-50 mmHg in average. The operation continued 180 minutes. The patients trachea was extubated once she was thoroughly awakened after surgery and airway reflexes became stronger. She was given 500 mg acetaminophen intravenously for postoperative pain relief. Recovery period after surgery passed comfortably, without any problems. During the 24 hour-period postoperatively, the patient was monitored in orthopedic ward, which revealed neither abnormal vital signs nor complications.

Discussion: TAR is a clinically defined syndrome characterized by hypogammaglobulinemia, thrombocytopenia and bilateral radial aplasia with thumbs present. Firstly, loss of chromosomal region localized to 1q21.1 has been found associated to TAR syndrome and congenital heart disease but later it has been reported that the inheritance pattern of TAR is complex and that deletion (1q) is necessary but not sufficient to cause the phenotype. Bleeding episodes are most frequent during the first 1 to 2 years of life, with increased mortality due to intracranial hemorrhage (1) when the platelet count is 20,000/mm3. With increasing age, the recurrence of thrombocytopenic episodes decreases and platelet count can improve to a near-normal level. Survival is significantly longer in patients with TAR syndrome, with a projected curve showing a plateau of 75% by 4 years of age. The postponement of the operation to the 5th year of age in our patient thus seems reasonable. Frequency of hemorrhagic episodes decreases with age in agreement with a rise in the platelets, the function of which is probably normal in the majority of patients with TAR syndrome. Although bilateral radial aplasia which is observed in 100% of the patients is the defining skeletal feature in TAR, additional skeletal abnormalities are frequently observed, including extensive upper limb malformations, pectoral, and lower limb malformations which are observed in almost 50% of the patients. Dysmorphic facial features such as micrognathia, broad forehead, and low, posteriorly rotated ears have been found in up to 53% of patients with TAR. In addition, mental retardation and lactose intolerance (47%) may also be present. Non-skeletal abnormalities are also common, including gastroenteritis and cow’s milk intolerance in 47%, renal malformations in 23%, cardiac defects in 15%, facial dysmorphism in 53%, short stature in 95%, macrocephaly in 76% and capillary hemangioma in 24%. In a case report by Lynch et al., successful general anesthesia of an urgent caesarean section for a woman with TAR syndrome. The major anaesthetic difficulties they encountered were severe thrombocytopenia with a platelet count 30x10^9/L, which precluded regional anesthesia, and extensive limb abnormalities resulting in difficulty with vascular access and cardiovascular monitoring. Platelet transfusion was required but airway difficulties were not encountered. In our case, although it can be expected in this syndrome due to the dysmorphic facial features we did not encounter airway difficulties and no platelet transfusion required. The treatment of TAR in the first year of life is largely supportive with platelet transfusions as needed to control bleeding symptoms and facilitate orthopedic or other procedures. Much of the clinical management following the first year of life will be directed towards the non-hematologic manifestations of this disorder. Nonetheless platelet count is important in preoperative assessment. If platelets are below 50000 / ml, mucosal hemorrhages may develop during intubation by means of laryngoscopy. Blood losses require close attention during surgical follow-up. Patients may require perioperative platelet transfusions. The postponement of all elective operations until platelet counts are normal is recommended. Nasotracheal and nasogastric tubes are relatively contraindicated secondary to risk of epistaxis. Limb abnormalities may make vascular access more challenging and might require careful positioning. Patients with congenital heart disease require perioperative antibiotic prophylaxis. This case report, to the best of our knowledge, is one of a limited number of cases emphasized on management of anesthesia of TAR syndrome in the world. In conclusion, we believe that careful preoperative assessment, selection of appropriate anesthetic agent, and monitoring deserve important consideration in cases with TAR syndrome where possible associated anomalies should not be overlooked. The written informed consent was obtained from the family for publishing this case as a report.
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EFFECT OF BODY MASS INDEX ON EARLY OUTCOME AFTER CORONARY ARTERY BYPASS GRAFTING

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The aim of this study was to investigate the effect of body mass index (BMI) on early outcome after coronary artery bypass surgery (CABG).

Method and Material: After approval from the hospital ethical committee, 250 patients aged 33 to 82 were studied undergoing CABG. Patients were divided into four groups according to body mass index (BMI) as weak (n = 15; BMI < 15), normal (n = 52; BMI = 19 to 24.9), overweight (n = 72; BMI = 25 to 29.9) and obese (n = 111; BMI > 30). Surgical risk factors examined included age, sex, previous myocardial infarction, ejection fraction, hypertension, diabetes mellitus, chronic obstructive pulmonary disease, peripheral vascular disease, cerebrovascular disease and urgency for surgical procedure. Surgical outcomes examined included usage of inotropics, amount of bleeding, need for transfusion, sternal wound infection, renal failure, mechanical ventilation time, intensive care unit stay and length of hospital stay. The data obtained from chi-square test, Kruskal-Wallis test and Mann-Whitney U test.

Findings: The incidence of hypertension was significantly higher in the obese group (p<0.05). Findings of other preoperative and perioperative parameters did not differ significantly. The level of bleeding was significantly lower in the obese patients (p<0.01). Transfusion needs was significantly lower in the group of obese compared to other groups (p<0.01).

Results: Our results indicate that the patients with obese BMI do not effect early outcome after CABG. Despite the comorbidities that are often present with obesity, obese BMI was not found to be an independent predictor of morbidity and mortality after CABG.

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INTENSIVE CARE COURSE OF A PATIENT WITH BULBAR PRESENTATION OF AMYOTROPIC LATERAL SCLEROSIS

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Aim: Amyotrophic lateral sclerosis (ALS) is a progressive neurodegenerative disease with a mean age at the onset of 60 years. It is characterized with progressive degeneration of upper and lower motor neurons. Although the usual clinical presentation is asymmetric muscle weakness of the extremities, it is rarely presented with bulbar symptoms such as dysarthria, hoarseness or dysphagia. The progression of the disease is generally rapid and most the patients die within 2 to 4 years due to respiratory failure. Long term intensive care unit admission is inevitable for ALS patients. The aim of this case report is to present the intensive care unit (ICU) course of a patient with ALS presented with bulbar involvement.

Case Report: A 73 year old man with the history of dysarthria and dysphagia was diagnosed as ALS 6 months ago. He has had a coronary artery bypass surgery and was under medication for hypertension and coronary artery disease. He admitted to ICU after a successful resuscitation for acute respiratory failure in the emergency department with an APACHE II score of 24. Chest X-ray revealed opacification of the right hemithorax and CT scan revealed bilateral pleural effusion and compression atelectasis especially significant on the right side. PaO2/FiO2 ratio, which was improved with recruitment maneuvers and higher levels of PEEP, was 89 on admission to ICU. Fiberoptic bronchoscopy was performed and purulent secretions occluding the right main bronchus were suctioned. Tracheotomy and gastrostomy were performed. The mechanical ventilation was uneventful except a ventilator associated pneumonia related to Acinetobacter baumannii that was treated with appropriate antibiotherapy. Weaning was unsuccessful for the patient due to poor spontaneous breathing; therefore we planned to discharge the patient with home ventilation. He was also evaluated in another medical center and scheduled for diaphragm pacing.

Discussion: Mechanical ventilation is inevitable in the course of ALS especially when either respiratory muscles or the bulbus is involved. Intensive care course may be prolonged and complicated for patients with ALS. Early application of tracheotomy and gastrostomy may decrease the frequency of respiratory complications. Quality of life after intensive care unit should especially be considered while planning the treatment and follow-up strategies for ALS patients.
OPTIMAL WRIST POSITION FOR LONG AND SHORT AXIS ULTRASOUND GUIDED RADIAL ARTERY CANNULATION

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The radial artery is the most common site for arterial cannulation. Procedures for improving radial artery cannulation have involved direct visualization of the vessel with ultrasonography (US). The aim of this study evaluate the short axis and long axis radial artery measurements at 0º, 45º, 60º wrist joint angle and find out the optimal wrist joint angle for long and short axis US guided radial artery cannulation.

Method and Material: One hundred fifty-two (90 men and 62 women, 18-48 years of age; mean age: 32.9±6.1) healthy volunteers were recruited. The radial artery distance between skin and height, width, area in short axis and radial artery distance between skin and height was measured in long axis at 0º, 45º, 60º wrist joint angle were measured.

Findings: Short axis width was statistically significantly increased at 45º compared to at 0º (p<0.001). Short axis radial artery distance between skin and height at 45º were statistically significantly decreased than at 0º (p<0.001 for all comparisons) and long axis skin distance and height at 45º were also statistically significantly decreased than at 0º (p<0.001 for both comparisons). Short axis radial artery skin distance and area at 60º is statistically significantly decreased than at 45º (p<0.001 for both comparisons) and also long axis height of radial artery at 60º is statistically significantly decreased than at 45º (p<0.001).

Results: Angle increment up to 45º might help clinicians for radial artery cannulation in short axis plane whereas this angle increment maneuver decreased the arterial height in long axis which might be a potential disadvantage for cannulation.

COUPLED PLASMA FILTRATION ADSORPTION (CPFA) IN INTENSIVE CARE UNIT: FIRST EXPERIENCE

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Objectives: Sepsis is still one of the main causes of death in critically ill patients and circulating pro-inflammatory and anti-inflammatory mediators appear to participate in this cascade. Several blood purification techniques have been used to remove circulating septic mediators (continuous hemofiltration, high volume hemofiltration, plasma exchange) but in order to achieve higher mediator clearance a new strategy that combines plasmafiltration with plasma adsorption has been proposed (1). Coupled plasma filtration adsorption (CPFA) is a modality of blood purification in which the plasma is separated from whole blood and directed into a sorbent cartridge. The sorbent agent removes cytokines with no interaction with the blood cells (2).

Case: A 76-year-old male patient with a history of Diabetes Mellitus, chronic obstructive pulmonary disease and atherosclerotic heart disease was admitted to the intensive care unit with respiratory insufficiency. He had a history of falling down at home 2 days ago. On physical examination there were ecchymotic lesions on the left side of thorax and chest x-ray revealed displaced fractures on the left 6 - 7 th ribs with hemothorax requiring a chest tube insertion. The patient’s clinical course deteriorated and the mechanical ventilation was started following the endotracheal intubation. His vital signs were unstable and vasopressor agents were infused to stabilize the hemodynamic condition. He had tachypnea and his spontaneous breathing was not sufficient to wean so continuous sedation was required to adapt the mechanical ventilation. On the 5th day, chest radiograph showed increased pulmonary infiltration on the left side together with the positive sputum culture for methicillin-resistant Staph aereus. Antibiotics were administered according to the susceptibility of the isolated pathogen. Ventilator- associated pneumonia was considered as a result of prolonged mechanical ventilation. He had fever up to 39ºC and leucocytosis (25.000/mm³). This septic condition made the physical status of the patient worse and the increment doses of vasopressors were required together with the infusion of noradrenaline. The patient had anuria refractory to fluid therapy. An additional therapy for the purification of the blood from septic mediators was scheduled to reduce the severity of the clinical picture. The right femoral vein was accessed via 12 F double-lumen catheter inserted through the Seldinger technique and CPFA (INFORMED HF-440, Geneva, Switzerland) was carried out. Plasma filtration and blood flow rates were maintained at 25 ml/min and 150 ml/min respectively and according to the patient’s condition, the flow rate was adjusted. A single course of CPFA lasted for 6 hours and at the end of the procedure the noradrenaline infusion was ceased, the doses of vasopressors were decreased and the urinary output was 0.5mL/kg/h. The radiological improvement on chest x-ray was also promising but on the 12th day of his admission, the patient was tracheotomised because of the failed extubation. Atrial fibrillation resistant to multidrug treatment accompanied to the clinical condition. Although the management of the septic condition and the improvement of the renal function, the patient died on the 34th day of his admission due to the aggravation of his serious co-existing diseases.

Discussion: In our case, the application of CPFA facilitated the cessation of vasopressors and improved the systemic and renal hemodynamic status. Considering the high mortality and morbidity rates in septic shock patients, this technique seems to have benefits. The clinical studies are limited so further experiences are required to define the effectiveness of this technique in septic patients.

References
MAN- IN- THE –BARREL SYNDROME DUE TO BILATERAL SUBDURAL HEMATOMA

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Introduction: ‘‘Man-in-the-barrel’’ syndrome refers to a clinical syndrome of brachial diplegia. Classically, it has been associated with cerebral hypoperfusion resulting from watershed ischemia between the vascular territories of the middle and anterior cerebral arteries (1). It has also been reported secondary to peripheral nervous system involvement (brachial plexus lesions and polynuropathies), spinal cord disease (infarction of the spinal cord, upper spine injuries, motor neuron disease, cervical epidural infection) and brain involvement other than watershed infarctions (metastatic disease and closed head injury) (2). With this paper we report a patient who developed ‘‘man-in-the-barrel’’ syndrome due to a closed head injury.

Case: A 41-year-old man, with a closed head injury and a Glasgow Coma Scale of 7, was intubated in the emergency department and admitted in to the ICU. A cranial CT showed bilateral fronto-parietal subdural hematomas and frontal parenchymal edema. The patient received optimal supportive care and after 15 days he regained consciousness with ‘‘man-in-the-barrel syndrome’’. Although his motor function remained intact in the lower extremities, his arms did not react to painful stimuli applied to the nailbeds. During the treatment period, the patient neither had any hypotensive episodes nor any electrolyte disturbances. MRI showed bilateral watershed infarctions involving distal fields of the middle and the anterior cerebral artery. A doppler analysis of the supra aortic trunks showed that the carotid and vertebral trunks were normal.

Conclusions: The duration and severity of hypotension needed to trigger ‘‘man-in-the-barrel syndrome’’ is unknown. Our patient did not develop any period of sustained hypotension, which is the most common cause of border-zone infarction. Therefore in our case, bilateral frontal subdural hematoma is most likely the cause of this border-zone infarction. In addition to mostly seen hypotension or any electrolyte disturbances, MRI showed bilateral watershed infarctions involving distal fields of the middle and the anterior cerebral artery. A doppler analysis of the supra aortic trunks showed that the carotid and vertebral trunks were normal.

References:

SUCCESSFULL MANAGEMENT OF A CASE WITH H1N1(INFLUENZA) INDUCED SEVERE ACUTE RESPIRATORY DISTRESS SYNDROME WITH ECMO.

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Objective: H1N1 influenza can cause severe acute lung injury. Extracorporeal membrane oxygenation can be used as a rescue therapy in patients failing conventional mechanical ventilation. Here, we describe our experience in H1N1 induced ARDS using both lung protective ventilation strategy in conjunction with extracorporeal membrane oxygenation (ECMO).

Case: A 53 year old male patient was admitted to emergency service with respiratory failure and transferred to ICU. He was entubated on admission. It was learned that he took colchicine pills for abdominal pain from his past medical history. His CBC was WBC:2.3K/uL, neutrophil:1.7K/uL, lym:0.5K/uL, Hb:13.4 g/dL, Hct:41.1, PLT:84K/uL. His biochemical analysis was normal with the exception of ALT:88U/L, AST:274 U/L, Na:143.2 mmol/L, K:3.61 mmol/L. Procalcitonin level was 3.65 ng/ml and CRP:15.6 mg/dL. Coagulation parameters and urine analysis were normal. Specific antimicrobial treatment was varied on the basis of microbiologic results to treat coinfections with H1N1, Acinetobacter and Klebsiella pneumonia.

Conventional ventilation, venovenous haemofiltration, antiviral and antimicrobial therapy and prone position did not improve severe hypoxia and intractable hypercapnia of the patient with isolated ARDS. ECMO (Novalung, Germany) was started at 15th day of mechanical ventilation. ABG analysis at that time was pH:7.24, pCO2:103.7 mmHg, pO2:55.2 mmHg, K:3.61 mmol/L, Na:143.2 mmol/L, Ca:1.13 mmol/L, L,CHCO3:44.3, BE:14.5 while FiO2 was 100%. Venovenous ECMO and biocoated circuit was used. A 20F venous withdrawal cannula was inserted via left femoral vein and a 18 F infusion cannula was inserted in the right jugular vein percutaneously with Seldinger technique. During extracorporeal lung assistance heparin infusion was monitored with ACT measurement which was maintained between 180-250 sec for 15 days. ECMO flow and respiratory parameters were adjusted to achieve normocarbia and oxygen saturation above 90. IVIG treatment at a dose of 2 mg/kg over a 5 day course was given to the patient since Immunoglobulin levels were lower than normal limits. Prednol was administered at a low dose (20 mgx2) The duration of ECMO support and the duration of mechanical ventilation was 16 and 31 days respectively. The patient was eventually recovered and successfully discharged from the hospital. His total length of ICU stay was 47 days.

Conclusion: ECMO therapy is a life saving invasive strategy in severe respiratory failure for patients with otherwise fatal prognosis.
A RELIABLE TEST FOR THE DIAGNOSIS OF BRAIN DEATH: BISPECTRAL INDEX SCALE (BIS)

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Brain death (BD) is defined as the total irreversible loss of brain functions including brain stem. According to the Turkish regulations, BD diagnosis must be based on the clinical criteria and an additional imaging test showing the cerebral circulatory arrest. Bispectral Index Scale (BIS) is derived from a mathematical analysis of the electroencephalogram. BIS value “zero” means total electrical silence of the brain. The aim of our study is to determine the reliability of BIS in brain death diagnosis.

Method and Material: Twenty-one patients with brain death diagnosis according to the clinical criteria were included. Patients were hemodynamically stable, normothermic, normocapnic and normal range of oxygenation and metabolic status. Then patients were monitored by BIS (BIS XP, A-2000, Aspect Medical Systems, Newton, Mass, USA) continuously and an additional imaging technique was applied. Transcranial doppler ultrasound was performed in all but two cases, in whom diagnosis was confirmed by cerebral angiography in one patient and computed tomography angiography in the other.

Findings: Mean age was 42.5 ± 18.7 (4-71) years. Only BIS values with a signal quality index between 97-100 was recorded. Recorded BIS values were “zero” for the majority of the study period and all additional imaging techniques supported brain death diagnosis in all patients.

Results: BIS is a noninvasive, easily interpreted method for monitoring of cerebral activity. According to our results, BIS is easy to perform and helpful in BD confirmation.

A RARE AND FATAL CAUSE OF SEPSIS: EMPHYSEMATOUS PYELONEPHRITIS

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Introduction: Emphysematous Pyelonephritis (EP) is a rare and mortal suppurative renal infection but early diagnosis can be lifesaving. It can be diagnosed with radiology. It can be healed by wide spectrum antibiotics, surgical drainage or nephrectomy (1). In this case report, we aim to present a mortal case which-contemplates aggressively despite the wide spectrum antibiotics.

Case: The female patient, who is 66 year old, came to our emergency department with the complaints of acute right side pain, fever, nausea and vomiting commencing two days ago. It can be learned that the patient was diagnosed with renal colic and discharged from another hospital a week ago. In her profile, she has type two regulated diabetes and kidney stone operation. In the emergency department, HR: 138/minute SPO2: %80 T: 36.8°C RR: 30/min and her urine has three positive leucocyte esterase, abundant erythrocytes and leukocytes; Urea: 50 mg/dL, Cr: 1.24 mg/dL, bilirubin: 2.4 mg/dL, hyponatremia hypokalemia, leukopenia, thrombocytopenia have been detected in the laboratory. In order to exclude pulmonary embolism or aortic dissection thoracoabdominal CT scan was done which rather revealed medium pelvicalyxial ectasia, air in the pelvis and calculi in the ureteropelvic junction in the right kidney and also air in the right ureter, and interstitial pulmonary edema. She was diagnosed with multi organ failure and intubated, and supported with mechanical ventilation in PRVC mode. Fluid resuscitation was done under PICCO monitoring. In her second day, interventional radiology placed drain to the right calixial area and took culture from abscess. In her third day, because of the deep acidosis, CVVHDF was started. Meropenem treatment was started for the E.coli positive cultures. Despite all the treatments, the patient died in the seventh day of septic shock treatment.

Conclusion: EP is a serious infection, which has to be diagnosed quickly and treated swiftly. The patients who admit to the hospital having side-pain with diabetes and stone history and have findings of sepsis may be thought as potential sick. The diagnosis should be supported with monitoring methods. Treatment should be planned according to disease severity, patient’s clinic situation and the response to the treatment.

References:
The red cell distribution width (RDW) is a part of complete blood count and is a quantitative measure of the variability in the size of circulating erythrocytes. Recently RDW becomes a predictor of mortality in many conditions. We conducted this study to investigate the prognostic value of RDW in ICU (Intensive Care Unit) population without making age and diagnostic discrimination.

**Method and Material:** Two hundred and eighty-four ICU patients were enrolled into this study. All patients including surgical ones, identified retrospectively via the central medical database of our hospital. Patients with a history of recent blood transfusion and patients who died or discharged from ICU within 48 hours were excluded. Patients were classified according to their age, process of their disease, duration of stay in ICU, types of diseases and clinical outcomes. Mortality rate in ICU was evaluated with respect to the surgical or medical nature, acute or chronic process of the disease, age and length of stay in ICU. The changes in RDW values depending on the age and duration of stay in ICU were evaluated. In patients who died or discharged, the assessment of the RDW values was made according to the acute or chronic process of the disease. The Chi Square test was applied to compare the mortality rate of the groups. The changes in RDW values depending on the length of stay in ICU were analyzed by repeated measures ANOVA and paired t test. The Student t test was applied to compare the mortality rate of the groups. The changes in RDW values depending on the length of stay in ICU were analyzed by repeated measures ANOVA and paired t test. The Student t test was used for normally distributed variables and Mann-Whitney U test for non-normally distributed variables.

**Findings:** There was no difference in the RDW values between the patients who survived or died. RDW values increased slightly parallel with the length of stay in ICU. Also there was a weak correlation between the initial RDW values and age. Mortality rate in ICU was found to be higher in medical patients than surgical ones, but no significant difference was found between acute or chronic case groups.

**Results:** Unlike the other previous studies in ICU, we did not found any significant relationship between mortality and RDW levels. Determination of the factors that influence RDW values is important in order to use RDW as prognostic predictor in ICU. In general intensive care units that have wide variety of diagnosis spectrum, RDW has been far from being a mortality predictor. Identification of the factors that had an impact on RDW values is important, in order to use RDW as a well mortality predictor.
PLASMAPHERESIS AS A RESCUE THERAPY IN MUSHROOM POISONING: A CASE REPORT

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Introduction: Amanita phalloides is an important cause of death due to mycetism.(1) Poisonings generally have the symptoms as nausea and vomiting. Toxin is absorbed enterohepatically and renal reabsorption increases the toxicity. Toxins cause hepatorenal failure with gastrointestinal and neurologic symptoms.(2)

Case: A 28-years old woman admitted to the emergency department with the complaints of nausea and vomiting 24 hours after ingestion of mushroom. On admission, AST: 317; ALT: 419; LDH: 522; INR: 1,38; aPTT: 31,8; Hb: 7,4 g/dl; Hct: %22; PLT: 21000/mm3; ammonia: 61 µmol/l were detected. She was followed by the gastroenterology department with the diagnosis of A. phalloides poisoning and hemoperfusion with the carbon filter was started as the biochemical findings deteriorated (AST: 1276 IU/L; ALT: 1837 IU/L; LDH: 1959 IU/L; INR: 2,98). Despite the hemoperfusion, she got worse and unconscious, and was taken to the intensive care unit with acute fulminant liver failure. Penicillin G, oral-rectal lactulose and acetyl cysteine infusion were added to the treatment. Anemia and thrombocytopenia were treated by blood products. She was listed for emergency liver transplantation (MELD score: 55 and Child Score: B).

While awaiting for transplantation she was taken under plasmapheresis as was AST: 4951 IU/L; ALT: 6357 IU/L; LDH: 6750 IU/L; INR: 3,32; aPTT: 26,3; ammonia: 118; total bilirubin: 1,46. Due to the risk of bleeding, right femoral vein was catheterized under ultrasonographic guidance. Three sessions of plasmapheresis with fresh frozen plasma were undertaken with Prismaflex using TPE ultrasonographic guidance. After plasmapheresis, as the clinical picture improved (with AST: 87 IU/L; ALT: 499 IU/L; LDH: 192 IU/L; INR: 1,34; aPTT: 26,3; ammonia: 118; total bilirubin: 1,46), she was discarded from the transplant list.

Discussion: In the acute fulminant liver failure due to mushroom poisoning, liver transplantation can be required. However, we think that due to both the difficulties in donor organ finding and the quick poisoning, liver transplantation can be required. However, we think that due to both the difficulties in donor organ finding and the quick progression of the disease, plasmapheresis can be lifesaving and time saving during the preparatory period for liver transplantation.

References:

ADRENAL INSUFFICIENCY DEVELOPED IN PATIENT WITH CHRONIC KIDNEY FAILURE

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Introduction: Adrenal insufficiency (AI) is a hard to identify disease in early period that develops as a result of bilateral adrenocortical destruction. In our case in the patient followed due to chronic kidney failure (CKF), AI was presented which was diagnosed with resistant hypoglycemia and hypotension attack. Case Presentation: 58 years old male patient in the dialysis program who was followed due to diagnosis of CKF was taken into intensive care unit because of disorder in his overall condition, hypoglycemia and hypotension. The cranial Computed Tomography (CT) of the patient was normal who had Diabetes Mellitus (DM) in his history and cachexia and hyperpigmentation. Consolidation in both hemithoraxes, pleural thickening and effusion was determined in thorax CT and atrophy was detected in both surrenal glands via abdominal CT. Response could not be obtained to adrenocorticotropic hormone (ACTH) stimulation test in the patient whose plasma cortisol level was low and ACTH level was high. Steroid treatment was started in the patient who was considered to have AI and recovery was observed. The patient whose clinical findings improved, was transferred from intensive care unit to the service with steroid replacement therapy.

Discussion: Clinics for AI starts after 90% of adrenal glands are destructed; manifestation may be unclear for a long time and diagnosis may be delayed till adrenal crisis. Acute adrenal insufficiency might require intensive care unit due to resistant hypotension, dehydration, nausea, vomiting, hypoglycemia and disorder in overall condition. AI must be taken into account in patients with CKF if hypoglycemia and hypotension is observed and in diabetic patients with recurrent hypoglycemia attacks. In our case, findings like hypoglycemia and hypotension that were frequently seen in patients with CKF and DM, were presented. Upon requirement for intensive care unit due to disorder in general conditions and resistant hypotension, investigations along with laboratory and imaging methods were performed and response was obtained to the treatment applied for AI. As a conclusion, to our knowledge AI must be considered in patients with CKF who apply with only hypoglycemia and hypotension symptoms and it must be investigated with advanced examinations because delay in diagnosis in AI causes high morbidity and mortality.

References:
Results: Dermatological disorders are common problem in the ICU where is a special setting leading to various skin conditions due to immobility, sweating and decreased perfusion. Intensivists should be kept in mind that skin is a crucial organ as the other organs and personnels. Staff and dermatology department will guarantee a rapid diagnosis and treatment of various skin disorders in the ICU.

Method and Material: We performed a 1-year prospective study in three general medical and surgical ICU. All patients examined dermatologically and patients who presented skin lesions upon admission or developed them during their ICU stay included to the study.

Findings: 136 patients with the mean age 47.2 ± 17.9 years examined and 43 (31.6%) patients with skin disease included to the study. The major reasons were skin and soft tissue infections, contact dermatitis, xerosis cutis, adverse drug reactions, and chronic wounds including pressure sores and skin irritation or dermatitis and also toxic epidermal necrolysis was observed in one patient.

Results: No difference in prevalence of burnout was detected according to age, level of training, years of employment and family status. Anxiety, depression, depersonalisation scores were lower in the nurses that choose the profession of his own accord (p≤0.05). Personnels accomplishment scores were higher in the nurses that choose the profession of his own accord (p≤0.05). Emotional exhaustion was statistically significant in the nurses that find the social activity inadequate (p≤0.05).

Results: Work demands and burdens, high expectations on performance and despite maximal effort and use of high technology apparatus and pharmaceuticals, not every patient could be recovered, creates enormous pressure on ICU nurses. A high proportion of critical ill oncological patients in our ICU is also associated with high levels of emotional stress. In our study high levels of emotional exhaustion and depersonalisation were related to poor social activity. Finding the profession in proper and choosing the intensive care nursing profession by his own accord are also related to the burnout. The burnout risk is higher in our ICU nurses who do not want to work at his own request. As a result, maintaining a balance between personal needs and preferences and job demands and burdens may reduce burnout.
CHARACTERISTICS AND OUTCOMES OF ADULT PATIENTS RECEIVING MECHANICAL VENTILATION DUE TO ACUTE POISONING

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Poisoning is an important cause of admission to intensive care units (ICUs) and prolongs the length of stay (LOS) in the ICU. Patients who come with self-poison or overdose may require mechanical ventilation (MV). The need for prolonged MV causes a significantly longer LOS and higher mortality in the ICU. The analysis of the characteristics and outcomes of patients receiving MV after poisoning may be useful in the clinical management of these patients, allowing for better counseling of the patients and their families.

Objectives: to evaluate the relationships between demographic and etiological characteristics and the need for MV.

Method and Material: 211 patients diagnosed with poisoning were analyzed from January 2010 to December 2011. Data regarding type of poisoning, age, gender, the time between exposure and ICU admission, type of poisoning, toxic agents, the route of exposure, consciousness status on arrival, the length of the ICU stay, need of MV, complications of MV, the Glasgow coma score and outcome were obtained.

Findings: The use of MV was significantly associated with both gender (P=0.04) and the route of exposure (p<0.001). The use of MV was also significantly associated with type of poisoning (p=0.01) and the poisoning agent (p<0.001). There were very strong relationships between the drug poisoning and gender (p=0.002) and between type of poisoning and gender (p=0.008).

Results: The present study demonstrated that there were significant relationships between the use of MV and gender, type of poisoning, the toxic agents, the route of exposure and increased the ICU LOS. The need of MV may lead to poor outcome as it is associated with higher incidence of ventilator related complications and longer ICU stay.
PROCEDURAL SEDATION AND ANALGESIA FOR BURN WOUND CARE IN ADULT

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Burn treatment includes daily cleaning, debridement, dressing changes and assessment regarding the need for skin grafting. These procedures are painful and usually require procedural sedation and analgesia. Our aim was to quantify efficacy and patient safety of procedural sedation and analgesia in a burn unit.

Method and Material: 201 procedural sedations and analgesia (PSA) in 101 burned patients have been reviewed over a 10-month period. Demographic and clinical data including patient age, gender, body weight, dates of burn injury and wound care procedures, length of procedure, PSA medications and doses, adverse drug events, difficulties encountered and related interventions have been assessed.

Findings: The mean length of the procedure was 32.4 minutes with a range of 10 to 90 minutes. The mean subject age was 38.9 years (range: 18 to 90 years), 82% were male, and the mean TBSA was 18.3% (1-67%). This burn center used a procedural sedation regimen of fentanyl, propofol, ketamine and midazolam for their rapid onset and short duration of action. Documented 126 adverse events were hypertension (60), respiratory depression (30), hypothermia and shivering (20), hyper salivation (8), allergic reactions (2), body temperature 38 °C, CVP 2 mmHg. Patient was shivering and sweating. Nasogastic content and urinary output were within normal ranges. Laboratory tests: CRP 15.6, WBC 10300, fibrinogen 600, D-dimer 2.20, troponin 3.97, myoglobin 156, BUN 53. First chest X-ray and cranial CT were evaluated as normal. Blood levels of ethanol and carboxyhemoglobin (COHb) were normal, urine analysis for drugs was positive for phencyclidine. On the second day of admission patient’s fever, shivering and sweating decreased; his consciousness was improved, GCS was 15 so patient was extubated. Repeated MRI images were reported as consistent with CO intoxication. Diminished respiratory sounds in lower parts of lungs considered to be as a result of atelectasis and respiratory exercise, oxygen support through nasal cannula and non-invasive pressure controlled mechanical ventilation (NIMV) implemented. Decrease in oxygen saturation after NIMV observed and thorax CT-Angiography revealed bilateral linear atelectasis in lower parts of lungs and pneumomediastinum. NIMV was stopped.

Results: Patient safety and comfort constitute the prime priorities in burned patient management. The provision of PSA in patients with severe burn carries the risk of potentially life-threatening complications. Good PSA practice involves pre-sedation assessment and optimal selection of patients, careful monitoring and support from dedicated staff, and adherence to recovery and discharge criteria.

Conclusion: Clinical findings of CO intoxication are usually correlated to COHb levels, but it must be considered that they are not always directly proportionate (1-3). Carbon monoxide causes structural damage in brain tissue which can be demonstrated acute and subacute stages (4-6). In our case unconsciousness and structural brain lesions seen in MRI despite of normal COHb levels support this. It should be kept in mind that half-life of CO is 320 minutes and effects of tissue hypoxia can be seen for prolonged time.
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**VALPROIC ACID OVERDOSE INDUCED SEVERE BONE MARROW DEPRESSION IN ICU; USING OF CALCIUM FOLINATE AND L-CARNITINE**

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Objectives of study: Valproic acid (VPA) has been used as an antiepileptic drug for different types of seizures. In addition, it has been used to treat a wide spectrum of diseases ranging from bipolar and schizoaffective disorders, social phobia and neuropathic pain to migraine treatment and prophylaxis. However, in toxic doses severe complications such as brain edema, coma, hepatic failure, pancreatitis, bone marrow suppression, hyperammonemic encephalopathy may occur. We report the case of a patient with a serious intoxication secondary to VPA overdose who was treated with a combination of calcium folinat and L-carnitine.

Case Report: A 33-year-old woman was admitted to our emergency department after ingesting 150 number of sustained-release formulation of VPA 500 mg. Then the patient was transferred to the intensive care unit (ICU). L-carnitine therapy started first day of ICU and L-carnitine therapy was continued until the drug level fell to an undetectable range. 4th day of ICU; hematology were consulted increasing leukopenia. Calcium folinat therapy was started. After Calcium folinat therapy white blood cell were increased. 7th day of ICU; respiratory distress was observed then she was intubated and put on mechanical ventilation. It’s thought that the patient has developed leukopenia associated pneumonia and appropriate antibiotics are administered. She died in 8th ICU day.

Discussion: We present a case of VPA intoxication with neurological involvement, hemodynamic instability, severe leukopenia, thrombocytopenia and respiratory asisosis after VPA overdose. Valproic acid is an organic acid similar to fatty acids that is metabolized by the liver mainly via glucuronic acid conjugation, mitochondrial beta-oxidation and cytosolic omega-oxidation. Overdose patients with acute VPA intoxication have been given levocarnitine (L-carnitine) in an attempt to increase VPA metabolism via beta oxidation and to reverse mitochondrial metabolic abnormalities.

Conclusion: The presented case of VPA intoxication was treated with calcium folinat and L-carnitine; hepatotoxicity did not develop and the patient recovered from a toxic dose of VPA. We supposed that performing early calcium folinat treatment in the beginning of leukopenia may prevent the bone marrow suppression and as a result morbidity and mortality can be decreased.

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**SCREENING OF THE NUTRITIONAL RISK OF BURNED PATIENTS BY NRS 2002**

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To evaluate the nutritional risk in hospitalized patients using the methodologies of European Nutritional Risk Screening 2002 (NRS 2002).

Method and Material: We prospectively evaluated the nutritional risk of 195 cases of burn patients in burn center and intensive care unit over a 10-mounth period with NRS 2002. The patients having NRS score > 3 were included in nutrition support (NS) program. According to patient status, oral nutrition support (ONS), enteral nutrition (EN), parenteral nutrition (PN), or EN plus PN was applied.

Findings: The study sample comprised 195 patients (55 women, 140 men), mean age 22.3 (SD=21.1) years. The mean percent total body area burned was 13.46% (SD=11.9). The prevalence of patients at nutritional risk with the NRS-2002 first and second week were found as 6.22% and 1.91% respectively. In burn unit, the rate of the patients having NS in first and second week were found as 90.4% and 72% respectively. No iatrogenic malnutrition was observed in our burned patients.

Results: The hypermetabolic response associated with severe burn injury results in high calorie requirements to allow optimal healing and outcome. Aggressive NS is recommended following severe burn injury. Our burned patients had been given aggressive nutritional support. Therefore, NRS 2002 screening system had no additive effects on deciding the nutritional support in burned patients.
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THE COMPARISON OF EFFECTS OF PREOPERATIVE AND PERIOPERATIVE DEXMEDETOMIDINE INFUSION ON POSTTHORACOTOMY PAIN

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We aimed to compare the effects of preoperative and perioperative dexmedetomidine infusions on postoperative analgesia, tramadol consumption and sedation on patients who undergoing thoracotomy in surgical intensive care unit (SICU).

Method and Material: Forty patients divided randomly into two groups. A loading dose of 1µg/kg dexmedetomidine (10minute) was applied in both groups before anesthesia induction. Additionally, in group-I infusion of dexmedetomidine (0.4 µg/kg/h) was given through the operation and following 6 hours after the operation. Same protocol was used for induction and maintenance of anesthesia in all groups. Tramadol (1mg/kg) was also given as a loading dose in both groups after the extubation. Tramadol administered to the patients by PCA device with a 0.4 mg/kg/hour infusion, 0.2 mg/kg bolus dose, and 20 minutes lockout intervals. Hemodynamic parameters, SpO2, respiratory rate, visual analog scale (VAS) resting and ramsey sedation scale (RSS) values, tramadol demand and delivery doses, side effects and requirements for additional analgesia were recorded within the postoperative 24 hours in SICU.

Findings: No statistically significant differences were observed between the groups, when the amount of percentage changes in postoperative hemodynamic values were compared. There were no significant differences between the groups in VAS scores, total PCA-tramadol consumption, RSS values, requirements for additional analgesia, and side effects (p>0.05). Postoperative basal VAS and RSS values were significantly lower than the other periods in both groups (p<0.05).

Results: We conclude that preoperative iv dexmedetomidine infusion was as effective as perioperative dexmedetomidine infusion as an adjunct to PCA with tramadol on postthoracotomy pain.

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RISK FACTORS ASSOCIATED WITH READMISSIONS TO ICU

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To evaluate risk factors for predicting readmissions to ICU and to help determine objective criteria for discharges from ICU.

Method and Material: A total of 476 patients discharged from our ICU over a 5-year period examined retrospectively. APACHE II and SOFA scores on both admission and discharge, clinical and laboratory findings of 50 readmitted and 56 non-readmitted patients were evaluated. Patients readmitted within 4 hours, aged under 16, had a diagnose of burn, transferred to another unit or home and died in first ICU stay were excluded.

Findings: 476 of 1186 patients discharged to ward and these patients made up the study group (mean patient age 61 years). Our readmission rate was %10.5 (readmissions over discharges). The most frequent diagnoses on admission was associated with gastro-intestinal surgery (%53.8) and secondarily neurosurgery (%19.8). Most common reason for readmissions was respiratory failure (%60) and second cardiovascular problems. %42 of readmissions occurred in 48 hours after discharge.

Patients with age over 60 had a nearly fourfold risk (OR=3.88) (%95 CI: 1.727-8.755) (AUC: 0.69), APACHE II score at discharge over 8 had a nearly fivefold risk (OR=4.74) (%95 CI: 1.733–12.996), SOFA score at discharge had over threefold risk (OR=3.48) (%95 CI: 1.496-7.494) for readmissions to ICU. Discrimination ability was moderate for the three models: AUC of 0.69, 0.64 and 0.66 for predicting readmissions, respectively. Regardless of the reason for readmission, these patients have an extremely high mortality rates (OR=159,0) (%95 CI: 35.997-702.310).

Results: Older age, APACHE II scores over 8 and SOFA scores over 1 at discharge, and plasma albumin levels under 2.5 g/L before discharge seems to be risk factors for readmissions to ICU. Efforts for developing an acceptable scoring system like Stability and Workload Index for Transfer (SWIFT) and; studies to determine risk factors are in progress. Future studies focused on reducing readmissions with high mortality rates are needed.
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**ORGAN INVOLVEMENT DIFFERENCES BETWEEN PRIMARY ABDOMINAL AND PULMONARY SEVERE SEPSIS AND EFFECTS ON MORTALITY**

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If outcomes vary according to the source of infection, this may impact on clinical trial design. The aim of this study was to investigate whether the presence of severe sepsis originating in two sites, abdomen and lung, had any impact on patterns of organ failure, number of organs failed, SOFA scores, lactate levels, platelet counts or mortality. We used SOFA scoring system to investigate organ failures.

**Method and Material:** With a diagnosis of sepsis between 2008 and 2010, 117 files datas of 130 patients were analysed retrospectively. 35 patients with severe sepsis were detected and divided into pulmonary and abdominal source groups including 13 and 22 patients respectively. Each group was further divided into two groups, exitus and discharge. The entry SOFA, 1 week maxSOFA and first 48 hours deltaSOFA scores were noted and compared. The mortality rates, length of stay were evaluated. The Number of involved organs were evaluated in pulmonary and abdominal sepsis groups. Also the initial lactate and thrombocyte levels relationship with mortality were examined.

**Findings:** The number of organs involved in the abdominal group is higher than in the pulmonary group (p>0,05). Hospital stay in the pulmonary group is longer than in the abdominal group (p>0,01). In the pulmonary group the rate of cases with thrombocyte levels higher than 150x10⁹/L is higher, in the abdominal group the rate of cases with thrombocyte levels lower than 150x10⁹/L is higher. In the pulmonary sepsis group the rate of cases with lactate levels lower than 4 mmol/dl is higher, in the abdominal sepsis group the rate of cases with lactate levels higher than 4 mmol/dl is higher. In the abdominal sepsis group, CVS (p<0,01) and renal involvement (p<0,05) was higher in exitus group. MaxSOFA and deltaSOFA rates are correlates with mortality.

**Results:** After exclusion, the number of cases became lower. So this study, we hope could be extended to make any addition to awarenes of sepsis.

**References**


THE EXAMINATION OF PROGNOSTIC FACTORS THAT HAVE AN EFFECT ON THE MORTALITY OF PATIENTS WITH MULTIPLE TRAUMAS

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Regardless of the level of socio-economic development in countries, multi-traumas are one of the most basic problems that cause deaths in our day. A high rate of morbidity and mortality are seen in patients with multiple traumas due to serious damage to a number of organs. In order to reduce the rate of deaths in connection with trauma, the factors that have an effect on mortality need to be determined and systems for approaching these patients need to be developed accordingly. The objective of our study is to research the factors that have an effect on mortality in patients with multiple traumas.

Method and Material: One hundred six patients of 18 years and older, who were being monitored in the Dicle University Anesthesiology and Reanimation clinic intensive care unit with a diagnosis of multi-trauma between the dates of November 2007 and December 2011 were included in our study. Information about the patient like age, gender, trauma etiology, the region affected by the trauma, the duration of mechanical ventilation, period spent in hospital, whether a blood transfusion was given, laboratory and radiology tests, GCS, APACHE-II and SOFA score; to provide information about the prognosis was obtained from the patient files and their connection with mortality was analyzed.

Findings: While 69% of the patients were male, 31% were female and the average age was 34.2±17.1, 26 of the patients (24.5%) died. There was no connection between survival, age and gender. When the causes of death were examined it was observed that 44% were attributed to traffic accidents inside vehicles, 24% to traffic accidents outside vehicles and 27% were from falling from a height. No meaningful connection was observed between the presence of head trauma and thorax trauma, blood transfusion, ARDS development, undergoing operations and mortality. However, it was observed that there is a significant connection between the existence of abdomen trauma (p=0.034) and the development of sepsis (p=0.011) and mortality. It was observed that the rate of mortality rose as the duration of hospital stays and mechanical ventilation grew. Significant correlation was observed between mortality and GCS, APACHE-II and SOFA scores. However, this correlation was even stronger with the APACHE-II score (r=0.624; p<0.001).

Results: Multi-trauma is still an important health problem that increases mortality and morbidity rates. The transfer of patients to an intensive care unit as soon as possible and the delivery of their treatment with a multidisciplinary approach is extremely important in reducing mortality.

| P-68 | ACUTE SEIZURES DUE TO DRUG INTERACTION BETWEEN VALPROIC ACID AND MEROPENEM |
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Objective: Status epilepticus (SE) is a medical emergency associated with significant morbidity and mortality. The interaction between Valproic acid VPA and meropenem is characterized with a rapid decline in serum VPA levels. We describe a patient who displayed a probable pharmacokinetic interaction between meropenem and VPA that resulted in development of epileptic seizures.

Case report: A previously healthy 21 y.o. woman admitted to emergency department with fever and stiff neck. Blood cultures, CBC, CRP, and blood chemistry and CSF samples were obtained. Meropenem and vancomycin were started an initial for menengitis. On day 3 of the antibiotic therapy generalized tonic-clonic seizures were observed. Phenytoin and intravenous (IV) thiopental were started. The patient was intubated and mechanically ventilated. EEG revealed generalized epileptiform activity. In the following days, seizure activity continued. Levetirasetam, carbamazepine and VPA were added for treatment respectively, but seizures continued. The patient was consulted with neurology and infectious disease doctors daily. Serum VPA and carbamazepine levels were lower than therapeutic levels although the drug doses were on upper limits. On the 20th day of meropenem therapy, interaction of carbapenems and anti-epileptic agents was suspected. Antiepileptic therapy was discontinued. Serum concentrations of VPA increased over the next days to achieve therapeutic levels. On day 21 she was extubated, no seizures had occurred over the previous 48 hours. She was discharged from the ICU, with VPA concentrations within the therapeutic range.

Discussion: We have started treatment of IV meropenem with initial diagnosis of meningitis. On the 3th day of antibiotic therapy epileptic seizures occurred. With the diagnosis of SE patient was non-responsive to the various antiepilptics. Serum concentrations of antiepileptics were low during treatment. A possible drug interaction was suspected and meropenem therapy was terminated. Serum concentrations of antiepileptics reached therapeutic levels within 48 hours and seizures stopped. Drug interactions are frequently encountered problems in ICUs. This situation may complicate the therapy. Carbapenems have a potential effect of inducing seizures and may also lower serum levels of antiepileptic drugs.

Conclusion: Patients receiving antiepileptics and carbapenem group antibiotics concomitantly should be closely monitored due to possible drug interaction between these agents.
EVALUATION OF INVASIVE DEVICE-ASSOCIATED INFECTIONS RATES IN INTENSIVE CARE UNIT OF A TEACHING HOSPITAL IN TURKEY; FIVE YEARS’ EXPERIENCE

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In this study, we aimed to evaluate invasive device-associated infections rates (IDAIR) in our nine-bed-adult-intensive care unit for five years.

Method and Material: Patients who were admitted to intensive care unit of our hospital in 2008-2012 were included in this study. Nasocomial infections were identified using the Centers for Disease Control and Prevention definition. IDAIR were calculated by using National Healthcare Safety Network (NHSN) data. Our results were compared with the country-wide surveillance data obtained from Refik Saydam National Public Health Agency.

Findings: 209 patients in 2167 patient days, 208 patients in 2005 patient days, 325 patients in 2083 patient days, 266 patients in 2220 patient days, and 486 patients in 2864 patient days were followed up in 2008, 2009, 2010, 2011, and 2012, respectively. Ventilator-associated pneumonia rate (VAPR) (2.31/1000 ventilator days in 2008, 4.32/1000 ventilator days in 2008, 2.77/1000 ventilator days in 2010) and Catheter-associated blood stream infection rate (CA-BSIR) (1.57/1000 central catheter days in 2008, 2.23/1000 central catheter days in 2009) were found to be less than the average of similar hospitals in the country. Catheter-associated urinary tract infection rate (CA-UTIR) of 2008, and 2009 (6.00/1000 urinary catheter days in 2008, 7.09/1000 urinary catheter days in 2008) of this period were above the CA-UTIR of 2010, 2011, and 2012 (4.35/1000 urinary catheter days in 2010, 4.57/1000 urinary catheter days in 2011, 3.17/1000 urinary catheter days in 2012). While VAPR in 2011 (11.49/1000 ventilator days), and 2012 (9.62/1000 ventilator days) were higher than the rates of 2008, 2009, and 2010, CA-BSIR remained in 2011 (0.56/1000 central catheter days), and 2012 (1.03/1000 central catheter days) were less than the rates of 2008, 2009, and 2010.

Results: The annual evaluation of surveillance has been guiding to prevent hospital infections. Unless the control measures are not applied equally effective in every area, the success could not be obtained simultaneously.

References
FORTY-FIVE DEGREE WRIST ELAVATION IS OPTIMAL FOR ULTRASONOGRAPHY GUIDED LONG AXIS RADIAL ARTERY CANNULATION BOTH FOR YOUNG AND ELDERLY SUBJECTS. A RANDOMIZED STUDY

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Procedures for improving radial artery cannulation have involved direct visualization of the vessel with ultrasonography at the time of cannulation. To establish an appropriate wrist joint position for arterial cannulation is crucial for US guided cannulation success. In this study we aimed to find out the optimal wrist joint angle for long axis ultrasonography guided radial artery cannulation with comparing the long axis radial artery measurements at 0°, 15°, 30°, 45°, 60°, 75° wrist joint angle in young and elderly healthy subjects.

Method and Material: One hundred forty (70 young healthy volunteers with mean age: 32,5±5,61 and 70 elderly healthy volunteers with mean age: 63,7±6,38) healthy volunteers were recruited to study and randomized to young and elderly subject group. The subjects’ wrists were positioned at 0°, 15°, 30°, 45°, 60° and 75° again and images in long axis were obtained at each angle. The distance between skin and radial artery was measured in long axis.

Findings: Maximum arterial height was achieved at 45° in both young and elderly subjects (p<0.05 compared to 0° in both groups). Radial artery distance between skin at 0° (p = 0.02) and radial artery height at 45° in long axis view were statistically decreased in elderly age subjects compared to young subjects (p = 0.01).

Results: Angle increment up to 45° might help clinicians in long axis US guided radial artery cannulation whereas this angle maneuver decreased the arterial skin distance which might be also a potential advantage for cannulation.

THE EXAMINATION OF PROGNOSTIC FACTORS THAT HAVE AN EFFECT ON THE MORTALITY OF OBSTETRIC PATIENTS THAT ARE BEING MONITORED IN INTENSIVE CARE UNITS

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Pregnancy, which is a physiological process usually passes without problems. However, complications in the pregnancy or the intensification of an existing medical condition can threaten the lives of the mother and/or the fetus and may require them to be transferred to an intensive care facility. Complications during pregnancy and birth are among the top reasons for mortality and morbidity among women at reproductive maturity, especially in developing countries. The objective of our study is to research the prognostic factors that have an effect on mortality in obstetric patients being monitored in a reanimation unit.

Method and Material: Seventy-eight cases that were admitted to the Dicle University Anesthesiology and Reanimation Clinic intensive care unit between April 2007 and April 2012 were included in our study. The demographic information about the patients such as the duration of pregnancy, the connection to mechanical ventilation and their stay in the intensive care unit, the procedures that were performed, the complications that developed, whether a blood or blood products transfusion was given, the use of vasoactive medications, a history of additional operations and hemodialysis, laboratory tests, GCS, APACHE-II and SOFA score; to provide information about the prognosis was obtained from the patient files and the connection of all the data with mortality was analyzed.

Findings: Mortality had occurred in 13 (16.7%) of the patients that were monitored in the reanimation unit. No significant statistical factor was determined between mortality and maternal age, week of gestation, number of pregnancies and indications causing admittance to hospital (40% obstetric hemorrhaging, 37.2% HELLP Syndrome and 11.5% eclampsia). The most common complications to occur in the patients were; acute lung injury (60.3%), acute kidney failure (15.4%), neurological complications (11.1%), sepsis (7.6%) and ARDS (3.8%) in that order. The GCS, APACHE II and SOFA scores in patients that developed mortality were significantly worse (p<0.001). It was discovered that the average duration of stays in the ICU for patients that died was 15 days whereas those that survived stayed there an average of 9 days (p=0.012). Mechanical ventilation treatment was administered to all of the patients who died (average 14 days) and 86% of the patients that survived (average 5 days) (p<0.01). Also a significant correlation was determined between the duration of mechanical ventilation and survival (r=-0.31; p=0.006). The need for vasoactive medication infusion in patients that died was more than in the patients that survived (p<0.001). However no connection was observed between the provision of blood and blood product transfusions and a history of additional operations and hemodialysis.

Results: The rate of maternal mortality is still very high in our country and especially in our region. The importance of intensive care units in terms of preventing obstetric mortality and morbidity has increased in our day. Therefore it would be appropriate for critical patients to complete their 48 hour postpartum period in intensive care units.
INFLUENZA A (H1N1) RELATED ACUTE RESPIRATORY DISTRESS IN PREGNANCY

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Objective Of Study: H1N1 influenza can lead to severe consequences including death of mother or fetus in pregnant woman. Mortality rates are high especially in the third trimester (1). The cause of maternal death is severe pneumonia and acute respiratory distress syndrome. We aimed to present a pregnant woman with 37th gestational week who had a H1N1 influenza virus infection.

Case Report: A 22-year-old pregnant expecting twins at 37 weeks was admitted to obstetric department for preterm delivery. She had a slight fever, sore throat and cough at admission. During her follow-up, the cough has intensified, respiratory distress developed and rales were found bilaterally on chest auscultation. Echocardiography gave first degree of mitral and tricuspid insufficiency in the patient. There was pleural effusion bilaterally on the thorax ultrasonography. Blood sample results for troponine and d-dimer were within normal values. Due to fetal distress, the patient was undertaken to urgent cesarean section on the second day of her hospitalization and two living girls were delivered. The mother was admitted to the intensive care unit with noninvasive ventilatory support postoperatively. On the third day her body temperature raised to 39 °C. There was widespread pneumonic infiltration at chest radiography. She was intubated and mechanical ventilation was started. In order to rule out H1N1 virus infection, nasopharynx wipe sample was taken. Oseltamivir 75 mg tablets twice, and piperacillin-tazobactam 4.5 g trice per day were initiated. Her general condition recovered and she was successfully weaned from the ventilator support on the 4th day of her antiviral therapy. She was discharged to obstetric department on the 10th day of her admission. Our department was informed that the patient was positive for influenza virus H1N1 after the discharge.

Conclusion: Maternal and fetal risks associated with Influenza virus infection at pregnancy are at high rates due to hormonal, immunological and mechanical changes occurred. Complication and hospitalization rates increase as gestational week increases (1). Infection with influenza virus H1N1 should be suspected when a pregnant woman presents with the respiratory tract symptoms like sore throat, cough, dyspnea and fever. Early antiviral therapy by oseltamivir or zanamivir can save the lives of the mother and the fetus.

References

ACUTE POISONING CASES TREATED AT ACIBADEM KADIKOY HOSPITAL BETWEEN 2005 AND 2011

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Intoxication is a worldwide problem. We wanted to reveal its epidemiology and other aspects at least in one tertiary hospital. A retrospective study of acute intoxication cases was performed at the Acibadem Kadikoy Hospital between January 2005 and December 2011.

Method and Material: Data from a total of 128 patients were included. Various parameters (age, sex, time of ingestion, month of occurrence, chronology, agent responsible for the number and types of poisoning cases treated, history, symptoms, clinical development, treatment) were analyzed.

Findings: The mean age of patients were 30 ± 15 years (77% women). Drugs of abuse were the most common toxic agents (78.9%), followed by ethyl alcohol intoxication (14.8%) and carbon monoxide (CO) intoxication (4.6%). The problems most commonly resulting from the poisoning were neurological, and mortality rate was just 0.7%. One hundred and eight cases of poisoning occurred as suicide attempts. The ingestion of poison was the most common route of poisoning in 121 (94.5%). The remaining was poisoned by respiratory route in 7 patients (5.5%). Peak of poisoning occurred in December and January (23.4%). Treatment was general decontamination and supportive-symptomatic therapy. One hundred and five patients were treated with activated charcoal, Gastric lavage was performed in 107 patients. Renal replacement therapy and inotrops was started for only one patient. Hyperbaric oxygen therapy was the treatment modality for three CO poisoned cases. Five patients were put on intermittent positive pressure ventilation (IPPV). One hundred and two patients were discharged from hospital within 24 hours. One of our patients died due to CO poisoning.

Results: Poisoning is a serious condition that needs rapid diagnosis and treatment. Early diagnosis, careful monitoring and appropriate management may decrease the mortality rate among these patients.
A PATIENT WITH SEVERE HYPERCALCEMIA IN INTENSIVE CARE UNIT

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Objectives: The control of electrolyte levels is essential in critically ill patients and the calcium is the one of these. Regulation of serum calcium is managed by two hormones, parathyroid hormone (PTH) and calcitriol. Several factors can affect this homeostasis (1).

Case Report: 37-year-old male patient admitted to Pulmonary Clinic due to fever and pneumonia. He has past medical history of alcohol abuse and he was in a bad hygienic condition. During his follow-up, he suffered from abdominal distension and constipation with hypoactive bowel sounds. Fleet enema was administered but the patient was not relieved. Ceacal perforation was diagnosed on abdominal computed tomography and the patient was transferred to intensive care unit (ICU) after surgical repair of perforation and colostomy. His respiratory effort was not sufficient and he was mechanically ventilated. Weaning process was prolonged and extubation was not achieved. On the 14th day of his ICU admission the patient was tracheotomised. Pulmonary infiltration was aggravated and antibiotherapy was administered according to the susceptibility of the isolated pathogen. His vital signs were not stable and the septic condition made physical status worse with the necessity of high dose of vasopressors. During his follow-up, the serum calcium level showed gradual increment resistant to fluid therapy and loop diuretics. On the 50th day, the level of serum calcium was reached to 17.95 mg/dL and altered mental status, muscle twitches and electrocardiographic changes were determined. Immobilization hypercalcemia was considered after exclusion of other possible reasons. Continuous Veno-venous Hemodiafiltration (CVVHDF) with citrate anticoagulation was carried out and the 2nd day of treatment the level of serum calcium decreased to normal values. The patient was weaned and decannulated on 95th the day. On the 104th day of his ICU admission, the patient was discharged to surgical clinic in a well-condition.

Results and Discussion: In critically ill patients, serum calcium level must be reduced as soon as possible. Long time to normalization is likely worsening the prognosis by inducing renal and cardiac dysfunction, gastrointestinal hemorrhage and acute pancreatitis. CVVHDF is a treatment of choice in treatment-resistant cases.

References:

POISONING RESULTING IN DEATH IN INTENSIVE CARE MEDICAL APPROACH AND PROCESS ANALYSIS

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This study aimed to determine the relationship between different types of poisoning and death at crime scene or intensive care unit (ICU) to provide a guideline to prevent poisoning types resulting in death at the crime scene and to improve management of poisoning types resulting in death at emergency care units (ECU) and ICU.

Method and Material: A total of 103 cases of poisoning were investigated and classified into 13 groups according to poison types. The relationship between types of poisoning, gender and treatment in ICU according to 7 different age groups was evaluated.

Findings: Most frequent cause of poisoning was medical drugs (n=46; 44.7%). There is a statistically significant relationship between the cause of poisoning and those who receive an intensive care treatment (p=0.05). ICU treatment was significantly common in medical drug, amanita phalloides, methanol, organophosphate and other organic substance poisonings. Heroin, carbon monoxide and corrosive substance poisonings resulted in death at the scene or on the way to the hospital.

Results: We conclude that precautions and efforts to prevent people’s contact with heroin, carbon monoxide and corrosive substances should be increased. The ICU treatment for those who were poisoned by medical drugs, amanita phalloides, methanol, organophosphate and other organic poisons should be improved. Presence of surgical transplantation teams in regions where mushroom poisoning (mycetism) is frequently seen could be beneficial.
Internal jugular venous cannulation should be performed in patients while maintaining a neutral head position for a variety of clinical conditions. However, in this position, the landmark that should be used is unclear. Our aim was to evaluate the success rate of right internal jugular vein (RIJV) cannulation guided by carotid artery (CA) palpation in a patient with a neutral head position.

**Method and Material:** The prospective randomized study was designed as two parts. Part 1: Prior to this study we conducted a preliminary evaluation with CT scans of 30 consecutive patients to determine the relationship with RIJV and the CA. Part 2: A total of 150 patients who planned RIJV cannulation were included in the study. Each patient’s head was placed in the neutral position. Under general anesthesia, the patient was positioned in the Trendelenburg position and ventilation was provided with a positive end-expiratory pressure. RIJV cannulation was performed by ten different clinicians using CA palpation to guide the needle, which was not angled either medially or laterally. The primary outcome variable was the cumulative success rate, which was defined as RIJV puncture achieved in the first 3 attempts using a needle.

**Findings:** The cumulative success rates on the first 3 attempts were 96.7%. No differences were observed between the clinicians. CA puncture did not occur in any patient. 

**Results:** CA guided RIJV cannulation can be used effectively due to its high success rate in patients whose heads are maintained in a neutral position.
Amitriptylin Intoxication

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Introduction: Intoxication with Tricyclic antidepressants may cause 11.3-32 percent deaths(1). In this case report, we the importance of multidisciplinary approach to severe amitriptyline intoxication was emphasised.

Case report: 35 years old female patient, had taken 41 tablets of 25 milligrams of Amitriptylin, was brought to Emergency Room. On physical examination her Glasgow Coma Scale was 13, vital signs were stabil. Because of overdose of Amitriptylin she was transferred to intensive care unit (ICU). At the ICU, she was hydrated and gastric lavage was performed. On follow up at ICU the patient had sinus tachycardia. After 3 hours of hospitalization, because of she had convulsion and her respiration was depressed, she was intubated. Metabolic acidosis was revealed and bicarbonate infusion was started in dose of 1 mg/ kg IV. 10 mg of diazepam was administered intravenously and 2x50 mg IV of epanutin were initiated for convulsions. 3 mg/hr midazolam were initiated for sedation. For treatment of hypotension 0.5 mg/hr noradrenalin was applied. After treatment of hypotension and metabolic acidosis, her blood pressure was 110/80 mmhg and her metabolic acidosis was meliorated. After 48 hours of hospitalization in ICU, she was extubated.

Discussion: Safety dose range of TCA’s is 1-5 mg/ kg. In the case of overdose usage, intoxication occurs. Death usually occurs taking over doses of 1-3 grams, despite receiving very high doses (>4 grams of Amitriptylin) have been reported in cases without death(2,3). Severe intoxications can lead to cardiac arrhythmias, respiratory depression, convulsions, coma and even death(4,5). Patients who presented with signs of Amitriptylin toxicity, despite normal ECG, according to cardiac point of view they must be monitored for 24 hours(6). Sinus tachycardia was the only finding in our patient. As a conclusion; in the case of intoxication of Amitriptylin, epileptic seizures and respiratory depression usually occur. Aggressive treatment with intravenous fluids and cardiovascular support are still mainstay of the current intoxication therapy.

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Intensive Care Management in a Cerebral Aneurysm Case Who Developed Hemorrhage During Endovascular Procedure

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Introduction: Re-bleeding and vasospasm are the most important complications of cerebral aneurysms. The main purpose of treatment through an endovascular approach is to alleviate the high risk of surgical complications and the risk of bleeding.

Case report: Saccular aneurysm (10x8 mm) was detected with DSA in the distal internal carotid artery (ICA) in a 32-year-old female patient who had presented with subarachnoid hemorrhage following the complaint of a severe headache (Image a). Endovascular treatment was planned. Consent for anesthesia was obtained with the ASA II risk and the patient was monitorized before the procedure. She was connected to the mechanical ventilator after endotracheal intubation. Re-bleeding was detected on control DSA (Image b). 5000 IU of heparin were administered before the procedure was reversed with protamine. Hemodynamic parameters were stabilized by administration of beta-blocker and nitroglycerine. Hemorrhage was seen to have ceased on control DSA. Saccular aneurysm was embolized with Detachable Coil (Images c,d). Severe spasm was observed in the middle cerebral artery (MCA) (Image c-white arrows). The patient was given intra-arterial 0.4 mg nimodipine (0.1 mg/ min). Minimal regression of the spasm was seen (Image d, white arrows). She was administered 5000 IU of heparin. Heparin infusion of 1000 IU/hour was begun for maintanence therapy. Treatment was begun to keep the mean arterial pressure at the level of 140 mmHg. The patient was transferred to the intensive care unit and she was intubated after the procedure had been completed. She was sedatized at ICU. Heparin infusion continued for 12 hours longer and was then switched to low molecular weight heparin. Antiedema and antiepileptic therapy continued. Hypopotasemia and hypocalcemia developed postoperatively and was corrected with replacement therapy. The sedation dose was reduced and the patient was extubated 24 hours later. Her general condition was moderate, she was conscious and she had somnolence. The pupils were isochoric, and the light reflex (LR) was +/+. The Glasgow Coma Scale score was 12. All four extremities were mobile and there were no lateralization findings. Intracerebral hematoma was not detected on control CT. The patient was discharged on the 15. postoperative day (GCS score: 15).

Discussion and conclusion: Subarachnoid hemorrhage and vasospasm lead to high mortality and morbidity. The clinicians must be ready for potential hemorrhage and neurological complications during and after endovascular therapy. Follow-up and treatments must be carried out under intensive care conditions through a multidisciplinary approach.
THE EFFECTS OF CPAP AND NASAL BIPAP THERAPY ON THE MANAGEMENT OF A PATIENT WITH COPD EXACERBATION HOSPITALIZED IN THE INTENSIVE CARE UNIT

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Introduction: Non-invasive mechanical ventilation (NIPPV) is a therapeutic method providing positive pressure breathing support through a mask without endotracheal tube (1,2). For this purpose, both standard mechanical ventilators and portable devices for NIMV providing positive airway pressure (BIPAP) are used by which continuous positive airway pressure (CPAP) or inspiratory and expiratory pressure levels can be determined separately (3). NIMV is effective by resting chronically fatigued muscles (4), correcting lung compliance disorder or by reducing alveolar hypoventilation (5). It reduces the workload of respiratory muscles by balancing positive alveolar pressure at the end of expiration in COPD (Chronic Obstructive Pulmonary Disease) patients (6,7). It is known that dyspnea complaints occur due to respiratory muscle fatigue in COPD patients and this fatigue is partly responsible for the deterioration in respiratory function (5,6).

Case: A 80-year-old male patient who smoked half a packet a day for 40 years was being followed for COPD. He took 4 x 2 salbutamol puff a day. He came to the emergency service with the complaint of difficulty in breathing. His breathing was shallow and 32 in a minute. Oxygen was given 2 l/min by mask. pH: 7.16, pCO2: 98 mmHg PO2: 54 mmHg HCO3: 34 mmol/L, and peripheral oxygen saturation SaO2: 88 was observed in the arterial blood gas. The patient was taken to anesthesia intensive care unit with the diagnosis of COPD exacerbation. NIPPV was achieved in CPAP mode with FiO2: 50% O2, PEEP: 8, PSV: 12 cmH2O. CPAP was applied with auronasal mask 6 times a day for 2 hours, and arterial blood gas values were as pH: 7.31, pCO2: 74 mmHg PO2: 66 mmHg HCO3: 45 mmol/L and SaO2: 96. The patient showed non-compliance to the auronasal mask in the ongoing process of the treatment. Since the required improvement in blood gas analysis was not observed due to non-compliance, portable BIPAP device with nasal mask was used at the end of the day BIPAP was administered 6 times a day for 2 hours as IPAP: 12 cmH2O EPAP: 5 cmH2O. The values of the arterial blood gas at the end of the second day were as follows: pH: 7.42, pCO2: 61 mmHg PO2: 126 mmHg HCO3: 39 mmol/L and SaO2: 97. The patient was discharged from the Intensive Care Unit with these values and transferred to the service of Chest Diseases with portable BIPAP device.

Results: In previous studies, it was reported that the most important benefit of NIPPV in acute exacerbations of COPD and respiratory failure is to give opportunity for the muscle rest and to reduce air trapping by eliminating intrinsic PEEP (8,9). Cooperation of the patient during treatment is important. In our case, BIPAP was applied with nasal mask as the patient refused auronasal mask and he was discharged from the intensive care unit in short time, and his treatment continued under normal service conditions. Both the time in intensive care unit was shorter and the treatment process became faster. These devices are available recently and the treatment process can be provided at home as well.

References
P-83

THE RELATIONSHIP BETWEEN OXIDATIVE STRESS PARAMETERS AND CYSTATIN C LEVELS IN PATIENTS WITH SEVERE PREECLAMPSIA

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Oxidative stress is believed to have a role in the development of preeclampsia (PE). It is known that an increased cystatin C (CYC) level is also associated with PE. The aim of this study was to investigate the relationship between oxidative stress parameters and CYC levels in patients with severe PE.

Method and Material: Forty-four patients with severe PE and 40 healthy pregnant women were recruited to the study. All study subjects were divided into 2 groups; group 1 (n=44) consisted of patients with severe PE, and group 2 (n=40) consisted of healthy pregnant subjects. Blood samples were obtained to measure CYC, total antioxidant status and total oxidant status from all subjects. Oxidative stress index was calculated.

Findings: Compared to group 2, group 1 had significantly higher CYC, total oxidant status, oxidative stress index and lower total antioxidant status levels (p = 0.001, p < 0.001, p < 0.001, p = 0.036, respectively). Serum CYC levels were significantly correlated with oxidative stress index levels (r=0.609, p < 0.001).

Results: The present study demonstrated that both oxidative stress and CYC levels increased in patients with PE, and increased CYC levels seem to be a consequence of oxidative stress.

P-84

THE RELATIONSHIP OF GENDER AND GLASGOW COMA SCALE WITH LENGTH OF STAY AND MORTALITY IN ICU IN GERIATRIC PATIENTS

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Glasgow Coma Scale (GCS) score has previously been found to correlate with outcomes in critically ill patients. However, the influence of gender on ICU mortality is controversial. In this retrospective study, we aimed to evaluate the relationship of gender and GCS with length of stay (LOS) and mortality in ICU in geriatric patients.

Method and Material: Fatih University Hospital Database was evaluated for all patients aged ≥ 65 years who admitted to adult ICU between January 2009 and January 2013. The primary objective of the study was to investigate the relationship of gender with overall LOS and mortality rate in ICU. The secondary objective was to investigate the relationship of GCS at the time of admission to ICU with overall LOS and mortality rate in ICU.

Findings: Three hundred and seventy-five consecutive geriatric patients consisting of 166 women and 209 men admitted to ICU during the period of evaluation. No correlation was found between gender and overall LOS and mortality rate (r<0.50, p>0.05). There was a significant but weak negative correlation between admission GCS score and overall mortality rate (r<-0.50, p<0.01). Women had insignificant a lower mortality rate and a longer LOS in ICU compared with men. However, the differences between women and men in terms of the mean admission GCS, overall LOS and overall mortality rate in ICU were not statistically significant (p>0.05).

Results: The present study shows that a weak but significant relationship of admission GCS with length of stay (LOS) and mortality in ICU in geriatric patients. However overall LOS and overall mortality rate in ICU of women and men was similar.

P-85

ULTRASOUND-GUIDED PERCUTANEOUS DILATATIONAL TRACHEOSTOMY IN A PATIENT WITH ANTERIOR APPROACH CERVICAL DISCECTOMY

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Objective: Percutaneous dilatational tracheostomy (PDT) is preferred widely over surgical tracheostomy for long-term ventilator support in intensive care. However, it is difficult in some cases as patients with a short neck, enlarged thyroid gland or with previous neck surgery to determine only by palpation the exact position of the cricoid cartilage and first tracheal ring. It is recommended that ultrasound-guided puncture of the trachea can be useful to find the correct location for tracheostomy tube placement. We presented a patient with cervical disectomy with anterior approach in whom successful PDT with dilatation forceps was performed, guided by ultrasonography.

Case: A 68-year-old female, intubated patient, who operated cervical disectomy with anterior approach, had chronic obstructive pulmonary disease and hypertension was admitted ICU with respiratory failure. The patient was mechanically ventilated for 12 days. There was no recovery of respiratory failure for 12-day. On the 13th day percutaneous tracheostomy was designed due to her anticipated prolonged mechanical ventilation. Ultrasonographically guided tracheal puncture was preferred because of her previous neck surgery. The patient was prepared for PDT in a standard manner but without hyperextension of the neck. With a sterile linear ultrasound transducer the trachea was visualized in longitudinal section. The space between the second and third tracheal ring was chosen easily by USG. The trachea was punctured through the incision at an angle of 90o with needle/cannula closely leaning to the ultrasound probe. The ultrasoundographically guided procedure of PDT was performed without complications.

Conclusion: It was demonstrated that ultrasonographically guided puncture of the trachea can be used as a useful technique in difficult anatomical structures in the neck during a PDT in the present case. Furthermore, this technique may be a good alternative to other PDT-techniques in patients with difficult neck anatomies.
P-87

A “POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME (PRES)” IN INTENSIVE CARE UNIT- CASE REPORT

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Objectives Of Study: Posterior reversible encephalopathy syndrome (PRES) is a transient clinical situation diagnosed by neurological examination and radiologic findings. This situation is usually presents with headache, generalized convulsions, disturbances in vision, changes in mental status, hypertension and focal neurologic deficits. It is defined by cerebral vascular otonomic insufficiency due to immediate blood pressure changes. Here we discussed a case with PRES who is in dialysis programme because of chronic renal failure.

Case: 32 years old female patient with previous diagnosis of chronic renal failure was admitted to emergency department with of loss of conscious after dialysis. Cranial tomography was assessed normal. She was admitted to intensive care unit after having seizure and symptoms of dyspnea. Her Glaskow Coma Scale score was 4, pupils were isochoric and had bilateral light reflex. Treatment for brain edema was started. Laboratory findings were normal except BUN: 85 mg/dl, Creatinine: 7.4 mg/dl, potassium: 4.8 mEq/L, Hemoglobin: 10.8 g/dl and White Blood Cell count: 11900/mm3. Thiopenthal sodium infusion and epanutin were given to control convulsions. Routine dialysis programme was continued. On the 20th day in ICU her GCS score was still 4, but hemodynamic parameters were more stable. A diffusion magnetic resonance imaging revealed diffuse edema especially at cortex of bilateral frontal and parietal lobes, posterior side of temporal lobe. “Posterior reversible encephalopathy” was her preliminary diagnosis. The treatments for convulsions, hypertension, infections and other supportive treatments were continued. She became concious on 26th day and was discharged on the 49th day.

Conclusions: PRES is a multifactorial disorder that presents different clinical findings and exact diagnosis depends on radiologic findings. Symmetric brain edema at parietooccipital areas of the brain is typical for cerebral imaging. It is reversible without any disability. PRES should be in mind for all intensivists as it is a rare situation.
Introduction: Intensive care after liver transplantation bears a significant importance. Maintaining a multidisciplinary approach in the follow-up and treatment of these patients should be the basic principle. Most patients with final stage liver failure experience problems such as ascipt based preoperative atelectasis, pleural effusion, functional residual capacity and reduction in vital capacity. Therefore, respiratory complications are among the most important causes of mortality and morbidity after liver transplantations. In our case which was intubated again because of pulmonary complications after the transplantation, we aimed to emphasize the importance of early diagnosis and intervention.

Case: Liver transplantation from a live donor was planned for a 32 year-old female patient (Child score: C, MELD score: 24) diagnosed with decompensated chronic liver failure on cryptogenic cirrhosis level. Graft extraction from the donor took 290, anhepatic phase 80min and the total duration of the operation was 11 hours. For intraoperative replacement purposes, a total of 3 units of erythrocyte suspension, 3 units of TDP and 6200 mL crystalloid were induced. Hemodynamic parameters were stable throughout the operation. At the end of the operation, the patient who was transferred to the service on room on the 9th day and discharged with persistent from mucous was cleared with tampon aspiration and bronchi seemed to be open. The patient who was extubated on the 5th postoperative day after respiration physiotherapy and postural drainage treatment was scheduled. The whole surgical procedure lasted six hours and the procedure was maintained for 36hrs at which time the level of PaCO2 reached to normal values (pH: 7.49, PaCO2: 56.9 mmHg, PaO2: 94 mmHg, HCO3: 41.3 mmol/L, BE: 17.3, SpO2: 97.5%). Thorax CT revealed a giant emphysematous bulla and surgical resection of the bulla was scheduled. The patient having hypercapnic respiratory failure.

Conclusions: Our experience demonstrated that this system can effectively remove CO2 without any hemodynamic changes and adverse reactions. So this is a promising technique for the reduction of CO2 in a patient with respiratory failure but more clinical experience is needed.

References
HORNER SYNDROME IN A PATIENT WITH SEVERE CHEST TRAUMA

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Objective Of Study: Horner’s syndrome (HS) is the combination of pupillary miosis, eyelid ptosis, enophthalmos and facial anhidrosis on the same side of the face due to a lesion or compression injury of the cervical or thoracic sympathetic chain. We present a case of Horner’s syndrome in a patient who was admitted to the intensive care unit (ICU) with chest trauma.

Case Report: A 51-year-old male patient was admitted to our ICU following thoracic trauma without losing consciousness. Upon admission the neurological examination was normal. The patient had fractures on right scapula, right clavicula, multiple rib fractures (from the first to the seventh) besides right pneumothorax and pulmonary contusion. A chest tube was inserted through the fifth intercostal space on the anterior axillary line. On admission and during the follow up we did not observe any ptosis or miosis. He was ventilated non-invasively, but on the fourth day of his ICU stay invasive mechanical ventilation was started due to progressive respiratory compromise. Anisocoria (L>R) was observed on the eighth day. There was no pathological sign on ophthalmological and neurological examination and cranial BT. He underwent operation for rib stabilization on the tenth day. The patient was successfully weaned from the ventilatory support and he was extubated on the eighteenth day. We observed ptosis and miosis on the right side which are the other components of HS, after complete recovery. The chest tube was removed on the nineteenth day and the patient was discharged to the thoracic surgery department. On the tenth day after the removal of the chest tube, the clinical appearance of the right eye showed regression.

Conclusion: There are case reports on HS related to chest tube insertion, thoracic trauma and thoracic surgery. There is a thin endothoracic fascia between the parietal pleura and stellate ganglion. This anatomical feature explains the occurrence of Horner’s syndrome in the apical thorax injuries (1). In our patient, HS was probably due to either fractures of the ribs or chest tube placement. It should be kept in consideration that the presence of anisocoria in the unconscious patient with thoracic trauma can be related to HS.

Reference
P-92

RESPIRATORY DISTRESS DUE TO VOICE PROSTHESIS ASPIRATION: REPORT OF A CASE

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Introduction: Foreign body aspiration may cause fatal respiratory insufficiency (asphyxia) if it obstructs the trachea. Foreign bodies reaching more distal parts of the tracheobronchial tree, on the other hand, may cause ventilation defects in the affected region and they may cause predisposition for infection. Here we report a patient admitted to our ICU for respiratory dysfunction and eventually found to suffer from foreign body aspiration.

Case Report: A 55-year-old male was admitted to the ICU due to respiratory dysfunction. His medical history included total laryngectomy + modified neck dissection + tracheostomy for laryngeal cancer 10 months before, followed by chemotherapy (taxotere+5-FU+Cisplatin) and radiotherapy. Hospitalized 9 months later for second-line chemo due to recurrent tumor and pulmonary metastases, his condition deteriorated. He was connected through his tracheostomy carula to the mecanic ventilator to overcome respiratory acidosis and tachipnea. Thorax CT revealed multiple mediastinal lymph nodes, multiple metastatic lesions on both hemithorax, and additionally a tubular structure in the right main bronchus, resembling a fragment of an intubation carula. He was using a voice prosthes, which was removed by immediate bronchoscopy. Although the patient improved initially, tracheal aspiration and bronchoaveolar lavage cultures revealed Acinetobacter baumannii, the patient developed septic shock, and died on the 9th day.

Discussion: The definitive diagnosis of aspiration of foreign bodies is made by bronchoscopy, although clinical suspicion and radiological investigations are suggestive. In the patient reported, such an unlucky occasion might have influenced the already critical clinical condition negatively. Although immediately removed, the foreign body probably accelerated the irreversible scenario in this case.

P-93

INCIDENCE AND RISK FACTORS FOR VENTILATOR-ASSOCIATED PNEUMONIA IN OUR INTENSIVE CARE UNIT

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Introduction: Airway management of a patient with tracheal tumor is challenging. The airway experts may choose different airway management strategies, but in clinical intensive care, there may be no correct answer or alternatively several appropriate answers. We believe that airway patency in this patient was maintained with the consideration of several practical means of knowledge and skills inspite of limited equipment.

Method and Material: This retrospective database study included patients admitted between 2009 and 2010 to a 15-bed medical/surgical ICU in an university hospital. We analyzed data from 80 patients with VAP diagnosis. We evaluated the laboratory results, radiological findings, culture-antibiograms of these patients. Chronic diseases, diagnosis for the acceptance to the ICU, Glaskow Coma Scale (GCS) scores and APACHE II scores of these patients were recorded. We used clinical pulmonary infection score for the diagnosis of VAP.

Findings: The overall incidence of VAP was 19 cases per 1000 ventilator-days in 2009 and 14.34 cases per 1000 ventilator-days in 2010. Acinetobacter Baumannii was the most frequent bacteria isolated in patients with VAP diagnosis. Old age, low GCS and high APACHE II scores were the most important risk factors for VAP. Hypertension was the most frequently seen chronic disease in the VAP patients. Respiratory failure, abdominal surgery and trauma were the most frequent reasons for the acceptance into ICU. Reventilation, blood transfusion more than 2 units, vasopressor support and tracheostomy were the other risk factors.

Results: Awareness of the risk factors and knowledge of the most common pathogen causing VAP is important for the early diagnosis and treatment of VAP in ICU.
VALUE OF PERIPHERAL AND CENTRAL VENOUS PRESSURE MEASUREMENTS IN PREDICTING ACUTE RENAL FAILURE IN INTENSIVE CARE PATIENTS

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Previous studies in adults demonstrated a useful correlation between central venous (cvp) and peripheral venous pressure (pvp) measurements. However there is not sufficient data between the association of some common complications observed in intensive care units (ICU) like acute renal failure and cvp and pvp values. In this study we aimed to analyze if there is any relationship between acute renal failure and cvp-pvp measurements in adult ICU patients who did not have renal failure history before hospitalization.

Method and Material: For this purpose we included 39 patients (16 F, 73.6 ± 13.9 years old) who were hospitalized in ICU for at least 6 days for any reason. Basal and daily creatinine values, daily systolic, diastolic and mean blood pressures, and daily cvp-pvp measurements were recorded. Patients who had more than 50% increase in creatinine levels during follow-up were accepted as acute kidney injury (AKI, n: 12) group according to AKIN criterias while patients with stable creatinine values were accepted as no-AKI (n: 27) group. AKI patients were also grouped and evaluated for RIFLE criterias (risk n: 5, injury n: 4, failure n:3)

Findings: Considering all patients we found that pvp and cvp measurements were positively correlated (r:.882, p:.0001). Mean pvp was 10.6 ± 2.4, mean cvp was 6.4 ± 2.4 and mean cvp-pvp was 4.1 ± 1.1 mmHg. AKI and no-AKI groups were similar in means of demographic characteristics. AKI group had both higher pvp (p:.008) and higher cvp (.039) values compared to no-AKI group. AKI group also had lower systolic and mean arterial pressure (p.024, .035) compared to no-AKI group. Patients with renal failure has the highest cvp and cvp-pvp values and lowest blood pressures compared to injury and risk groups (p: .01).

Results: We think that pvp and cvp measurements are highly correlated in adult ICU patients and both could be used as early markers for venous congestion, lower arterial filling and AKI.

References

SUICIDAL HIGH DOSE SUBCUTANEOUS INSULIN INJECTION: CASE REPORT

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Introduction: Self applied insulin injection is a widely used treatment method for diabetes mellitus (DM) patients all over the world. It is also known that diabetic and non-diabetic patients have used insulin overdosage for suicidal purposes. In this case we aimed to present a patient, who have injected himself high dose insulin for suicide.

Case: A 35-year-old male patient attempted to suicide was examined in the emergency department. According to the anamnesis of the patient, he received 20 pieces of coversyl 5 mg tablet, 10 pieces of oral iron tablet, abdominal subcutaneous injection of 1000 units of NPH-insulin. Loss of consciousness was observed during transport to hospital and after infusion of 100 mL of 20% dextrose the consciousness was better. At the admission in the emergency department findings were; HR 120/min, BP 200/95 mmHg. Laboratory values of blood were glucose 63 mg/dL, potassium 2.9 mEq/L, insulin levels 2444.3 U/mL, respectively. Other values of the patient were normal. After gastric lavage, we applied activated charcoal via nasogastric tube. An intravenous bolus of 100 mL of 30% dextrose was given. With dextrose infusion maintenance for 24 hours blood glucose level was kept between 100-200 mg/dL. In 4. hour of injection serum insulin level peaked once. For preventing hypoglycaemia we required a 48 hours dextrose infusion. The patient did not develop any complications due to insulin overdosage.

Discussion: Cerebral damage, pulmonary edema, hypertensive crisis, and respiratory failure due to insulin overdosage have been described. Insulin is one of the hormone regulators not only for potassium also for magnesium and phosphorus. High-dose insulin application might cause hypokalemia, hypomagnesemia and hypophosphatemia in addition to hypoglycemia. In our patient, there was a moderate hypokalemia. Although antihypertensive drugs were taken hypotension was not observed. To treat this kind of patients dextrose infusion and close monitoring for electrolyte changes is recommended.
**SPIDER BITES INDUCED BY MYOCARDITIS, AND PULMONARY EDEMA: CASE REPORT**

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**Introduction:** Spider venom causes local and systemic toxic effects, but the most important predictor of mortality and morbidity is cardiovascular involvement. In this presentation, we will discuss 15-year-old male patient which developed myocarditis and pulmonary edema bitten by a spider known as “Karadul=Black Widow”.

**Case Report:** Patient apply to the emergency room with the symptoms of abdominal pain, shortness of breath and chest pain after the spider bite. Pulmonary edema was diagnosed by having diffuse bilateral inspiratory crackles in the lungs, bilateral diffuse infiltration in the chest X-ray and with coughing pink frothy sputum extraction. Patient accepted in the intensive care unit and diagnosed as myocarditis by having left ventricular global systolic dysfunction in electrocardiography, decreased on ejection fraction (25%), detected heart failure, elevation of the Troponin and CRP levels. The patient treated with diuretic therapy and applied non-invasive mechanical ventilation with PEEP. Signs of pulmonary edema declined in a few hours. On 10th day of hospitalization, ECOG was taken and ejection fraction was normal (65%), and left ventricular dimensions were decreased. As a result, the spider bites, particularly in children may result life-threatening disorders in the cardiovascular system. Especially shortness of breath and general poor health symptoms may be considered as myocarditis.

**Reference**


**DEVELOPMENT OF NEUROLEPTIC MALIGNANT SYNDROME (NMS) AFTER SWITCHING THE QUETIAPINE THERAPY TO CHLORPROMAZINE AND RISPERIDONE COMBINATION IN A SCHIZOPHRENIC PATIENT**

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**Objective Of Study:** NMS is a life-threatening idiosyncratic reaction that occurs after the administration of neuroleptic drugs. It also occurs just after changing the drug dosage or switching the therapy with high-potency agents during antipsycotic (AP) treatment. The aim of this report is to present a NMS development depends on altering the therapy agents.

**Method and Material:** 20 years old schizophrenic male patient received Quetiapine agent for one year, turned to his psychiatrist with a complaint of not having benefit. Therefore, his AP treatment was switched to Chlorpromazine and Risperidone combination 10 days ago. He was brought to our emergency clinic with confusion, slowness of movements and speech, decline in oral intake lasted for 3 days. Because of his altered mental status, muscular rigidity, AP treatment history and elevated serum creatine phosphokinase (CPK) enzyme level (10 times the normal), he was admitted to our intensive care unit with the diagnosis of NMS.

**Results:** According to our first physical examination, the patient was confused, GKS: 13, TA: 194/72 mmHg, pulse rate: 70/minute, respiratory rate: 10/minute, body temperature: 36.5°C. Extensive rigidity was determined in both upper and lower extremities. Diaphoresis and speech difficulty were conspicuous. There was no symptom set us thinking infection. There were no pathological finding in computing thorax and brain tomography and EEG was normal. Urogram and chest radiography assessed as natural. Laboratory workup was as follows: WBC: 4300/µL, HB: 15,4 g/dL, PLT: 175000/µL, c-reactive protein (CRP): 0.623 mg/dL, glucose: 95 mg/dL, AST: 52 U/L, ALT: 20 U/L, CPK: 1959 U/L, CKMB: 80 U/L, LDH: 606 U/L, ure: 28 mg/dL, creatinine: 0.8 mg/dL, Na: 138 mmol/L, K: 4,3 mmol/L, Ca: 9,3 mg/dL. No pathology was detected in arterial blood gas analysis. 4 major criteria (hyperthermia, elevated serum CPK enzyme, autonomic dysfunction and altered mental status) consistent with NMS were present. We terminated the present AP therapy in the beginning. Within four hours of his admission, he was intubated for invasive mechanical ventilation support because of severe dyspnea due to 39,5°C fever and dystonia. Intravenous sedatives initiated. Supporting treatment (iv hydration, paracetamol and passive external cooling) was applied. Serum CPK value regressed to 600 U/L. There were no bacteria reproduction obtained from culture during follow-up. No bacteria reproduction obtained from culture outcomes. Sedatives stopped and the patient extubated the third day. He hadn’t fever anymore, his confusion and muscular rigidity improved, serum CPK level decreased to 142 U/L. At the end of the sixth day, serum CPK was 42 U/L. The patient discharged from the intensive care unit and transferred to neurology clinic.

**Conclusion:** NMS, is a rare and potentially fatal complication of AP medication. It is believed to appear from dopaminergic blockade in central nervous system. It usually appears within the first two weeks of neuroleptic treatment, characterized by hyperthermia, autonomic dysfunction, altered mental status, muscular rigidity and increased serum CPK enzyme. The main points in treatment are terminating the present AP medication and performing supporting treatment. Bromocriptine can be used to improve the muscular rigidity. However, early diagnosis and intervention are the most important factors to prevent mortality. We consider that those patients who need continue monitoring and mechanical ventilation support should be followed in intensive care units.
In Fatih Sultan Mehmet Education and Research Hospital Reanimation Intensive Care Unit 2010-2011-2012 Invasive Equipment Related Infection Rate and Effecting Factors

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It is intended to semtinize the effecting factors and rate of the equipment related invasive infections between 2010-2012 in FSM Education and Research Hospital Reanimation intensive care unit.

**Method and Material:** In our clinic, we perform active prospective patient based surveyors. In Nazokamiyel invasive infection diagnosis, CDC criteria are taken as bases. The tool related infection number in one year period /The invasive tool usage day number x1000 formula is used in calculating invasive equipment related infection rate.

1. The aspirations applied with one sterile gloved person and one assistant;
2. The repeated oral cleansing procedure during the pre-
   intubation tube changes.

The antibiotics resistance proceed being an important problem obstructing the treatment of nosokomial infections flourishing in intensive care units. In this study the Acinetobacter spp, Pseudomonas aeruginosa, Klebsiella spp and Escherica coli isolates’s change in antibiotics sensitivity patterns between 2010-2012 are inquired.

**Method and Material:** In Fatih Sultan Mehmet Education and Research Hospital, by using conventional methods, 154 samples obtained in 2010 and 92 samples obtained in 2011 are compared in terms of antibiotic sensitivity rates. The disc-diffusion method suggested by CLSI is used.

**Findings:** For the 154 samples isolated in 2010, the dispersions are like following: Acinetobacter spp 87, Pseudomonas aeruginosa 69, Klebsiella spp 20, E. coli 14. In 2011, the rates of the 92 samples were Acinetobacter spp 39, Pseudomonas aeruginosa 19, Klebsiella spp 20, E. coli 14. And in 2012, the rates in samples changed as following: Acinetobacter spp 71, Klebsiella spp 21, Pseudomonas aeruginosa 21, E. coli 9. The sensitivity of these isolated bacteria to several antibiotics are shown in graphic 1. Antimicrobials are used both inorder to prevent and treat the infection and the overuse of antimicrobials causes a very important financial burden which is clearly augmented by resistant antimicrobials (1).

**Results:** In three years period, in all medicines inspected for Klebsiella spp samples, the resistance rates are increased. In E. Coli samples, only the ciproflexacin resistance rate is increased. No kolistine and tigesikline in Acinetobacter isolates are determined. And no kolistine resistance in Pseudomonas aeruginosa isolates is determined. This augmentation indicates the requirement of more attention in antibiotics usage.

<table>
<thead>
<tr>
<th>Klebsiella spp</th>
<th>E.coli spp</th>
<th>Acinetobacter spp</th>
<th>Pseudomonas spp</th>
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<tr>
<td>Amikasin</td>
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<td>86</td>
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<tr>
<td>Kolistine</td>
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**References:**
3. The repeated changing of catheter lints in every 24 hour period.
And the date noted on
The diarrheal illnesses have a substantial role to prevent those kind of cases.

With insulin; with a multidisciplinary team working with psychiatry has accompanied by depression in patients with diabetes mellitus treated should not be cut immediately, though normoglycemia is provided at cases of intoxication with very high doses of insulin glucose infusion as 3600 IU and so long lasting hypoglycemia has not seen yet. Therefore, infusion up to 96 hours has been reported; as our case with a high dose intake of 2700 IU of insulin glargine intake and eventually glucose only limited with case reports. In the literature, a case with a maximum continue when it is used over the therapeutic doses. Also related datas prolongs for 24 hours. There is no clear data about how long its effect lasts in this case is to emphasize life threatening, difficult to cope and prolonged hypoglycemia caused when insulin glargine used at too much higher than the therapeutic dose.

Case: 45 year old male patient was brought to the emergency room unconscious and cut his wrists. At the history taken from his relatives 12 empty insulin pen was found near the patient and he was injected 3600 IU insulin glargine subcutaneously for suicide attempt. Glaskow Coma Scale of patient was 7/15 at admission, 8-10 injection scars at abdomen were detected with physical examination and blood glucose level was 20 mg/dl. % 20 glucose infusion was started, incisions were sutured and patient admitted to Intensive Care Unit(ICU). Glucagon hydrochloride 1mg (1IU) was given at recurrent hypoglycemia intravenously. He was followed while glucose infusion paused and 120 hours lasting infusion need observed. At the end of the fifth day throughout 24 hours patient had no hypoglycemia without glucose infusion, he was consulted to psychiatry and then due to his high suicidality at sixth day he was transferred to high security psychiatry clinic.

Discussion: Insulin glargine is a long-acting insulin; its effect prolongs for 24 hours. There is no clear data about how long its effect continue when it is used over the therapeutic doses. Also related datas only limited with case reports. In the literature, a case with a maximum intake of 2700 IU of insulin glargine intake and eventually glucose infusion up to 96 hours has been reported; as our case with a high dose as 3600 IU and so long lasting hypoglycemia has not seen yet. Therefore, in cases of intoxication with very high doses of insulin glucose infusion should not be cut immediately, though normoglycemia is provided at least one more day blood glucose level should be monitored closely. Accompanied by depression in patients with diabetes mellitus treated with insulin; with a multidisciplinary team working with psychiatry has a substantial role to prevent those kind of cases.

Discussion: Insulin glargine is an analogue insulin that produced to provide basal insulin requirement. Hypoglycemia as a side effect of insulin glargine is quite rare if it is used at therapeutic range. Our aim in this case is to emphasize life threatening, difficult to cope and prolonged hypoglycemia caused when insulin glargine used at too much higher than the therapeutic dose.

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POSTPARTUM INTRACEREBRAL HEMORRHAGE: A CASE REPORT

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Introduction: Intracerebral hemorrhage (ICH) is composed of many reasons in every age and a life-threatening acute hemorrhagic cerebrovascular event. Postpartum ICH incidence is more frequent than antepartum and control groups (1,2). We wanted to provide a case about a patient who had intracerebral hemorrhage and follow-up of brain death in postpartum period after caesarean section (CS) operation.

Case: 32-years-old female patient had severe headache after C/S operation and she thought that it may be due to spinal anesthesia. She didn’t apply any medical help about this complaint. When she had loss of consciousness she was admitted to the emergency department at postoperative 36 hours. She had a history of smoking and epilepsy for 15 years. She had discontinuation of antiepileptic drug therapy together with the pregnancy was learned. Preoperative laboratory values were normal. Because of preeclampsia, emergency C/S operation was planned. Subarachnoid block selected as a method of anesthesia in this case with full stomach. The first examination in the emergency department Glasgow coma scale (GCS) was 5. She was intubated to ensure the air way safety. Cranial computerized tomography (CT) scan showed that; on the left parietal lobe’s cortex approximately 4x65 mm in size hematoma, a left lateral ventricle elevation, false herniation and intraventricular hemorrhage existed. The patient was evaluated by neurosurgery was not suggested surgery. She was considered anti-edema treatment. She was admitted to the intensive care unit was undertaken on the control of mechanical ventilation. In the intensive care unit hemodynamic parameters and vital signs were stabilized. Although she had not given sedation and curarization, GCS decreased to 3 at the fourth day of admission. So brain magnetic resonance (MR) angiography was performed to questioning vascular malformations and hemorrhagic tumors of the brain was taken. Monitoring of the internal carotid artery to the level of the skull base, but intracranial internal carotid arteries, the anterior and middle cerebral artery, intracranial vertebral arteries and basilar artery failure to follow, and increase in the external carotid artery vascularization suggested the diagnosis of brain death. After completion of the tests used in the diagnosis of brain death, patient was diagnosed with brain death and died at the seventh day of hospitalization.

Discussion: Although the most important risk factors that led to the formation of ICH are elderly ages and acute or chronic hypertension; pregnancy and the postpartum period have very high risk (1/5500 birth). The most commonly associated with eclampsia and pre-eclampsia; but it also happens associated with vascular malformations and hemorrhagic tumors. In addition, the lumbar puncture may increase the possibility of subdural or subarachnoid hemorrhage. Hemorrhage after lumbar puncture may be extradural, subdural and in the subarachnoid space but epidural space is more often (3,4). In our case as ICH risk factors for postpartum preeclampsia were having a history of smoking and applying spinal anesthesia for C/S operation. In this case, in spite of the development of headache, the patient applied to the hospital after loss of consciousness and neurological deficits so early intervention was prevented. Late interventions may lead to fatal neurological deficits. Closely following ICH patients by early intervention has vital importance. Developed headache after spinal anesthesia should be due to multifactorial causes and we think should be monitored closely for neurological point of view.

References

THERAPEUTIC HYPOTHERMIA: ENDOVASCULAR COOLING IN A PATIENT WITH A TRAUMATIC BRAIN INJURY

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Kartal Dr. Lutfi Kirdar Training And Research Hospital, Istanbul, Turkey

Objective Of Study: Hypothermia has profound effects on the brain function but importantly is potentially protective against both focal and global injuries (1). We present a case of multitraumatised patient with accompanied brain injury in whom we initiated therapeutic hypothermia in the intensive care unit (ICU).

Case Report: A 22-year-old tourist woman who had a bicycle accident was admitted to the emergency department. Multiple fractures were identified at nasal, frontal and patelal bones. She had also right clivucula fracture and pulmonary contusion. During her follow-up she had a generalized seizure and Glasgow coma scale (GCS) decreased to 3 from 11. Following intubation hemorrhagic secretions were suctioned from the tube. Chest x-ray revealed infiltration and the patient underwent diagnostic bronchoscopy and exploratory laparotomy, but nothing pathological was found. Cranial CT revealed frontal contusion and brain edema. Mechanical ventilation and sedation were started on admission to the ICU. On the second day of her admission and 36 h after the accident, therapeutic hypothermia was initiated following the placement of endovascular cooling catheter in the inferior vena cava via the femoral vein. She was cooled over a 24 hour period, with a target temperature of 32–34 °C and passive rewarming was started at the end of the 24th hour. On the fourth day, the patient’s GCS was 10. She was finally weaned from ventilatory support on the fifth day of admission with a GCS 14. Hypothermia catheter was left insitu and later used for cooling the patient as her body temperature raised. Finally the chateret was removed on the 9th day and she was discharged to surgical department on the 10th day of her admission to ICU.

Conclusion: Although some trials support the benefit of hypothermia as a primary neuroprotective strategy in patients with severe traumatic brain injury there is no consensus yet for use of therapeutic hypothermia. This case was our first experience with the induction of hypothermia that probably improved outcome in our patient.

References

ACCIDENTAL POISONING WITH HERBAL TEA IN INTENSIVE CARE UNIT

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Objectives: The use of herbal medicines can cause severe toxicity and even death. These medications may contain variability of active or toxic ingredients due to growing conditions, processing or preparation. They may be also misidentified (1).

Case: A 25-years-old male patient admitted to Emergency Service with shivering, nausea and loss of consciousness following 20 minutes after drinking a couple of herbal tea with unknown ingredients. He has flu-like symptoms for a few days with no history of drug ingestion. On physical examination, he was agitated with Glasgow Coma Scale of 5/15. He has tachycardia (150 beats/min), dilated and non-reactive pupils. Computed cranial tomography did not reveal any pathology. He was intubated and transfer to intensive care unit (ICU). Laboratory findings were within normal limits. Treatment included mechanical ventilation and supportive ICU therapies. His mental status was gradually improved and 22 hours later he was extubated. He defined an open package containing dried and chopped green leaves given by his friend. On the 24 hours of admission, the patient was discharged to Internal Medicine Clinic.

Results and Discussion: The dominant clinical features of this case are the characteristics of the anticholinergic poisoning. The popularity of herbal medicine is increasing but it must be considered that it has a high potential of intoxication especially in uncontrolled and unidentified products.

References
The antibiotic resistance and the range of nosocomial infection agent micro-organisms in intensive care units are changing time to time. For this reason, persistent pursuit of the surveillance of agent and resistance mechanisms are assisting for designating the treatment and the infection control protocols. For this purpose, the range distinctions of hospital infection agent micro-organisms and resistance mechanisms in FSM Education and Research Hospital Reanimation intensive care unit during 2010-2012 are determined.

**Method and Material:** In 2010-2012, the micro-organisms that are isolated as invasive equipment related hospital infection agents are evaluated retrospectively. The conventional methods are used for determining the isolated micro-organisms. The antibiotics sensitivity tests are applied according to the disc-diffusion method suggested by CLSI. The vancomisin resistance in enterococcs are considered in 2011.

**Findings:**

<table>
<thead>
<tr>
<th>Pathogen Antimicrobial in ICS</th>
<th>2010 (%)</th>
<th>2011 (%)</th>
<th>2012 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSBL</td>
<td>16,47</td>
<td>36,99</td>
<td>38</td>
</tr>
<tr>
<td>VRE</td>
<td>0</td>
<td>50</td>
<td>18,18</td>
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<tr>
<td>KD</td>
<td>2,68</td>
<td>2,6</td>
<td>37,5</td>
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<tr>
<td>MRKNS</td>
<td>87,5</td>
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<tr>
<td>MRSNA</td>
<td>100</td>
<td>85,71</td>
<td>50</td>
</tr>
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</table>

<table>
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<tr>
<th>Pathogen Antimicrobial in ICS</th>
<th>2010 (n)</th>
<th>2011 (n)</th>
<th>2012 (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acinetobacterspp</td>
<td>67</td>
<td>39</td>
<td>71</td>
</tr>
<tr>
<td>Klebsiellasp</td>
<td>5</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>P. aeruginosa</td>
<td>69</td>
<td>19</td>
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<tr>
<td>E. coli</td>
<td>13</td>
<td>14</td>
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</tr>
<tr>
<td>Enterokokspsp</td>
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<td>10</td>
<td>11</td>
</tr>
<tr>
<td>KNS</td>
<td>16</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>S. aureus</td>
<td>7</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Enterobacterspp</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>C. albicans</td>
<td>0</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Proteus</td>
<td>7</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Results:**

In 2010, 190 micro-organisms are isolated as hospital infections, in 2011 this number decreased to 126. In 2010, while the most frequently isolated bacteria were Pseudomonas aeruginosa and Acinetobacter spp, in 2011 and 2012, Acinetobacter spp was in first rank. In 2011 and 2012, the increase in Klebsiella spp and Enterococcus spp rates are remarkable. And KNS is decreased in 2011 and not seen in 2012. The dilitated beta-lactamase production and the carbapenem resistance in gram-negative bacteria (remarkably increased in 2012), the vancomisin resistance in enterococcs and the oxasalin resistance in KNS and Staphylococcus. Infection control measures, adherence to guidelines, surveillance and rational antibiotic use are important in decreasing the impact of resistance problem (1).

For our hospital, Acinetobacter spp remains important as nosokomial infection agent. In the isolated samples the carbapenem resistance increased. Increasing of the GSBL production rate in the gram-negative bacteria and the Klebsiella spp’s boom in the isolated hospital infection agents become instructive in amphiic antibiotics selection and indicated the requirement of the infection control precautions.

**Reference**

TOXIC EPIDERMAL NECROLYSIS (TEN)

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Introduction: Toxic epidermal necrolysis (TEN) is a severe idiosyncratic reaction which is mostly induced by drugs and characterized by affecting greater than 30% of body surface area and almost all mucosae and by prevalently causing loss of epidermis. The patients with TEN carry high risk of infection and sepsis is the leading factor of mortality. The patient followed-up for TEN in our Burn Intensive Care Unit (BICU) in whom Acinetobacter wound infection and bacteremia developed during disease course has been presented.

Case: The 30-year-old male patient used cefuroxime axetile for URTI 10 days ago and he was hospitalized in a health institution with prediagnosis of TEN depending on fever and development of diffuse maculopapular rash. He was administered an unknown iv antibiotic. The patient who developed bullous lesions in 60% of his body was administered iv Prednol 1gr in dosage 1x1. Due to the increased lesions; he was taken to an isolated treatment room in the BICU. His first examination revealed open consciousness, cooperation, orientation, PHR 87/min, TA 128/81mmHg, fever of 38,8°C and laboratory findings within normal limits. There were maculopapular, morbilliform, nikolsky+ rashes and bullous lesions that covered 85-90% of his body. Diffuse mucosal lesions were existing in his mouth, nose and eyes. He was supported by crystalloid fluid to maintain CVP value of 6-8 cmH2O and urinary output of 1-1,5ml/kg/hour. The gastroprotective pantoprazole and analgesic tramadol HCL were given. In the sixth day of his admission, İmipenem 4x500mg and Colistin 3x100mg IV were initiated because of 38,8°C fever, growth of gram (-) bacteria in the tissue culture and positive signal from blood culture obtained from CVP catheter. His CVP catheter was withdrawn. The skin lesions regressed in the following day. Fever increased to 39,2°C and tissue, blood and catheter cultures grew Acinetobacter baumannii. The dosage of Colistin was elevated to 3x150mg. Tigecycline was added to the treatment protocol. The dosage of Colistin was regulated to be 3x120mg and 3x100mg in the 5th and 8th days of the treatment; respectively. The treatment of tigecycline was completed by 10 days while combination of İmipenem+Colistin treatment was finalized in the 14th day of the treatment. He was discharged by full recovery in the 24th day of his admission.

Discussion And Conclusion: It is essential to follow-up these patients in an isolation room with a multidisciplinary approach and to determine the potential factors for antibiotic therapy and to initiate the treatment timely by obtaining their surveillance cultures regularly.

PLAZMA EXCHANGE FOR HYPERTRIGLYCERIDEMIC ACUTE NECROTIZING PANCREATITIS IN ICU: CASE REPORT

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Introduction: Hypertriglyceridemia (HTG) is a rare cause of pancreatitis. Hyperlipidemic pancreatitis (HLP) secondary to HTG presents typically as an episode of acute pancreatitis or recurrent acute pancreatitis or rarely as chronic pancreatitis. It is generally accepted that a TG level more than 1 000 mg/dL is needed to precipitate an episode of acute pancreatitis. Plasmapheresis has been claimed to reduce triglyceride level rapidly in HLP and is believed to halt the progression of HLP.

Case Report: 22 years old man was admitted to hospital with abdominal pain and vomiting. In his medical history: Type I hyperlipoproteinemia and two times pancreatitis. His abdomen was markedly distended and there was severe tenderness in the upper abdomen with musculer defense. The result of laboratory studies showed marked hypertriglyceridemia of 2142 mg/dl and hyperamylasemia 268 IU/L. Abdominal computed tomography scan performed at hospital admission showed diffuse pancreatic swelling with peripancreatic effusion and perfussion of contrast was low. Conservative treatment (fasting, lipid lowering drugs, insulin and fluid restoration) started. And plasmapheresis perfomed immediately in 2nd hours of ICU. After plasmapheresis serum TG level was 270 mg/dl. CT scan at 36 hours after the on set of symptoms showed decreased efussion and he was discharged from ICU on 6th day.

Discussion: It has been generally believed that a TG level of more than 1 000 mg/dL was needed to precipitate an acute pancreatitis. The hypothesis of hyperlipidemic pancreatitis is that pancreatic damage was resulted from toxic injury to the capillary endothelium and the damage of pancreatic acinar cells was caused by free fatty acids liberated by pancreatic lipase. Conservative treatment (fasting, lipid lowering drugs, insulin or fluid restoration) might decrease TG level slowly in a time span of days to weeks. In contrast, plasmapheresis might remove excessive lipid from serum in about 2 h.

We used plasma exchange with replacement of fresh frozen plasma (FFP) in the treatment of HLP in this case. FFP could supply lipoprotein lipase and apolipoprotein from the healthy donor. Lipoprotein lipase and apolipoprotein were essential for the catabolism of TG.

The time of plasma exchange might be the critical point. If patients with hyperlipidemic pancreatitis can receive plasma exchange as soon as possible, better result may be predicted.
We conclude that CPFA+DECAP to be able to undergo transplantation.

In cases which develop acute decompensation, organs is lengthy in our country , the use of extracorporeal membrane oxygenation (ECMO) systems. Also, approaches based on stem cells have come into the picture in recent years, transplantation has become one of the treatment choices for chronic respiratory failure (RF). The patient was admitted to the hospital with a pre-diagnosis of ileus and dispnea 1 day previously then transferred to Orthopaedic Service with values of GCS: 15, pH:7.44 under room air ventilation (IPPV) mode (FiO2:% 0.80, TV: 500ml, PEEP: 10cmH2O, f:18/min). After the patient was intubated due to development of acute respiratory failure and was connected to mechanical ventilation on SIMV mode (FiO2:0.50, f:14/min, TV:550ml, PEEP: 5 cmH2O). The follow-up of the patient who was self-extubated from the patient during procedure were presented in the Table 1. His fever was reduced during his follow-ups. DECAP and CPFA procedure was implemented in the waiting period for a donor organ. In the postoperative period ECMO support was continued, at the same time nitric oxide inhalation and stem cell transplantation were applied.

Case report: A 49-year-old male patient underwent 6 cycles of chemotherapy (cisplatin, vinblastin and bleomycin) because of pulmonary metastasis associated with embryonal carcinoma of the testis 27 years previously. During follow-up, PF associated with bleomycin was diagnosed. Lung transplantation was recommended for chronic respiratory failure (RF). The patient was admitted to the hospital with a pre-diagnosis of ileus and dispnea 1 day previously then transferred to the Intensive Care Unit (ICU) with pneumonia. Noninvasive mechanical ventilation (IMV) was started with a diagnosis of hypercarbic RF. On the 3rd day the patient was intubated. As hypercarbia continued, the treatment was changed on the 4th day to Interventional Lung Assist (ILA). As the case, for whom lung transplantation was planned, was not suitable for transport because of haemodynamics and oxygenation, special permission was granted by the Ministry of Health for evaluation by the surgical team and preparations were made at our hospital for the transplant operation. As the waiting period for a donor organ lengthened, 23 days after the application of the first ILA device, hypoxia and hypercarbia developed so the ILA device was changed. A fat tissue sample was taken from the patient as stem cell treatment was being considered. As hypoxia became more severe 11 days after starting using the 2nd ILA device, ECMO support was started. On the 4th day of ECMO support (39th day in ICU) a donor lung was obtained for the patient. Left lung transplantation was made with ECMO support, which continued peroperatively and postoperatively. In the postoperative period, nitric oxide inhalation was started for pulmonary hypertension and haemodialysis + ultrafiltration treatment was applied because of acute renal failure. The stem cell therapy was performed into intrabronchial and intravenous as sequentially twice a day at 7 day intervals. Despite the supportive treatments, the patient died of multiple organ failure on the 52nd day in ICU (15 days after transplantation).

Conclusion: When it is considered that the waiting period for donor organs is lengthy in our country, the use of extracorporeal membrane support systems in cases which develop acute decompensation, should be thought of as a choice to increase the chance of the patient to be able to undergo transplantation.
PNEUMOCYSTIS CARINII PNEUMONIA IN PATIENT WITH HIV WHO DOES NOT KNOW HE IS INFECTED

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Pneumocystis carinii causes a potentially fatal pneumonia in patients with AIDS. We describe a case of disseminated Pneumocystis carinii infection in a patient who does not know that he is HIV-infected.

Case: A 37 year old male patient presented with a dry cough, fever, severe back pain and increasing dyspnoea. He had fever (40°C), tachypnoea, tachycardia, hypotension and arterial blood gas analysis confirmed severe hypoxia. Chest examination revealed that few bilateral diffuse crepitations were heard on auscultation. A clinical diagnosis of sepsis and ARDS was made. Echocardiography revealed that left ventricular ejection flow decreased. (48%). X-ray chest PA showed diffuse bilateral shadowing. Patient was transferred to the ICU where initial evaluation revealed elevated inflammatory markers and white blood cell count, abnormal liver function, and renal failure. He was put on intermittent positive pressure ventilation (IPPV). Initial settings were: volume control mode; FiO₂ 100%, PEEP 15 cm of water; initial tidal volume 6 ml/kg body weight. These settings were adjusted from time-to-time on the basis of patient’s arterial blood gas analysis. Strict fluid balance and inotropic therapy were maintained. He was started on high dose intravenous caspofungin, meropenem, teikoplain, ciprofloxacin. Hydrocortisone was also started. Blood, urine cultures were negative. The patient consented to HIV testing and was found to be positive with CD4 count of 5.2/uL. Pneumocystis carinii DNA were positive. He was treated with trimethoprim-sulfamethoxazole, imipenem and caspofungin, teikoplain, ciprofloxacin. In addition to Ganciclovir therapy was started on high dose intravenous, oral lopinavir-ritonavir, fluconazol, and tenoflivir/emtricitabine. On the 33th day he had a right tension pneumothorax that required an intercostal drain and a moderate right pleural effusion. After 50 days, there was complete clearing of X-ray shadows and arterial blood gases were within normal limits. He was discharged on the 54th day.

Conclusion: We represented a patient with pneumonitis carini pneumonia who was newly diagnosed HIV Infection. HIV infection possibility must be considered in a patient has severe pneumonia.

Discussion: We represented a patient with pneumonitis carini pneumonia who was newly diagnosed HIV Infection. HIV infection possibility must be considered in a patient has severe pneumonia.

OHSS is an iatrogenic serious complication occurring after ovulation induction. The risk group consists of young, poor and diagnosed with PCOS cases (2). In most cases, symptoms are self-limiting and regressed. High mortality rates are available in the heavy type. As cites, pleural effusion, clotting disorders, ARDS, impaired liver function tests and septic shock may occur in severe OHSS. Severe cases constitute 68% of all OHSSs and hospitalization is required. Our case who had iatrogenic OHSS accompany with severe sepsis and NF after the ovulation induction, was treated in intensive care unit. NF requires early and aggressive surgical treatment, which is a serious bacterial infection, and has aquire high morbidity and mortality. Micro-organisms enter the body via surgical wounds on the skin, abrasions, burns, and injections. As a result, clinical pattern may vary from mild clinical symptoms to the ARDS in OHSS. The patients should be treated in intensive care unit, which have developed ARDS. In addition this, we think that epidual anesthesia may suplay shortening intubation time and length of stay in intensive care unit for the patients who were made constant debridement of necrotizing fascitis.

References:


**P-113**

**PROTECTIVE EFFECT OF THERAPEUTIC HYPOTHERMIA IN TRAUMATIC BRAIN INJURY WITH SUBDURAL HEMATOMA**

TASARGOL O, ARSLAN G, GEZGEL İ, DERMAN S, ÇEVİK B, KOSE C, PIROGLU D

Dr Lütfi Kirdar Kartal Training And Research Hospital Department Of Anesthesiology And Reanimation, Istanbul, Turkey

**Introduction:** Traumatic brain injury (TBI) remains a significant cause of morbidity and death in the world. Therapeutic moderate hypothermia (cooling to 32–34°C) has been shown to improve functional and cognitive outcomes in brain injury studies.

**Case report:** 20-years-old healthy male patient. The patient after a motor vehicle accident reaches the emergency department with glasgow coma scale (GCS) of 3. Pupils were anisocoric and middilated. Patient was intubated immediately. Diffuse brain oedema and a subdural hematoma (SDH) on the right frontoparietal region was found commonly after all computed tomography (CT). Craniotomy was performed to removal of SDH and he admitted to the ICU as intubated. We decided to application hypotermia to protect the brain. Foley catheter as temperature probe and Alsius thermoregulatory catheter from femoral vein was performed 6 hours after accident for this purpose. Measured temperature was 37.50°C. Our target temperature was 3300°C. Body temperature reached to target in 5 hours. Patient had positive light reflex, pupils were isocoric and patient was localized the pain as motor reaction on the fourth day. GCS was 8 at 7 day. We had applied therapeutic hypothermia for 7 days. Brain oedema was decreased at control CT Therefore the patient’s temperature was to be increased at 0.20°C/h to provide normothermia. The target body temperature was 3600°C. 15 hours later, we reached the target body temperature. The patient’s hemodynamics were stable. On the 8th day we extubated the patient and GCS was 15. Thermoregulatory device was closed and the patient’s catheters were removed. Within a few days, the patient was interned to service.

**Discussion and Conclusion:** The neuroprotective effects of hypothermia are related to prevention of postischaemic hypoperfusion, reduction of functional and basal metabolism, decreased accumulation of lactic acid and oedema formation, inhibition of excitatory neurotransmitter release, prevention of Ca(++) and Na(+) influx, inhibition of free radical formation. We concluded that early prophylactic mild hypothermia in patients with TBI (GCS<8) to decrease the mortality and improve neurologic recovery without the side effects of hypothermia include myocardial ischaemia, cardiac arrhythmias, coagulation abnormalities and supression of metabolic and immunological processes.

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**P-114**

**ISOLATED CENTRAL NERVOUS SYSTEM INVOLVEMENT FAT EMBOLISM SYNDROME: CASE REPORT**

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**Introduction:** Into the circulation as a result of fat globules (brain, kidneys, eyes, skin and clogging of the capillaries of various organs) occurring in the clinical picture is called fat embolism syndrome (YES) (1). In this presentation, without signs of peripheral post-traumatic fat embolism syndrome associated with isolated central nervous system involvement is presented. Case Report For the revision of hip replacement surgery are fond of the 41-year-old female patient; preoperative evaluation, physical examination, and laboratory values were normal. Echocardiogram revealed moderate mitral stenosis, mild aortic regurgitation was detected. Patient not having any post-operative problem during intraoperative term was received intensive care unit because of patient couldn’t being wake up as intubated. Arterial blood gas values were: pH: 7.41, PaO2:72 PaCO2:38 HCO3: 21 BEECF: -4. In the patient’s cranial diffusion MRI, on bifrontoparietal, the right occipital and the cerebellum cortical-subcortical restricted areas commonly observed and fat embolic events in multiple areas of infarction were evaluated. Patients were followed up for the ventilator. Corticosteroids, cerebral vasodilator drugs and albumin was used as a supportive therapy. Discussion Fat embolism syndrome is usually characterized by respiratory failure developed after pelvic and long bone fractures, cerebral dysfunction and petechiae. The incidence of fat embolism syndrome ranges from 0.5% - 5 percent (2) and its mortality different from 5% to 10% (3). Fat embolism syndrome is a multisystemic disorder characterized by the respiratory system, circulatory system, central nervous system, urinary tract, eye, and skin symptoms and signs in 24-72 hours after trauma (2,4). For the prevention of YES can be performed early and rapid stabilization of long bone fractures given prophylactic corticosteroid, prevention of hypovolemic shock, provision of adequate oxygen delivery, provision of analgesia therapy and intramedullary pressure reduction during surgery (1). Result, We believe that it is helpful to be thought YES table can be flourished during long-bone and pelvic fracture surgery and is standard supportive treatment with YES cases which have isolated central nervous system.

**Reference**


Özetle; şüpheli olgularda semptomatik tedavi ile birlikte öykü, fizik muayene ve laboratuvar bulguları bağımsız olarak metanol intoksikasyonu şüphesi doğurur. Ancak, bu olguda metabolik asidoz ve koma belirtisi coğrafi anotop ve metabolik asidozda glikoznормализasyon hizi 24 saatlik bir sürede gerçekleşirse, intoksikasyonun varlığından şüphelenilmelidir. 

Kaynaklar

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**A CATHETER MALPOSITION CAUSING FACIAL AND NECK EDEMA: CASE REPORT**

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**Objective Of Study:** Central venous catheterization is an invasive procedure that is performed frequently in intensive care units for various indications like fluid and drug administration, hemodialysis and hemodynamic monitoring. The advancement of the central venous catheter into a nontargeted vessel during insertion is an important complication. Here we report a case of malposition of a central venous catheter causing facial and neck edema.

**Case:** A 73-year-old male patient, who had a history of chronic obstructive pulmonary disease and coronary artery bypass grafting, were arrested at home following dyspnea while under medical treatment of exacerbation of COPD. He was resuscitated by his family members initially for 25-30 minutes. CPR was continued on the way and at hospital. He responded to CPR and he was admitted to intensive care unit. He was consulted to our clinic for placement of a central venous catheter for parenteral nutrition. Central venous catheterization was performed by using Seldinger technique with a 7F double lumen 20 cm catheter from right subclavian vein without any complication. The day after he was consulted again because of facial and neck edema. When chest radiograph, which was obtained after placement of the catheter, was evaluated, and the catheter was found advanced from right subclavian vein to right internal jugular vein.

The catheter was removed, and the facial and neck edema was resolved near totally in 24 hours.

**Discussion:** Right subclavian vein cannulation is associated with the highest risk of malposition. More commonly, malpositioning is towards the internal jugular vein of the same side. Although the catheter size was relatively small, the infusion of parenteral nutrition was thought to be the triggering and accelerating factor for edema in the present case. As a result, we would like to emphasize the importance of radiological verification of central venous catheter position just after cannulation of central line.
MASSIVE PULMONARY EMBOLISM IN CHILHOOD: CASE REPORT

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Introduction: Stasis in bloodstream, intimal injury and hypercoagulation were claimed to be main causes of deep vein thrombosis by Wirshow. The thrombi arising from popliteal or more proximal veins have a tendency to cause more severe pulmonary tromboemboli (PTE). PTE is the 3rd most common cause of death related to cardiovascular disease. Shock and massive embolism accompanying cardiovascular arrest cause death in minutes. We aimed to discuss the diagnosis and management of massive tromboemboli on a child which was discharged from the hospital without any squela after cardiopulmonary arrest four times arisen from massive tromboemboli.

Case: A 15 year boy was hospitalized in the orthopedi clinic with the complaint of pain in hip, fever and rise in CRP. The findings of an ultrasonographic examination was confident with gluteal abscess. An improvement in clinical signs was obtained with intravenous antibiotics and anticoagulant treatment. He was transferred to intensive care unit due to a sudden cardiopulmonary arrest just before discharge attempt. A transtoracic echocardiography revealed right ventricular dilatation and severe pulmonary hypertension. Thrombus in bilateral main pulmonary arteries and its branches were observed on thorax computerized tomography. Three additional cardiopulmonary arrest were reversed by proper attempts. On blood examinations, D-dimer was found to be <50,000 ng/ml and thrombosis count was found to be normal. A thrombolytic treatment was started. Intravenous anticoagulant treatment was changed to oral treatment on 4th day. The patient was extubated after normalization of D-dimer and arterial blood gase analysis. Repeat echocardiography revealed that right ventricular and pulmonary artery pressures were normal. Venous Doppler of lower extremities showed that there are partial thrombus in right main femoral vein, external and internal iliac veins and common iliac vein. It was learned that his mother had been treated for deep vein thrombosis by Wirshow. The thrombi arising from popliteal or more proximal veins have a tendency to cause more severe pulmonary tromboemboli (PTE). PTE is the 3rd most common cause of death related to cardiovascular disease. Shock and massive embolism accompanying cardiovascular arrest cause death in minutes. We aimed to discuss the diagnosis and management of massive tromboemboli on a child which was discharged from the hospital without any squela after cardiopulmonary arrest four times arisen from massive tromboemboli.

Discussion: The mortality of massive embolism is very high. Thrombolytic treatment is life-saving in high risk patients. Early diagnosis and prompt initiation of thrombolytic treatment has an favorable impact on prognosis.

References

FOODBORNE BOTULISM TREATED WITH ANTITOXIN IN LATE PERIOD: A CASE REPORT

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Background: Botulism is a disease caused by clostridium botulinum bacteria which is an absolute anaerobic bacillus with gram positive spore. It is the strongest toxin with known exotoxin, and causes the development of flaks paralysis which is the main characteristic of the disease, by blocking acetylcholine release from peripheral cholinergic nerve endings. Type a, b and e is effective types in humans.

Case: Fifty year old female patient with known hypertension and diabetes mellitus was transferred to ICU to receive invasive mechanical ventilator support after long apnea attacks in the 7th day of the follow-up with diagnosis of Myastenia Gravis in neurology clinic with complaints of double vision, swallowing difficulty, weakness on both arms, head ache, throat ache, hoarseness and difficulty in breathing. The patient to whom weaning was applied in the 7th day during ICU follow-ups, was re-intubated in the 12th day due to the apnea attacks developed. After the relatives of the patient who was again extubated in the 26th day of the follow-up, stated her consumption of homemade canned food, she was given 500 ml Trivalan botulism antitoxin in the evening with botulism pre-diagnosis after presynaptic type neuromuscular junction dysfunction was seen in EMG performed on the 27th day. With the recovery of speech and swallowing on the 28th day, eye lid opening occurred spontaneously. The patient to whom 250 ml anti-toxin was administered on the 29th day due to continuing weakness and exhaustion, started walking on the 30th day. The patient was transferred to neurology clinic on the 35th day.

Discussion &Conclusion: Because botulism was not considered in early period differential diagnosis, toxin screenings were not performed with the serum that could be performed until the 3rd day and anti-toxin was not administered in early period. After confirming the diagnosis on the 27th day with clinical findings, history and EMG findings, Myastenia Gravis treatment of the patient was discontinued and her clinical findings got better with anti-toxin administration. Successful results are reported with anti-toxin administration in many cases even it is administered lately (1, 2, 3).

In conclusion anti-toxin treatment is recommended even though botulismus intoxication diagnosis is established in late period.
MONITORING THE MICROCIRCULATION WITH NEAR-INFRARED SPECTROSCOPY (NIRS) IN A PATIENT WITH SEPTIC SHOCK

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Septic shock is characterised by the derangements in regional blood flow distribution and microcirculation disorders. We present a case in whom we monitored microcirculatory changes as well as the macrodynamic and laboratory parameters to show how the patient responded to the therapeutic interventions.

Case report: 38 years old patient who had been under immunosuppressive therapy for connective tissue disease admitted with pneumonia leading to septic shock. She was sedated, mechanically ventilated, her respiratory and hemodynamic parameters were monitored. Tissue oxygen monitorisation (StO2) was also performed (NIRS technology, Inspectra 300) on the thenar muscle of the hand. Antibiotics, volume resuscitation followed by dopamin and nitrates were given as rescue therapies while recording the changes in monitored parameters as follows:

- Admission: SAP: 74mmHg, CVP: 8cmH2O, StO2: 68%, lactate 6.14mmol/lt, urine output: -
- After one hour: SAP: 84mmHg, CVP 10mmHg, StO2 66%, lactate 5.33mmol/lt, urine output: >0.5ml/hour + Dopamin 5 to 10mcg/kg/hour (4th hour) : SAP 90mmHg, CVP 10mmHg, stO2 70%, lactate 4.93mmol/lt, urine output >0.5ml/hour
- Dopamin 10mcg/kg/hour + Nitrate 20mcg/min (6th hour) : SAP 98mmHg, CVP 12mmHg, stO2 73%, lactate 2.54mmol/lt, urine output >0.5ml/hour
- Dopamin+Nitrate 20mcg/min + noradrenaline 5mcg/hour; 18th hour: SAP 95mmHg, CVP 8mmHg, stO2 85%, lactate 1.62 mmol/lt, urine output >0.5ml/hour

Fluid management and vasoactive agents were adjusted according to the monitored parameters and the patient was stabilised within 24 hours.

Discussion: NIRS offers a technique for continuous, non-invasive bedside monitoring of tissue oxygenation. The ‘real time’ assessment of the peripheral microcirculation can potentially be useful in managing the ICU patients. In our case, we followed the changes in StO2 in parallel with the lactate levels, which seem to be compatible. The normal StO2 level of 75-95% were reached before the normal blood lactate levels were obtained, which means that StO2 monitoring can be promising for the fluid resuscitation in septic shock patients.
Introduction: The burn injuries show a clinical progression with high mortality and morbidity rates in the infants. The treatment of the burn case which occurred due to parental negligence and was assessed as a difficult airway by an appropriate anaesthetic administration and a multidisciplinary approach has been presented in this case report.

Case: A TBSA 18% 3° burn (full-thickness facial burn elongating to the cranial vertex) according to Lund-Browder was detected in a 35-day old female infant due to ignition of the baby cradle. The infant was orotracheally intubated and inserted a 3-way cpr catheter in her right v. femoralis due to the developed respiratory distress. At the admission to burn intensive care unit; she had bad general condition, periorbital puffiness due to periorbital edema and was intubated and sedated. Motor response showed full range of motion in bilateral extremities, PRR+/−, isorhonic, bilaterally equal breath sounds, PHR:115/min, TA:87/52mmHg, fever 36.5°C, SpO2:99%, venous blood gas values: pH:7.08, PO2: 52.3; PCO2: 36.3, HCO3 15.2, BE -14.6; Hb:11.5, Hct :31.4, Wbc: 38400, Pt: 756000 INR 1.09, Na:132, K: 5.2, Cl: 107, Ca: 11, urea:23, creatinine: 0.9, glucose: 93, alb 2.4, AST 112 ALT: 25.4. Mechanical ventilation in SIMV-P mode (FiO2:0.50, f:40/min, PEEP:2/10) under monitorization was initiated. Procalcitonine was found 8.5 in the third day. IV fluid was administered according to Shriners Cincinnati Formula to provide an urine output of 1.5-2 ml/kg/ day. Antibiotherapy was initiated according to culture test results. She was breastfed. The patient with sufficient spontaneous respiration was extubated in the 4th day of hospitalization. In the 18th day of hospitalization; the patient, for whom an operation was planned for debridement and grafting, was assessed as difficult airway due to the full-face and neck burns in. An operation to open an preoperative tracheostomy was planned via consultation with The Department of Otolaryngology. The induction was performed using 5-8% sevoflurane and 10 mcg fentanyl. An airway was provided using No.1 Cobra LMA. An surgical tracheostomy was made by Department of ENT. A No.3 cuffed tracheal cannula was inserted. The maintenance of anaesthesia was provided using 10 mg esmeron, sevofluarne %2 and 3/3 O2/N2O. Isotonic fluid and erythrocyte replacements were administered due to 80 ml bleeding and 100 ml urine output during the operation which took 3.5 hours in the patient for whom debridement was performed in the burned fields while full-thickness face and partial-thickness cranial graftings were used. The perioperative ABG analysis of the patient with stable hemodynamic status revealed measurements: ph:7.51, PCO2:20.3; PO2: 100mmHg, HCO3 24.7; BE: 1.7, Sat O2: 96%; Hb: 12.1, Hct: 39, glucose: 125, Na: 134, K: 4.0, Ca: 1.15. The postoperative tracheostomized patient with full-motion extremities and free O2 support was interned to the intensive care unit due to measurements of TA:87/52mmHg, PA:100/55 mmHg, HR:120/min, SpO2: %99, fever: 36.3°C, PCT:0.162.

Conclusion: We conclude that a multidisciplinary approach, timely applied treatment interventions and intensive care support therapy improve the prognosis of the burned infant cases that progress with high mortality and morbidity rates.
Thrombolytic therapy is the treatment choice in the massive PTE. Early diagnosis and treatment is life saving in the PTE. Be considered in patients with dyspnea, hypocapnia, hypoxia, and HCO₃: 20. Pneumonia, may mask the diagnosis of PTE and should be filmed and massive pulmonary embolism detected. 50 mg Flakon was applied to the patient. The second flakon caused nasal bleeding so, thrombolytic therapy stopped. Patient was observed for 23.2, SO₂: %82, HCO₃: 19.8. Meropenem was applied 3x1g/day for culture: E.Faecalis, arterial blood gase: PH:7.46, PaO₂:56.6, PaCO₂: 38.9, CRP:28mg/dl, urine analysis: leukocyte:100, Blood:250, Urinary protein: 798000K/ml, PT: 14.8, INR :1.24, fibrinogen: 520, D-Dimer: 0.39, CRP: 28mg/dl, urine analysis: leukocyte: 100, Blood: 250, Urinary culture: E.Faecalis, arterial blood gas: pH: 7.46, PaO₂: 56.6, PaCO₂: 23.2, SO₂: %82, HCO₃: 19.8. Meropenem was applied 3x1g/day for pneumonia. Deep vein system of bilateral lower extremities were normal in the doppler USG. Echocardiography: Expansion in the right cardiac cavity. Trousseau insufficiency (2nd degree) and PABS: 50-55 mmHg. CTPA: There are hypodense filling defects in both pulmonary artery and its branches. Common mosaic perfusion appearance in both lungs and together with prominence in the interlobular septas in these areas secondary to PTE. PTE was considered after tachypnea, tachycardia, hypoxia, hypocapnia, and respiratory alkalosis. Echocardiography revealed an expansion in right heart chambers and for definite diagnosis the patient’s CT pulmonary angiography (CTPA) was filmed and massive pulmonary embolism detected. 50 mg Flakon was applied to the patient. The second flakon caused nasal bleeding so, thrombolytic therapy stopped. Patient was observed for a day in intensive care unit, general condition was improved and in the arterial blood gases pH: 7.37, PaO₂: 85.1, PaCO₂: 38.9, SO₂: 98.5 %, HCO₃: 20.3. Pneumonia, may mask the diagnosis of PTE and should be considered in patients with dyspnea, hypocapnia, hypoxia, and hypotension. Early diagnosis and treatment is life saving in the PTE. Thrombolytic therapy is the treatment choice in the massive PTE.
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**THE MANAGEMENT OF SEVERE IMPORTED FALCIPARUM MALARIA IN OUR ICU**

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**Objectives of the study:** Falciparum malaria may mimic many disorders related to central nervous system. Recognition of severe cerebral malaria may be delayed in non-endemic areas. Higher survival rate could be achieved with a rapid and aggressive treatment approach to coma. The purpose of this case report is to describe the clinical management of severe imported cerebral malaria in our ICU.

**Materials and methods:** A 47 year old male was admitted in the ICU with complaints of progressive high grade fever, altered sensorium, poor feeding for 3 days and one episode of seizure 2 hours before admission. Computerized imaging of brain was normal despite the presence of deep coma. Besides performing routine cultures, Giemsa stained thick and thin blood smears were investigated for defining a possible parasitaemia as the patient had a history of a visit to an endemic country for malaria 10 days ago.

**Results:** Blood films revealed the presence of falciparum malaria parasite. Quinine sulphate, 3x600 mg p.o, tetracycline 4x250 mg p.o and intravenous artesunate 2.4 mg/kg were administered at 8th hour of admission. Artesunate (1.2 mg/kg) was repeated at 12 ve 24 hours. Quinine sulphate and tetracycline therapy was preceded for 7 days. The patient was intubated at 12 hours of admission because of progressive tachypnea and hypoxemia.

Whole body cooling with gastric/vesical lavage with distilled water at +4 C and antipyretic blanketrol, intravenous infusion of crystalloid solutions at +10 C and sedation and organ preservation strategies were carried out for 5 days. Fluid and electrolyte replacement, mechanical ventilation, enteral nutrition, drugs were performed to maintain the body temperature < 39 C. Blood urea nitrogen:198mg/dL and creatinine:6.38mg/dL. Patient was consulted nephrology to be applied two times a week hemodialysis.

**Discussion and Conclusion:** Cerebral malaria is a life-threatening complication seen in 2% of malaria cases, particularly in Plasmodium Falciparum infection. Early diagnosis and treatment in the ICU is therefore crucial to obtain the best outcome.

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**NURSE ATTEMPTED SUICIDE WITH INTRAVENOUS INJECTION OF HOUSEHOLD BLEACH AND PRILOCAINE HYDROCHLORIDE; CASE REPORT**

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**Abstract:** Sodium hypochlorite (NaOCl) is a solution made from reacting chlorine with a sodium hydroxide solution. NaOCl, which is known as household bleach, is a whitening agent and used in disinfection. Prilocaine hydrochloride is a local anesthetic agent of the amide family. Onset and duration of the local anaesthetic effect of prilocaine depend on the dose and the site of administration. Systemic toxic reactions primarily involve the central nervous system (CNS) and the cardiovascular system (CVS). Also Methaemoglobinemia may occur after the administration of prilocaine.

**Case:** A 36 year old female nurse was admitted to the emergency department. She attempted suicide by infusion of 150 mL household bleach (Dormestos)sodium hypochlorite 5%) and 20ml prilocaine hydrochloride(Citanest%2)into left antecubital vein with intravenous (IV) line, one hour before admission. She had a history of depression since 6 months and this was her third suicide attempt. The patient was hemodynamically stable. She was oriented and obeys commands. The patient was hemodynamically stable. Pulse rate 90 beats per minute, blood pressure 100/50mmHg, and his respiratory rate was 12breaths/min. Patient arterial blood gas analysis was pH:7.43, pCO2:39mmHg, pO2:141mmHg, SO2:%98.9. Her methemoglobin level is %9.95 (normal range %0.4-%1.5). Patient was transferred to intensive care unit. We gave her an initial intravenous bolus injection of 20% lipid emulsion 100 ml and continuous infusion 0.25 mL/kg/min. In clinical examination, her left arm was painful and swollen. Doppler ultrasound examination of her arm was normal. 24 hour later oligaemia (<0.5 mL/kg/h) was occured. At that time laboratory findings were blood urea nitrogen:198mg/dL and creatinine:6.38mg/dL. Patient was consulted by nephrologist and diagnosed with acute interstitial nephritis. Steroid treatment(60mg/day) and haemodialysis (2 times a week) were started. The patient was treated in intensive care for 14 days. Characterized by stable vital signs, the patient transferred to the department of nephrology to be applied two times a week hemodialysis.

**Discussion and Conclusion:** Suicide risk appears to be elevated in medical practitioners. Poisoning by drugs was far more common among the medical practitioners than the general population. This patient injected herself household bleach and prilocaine hydrochloride. Prilocaine hydrochloride cause methemoglobinemia. If clinical methaemoglobinemia occurs, it can be rapidly treated by a single intravenous injection of a 1% methylene blue solution. Our patient did not have any clinical findings, so we did not use methylene blue solution. The author thought that the renal failure was due to the direct toxic effect of sodium hypochlorite on the renal tissues and recommended forced diuresis, hydration and haemodialysis.
PULMONARY INJURY AND DIABETIC KETOACIDOSIS ASSOCIATED WITH CANNABIS SMOKING

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Introduction: Cannabis is the most widely used illicit drug worldwide. The use of cannabis with bonsai and tobacco with diabetic ketoacidosis (DKA) is a rare condition that we have never encountered before.

Case: A 17-year-old man presented with fatigue, respiratory distress, mental disorder at emergency department. He was dehydrated, tachycardic, tachypneic, normotensive and confused when admitted to intensive care unit. His arterial blood gas measurement revealed clinically important metabolic acidosis (Table 1). His blood glucose level was 520 mg/dL. Urine analysis showed ketonuria. Immediately intravenous rehydration, regular insulin and potassium replacement administered. He had abnormal auscultation as rhonchus especially at the right side and chest X-ray showed that the left hemithorax ventilation was less than the right and also atelectatic zones were seen at the left. Laboratory tests were normal. The patient was placed on mask O2 at 4L/min. On day 2, despite improvement in metabolic acidosis (Table 1), respiratory distress still persisted. On suspicion of pulmonary embolism, CT pulmonary angiogram was performed and revealed main pulmonary artery and right-left pulmonary artery were normal, consolidation was occurred at posterior left upper lob and posteriorobasale segment of right lower lob, also hyperinflation at the left lung was considered. On day three wide inflammation according to the inhalation of the substance was observed in bronchoscopic evaluation. The obstructive plugs were aspirated and the sample was defined as fibrinous and necrotic. Five days after bronchoscopy the patient was relieved and discharged from ICU to thorax surgery ward.

Discussion and Conclusion: Smoking cannabis leads to respiratory symptoms as cough, increased sputum production and wheezing and also associated with dyspnea, pharyngitis and exacerbations of asthma as a result of toxic effects on bronchial mucosa. In conclusion, cannabis has been shown to have harmful effects on lung function but the relationship with diabetic patients is not clear. Cannabis smoking history should become as common as recording tobacco exposure. Also the patients admitted for DKA should be questioned for drug abuse.

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CARDIORENAL SYNDROME: TREATMENT WITH LEVOSIMENDAN AND ULTRAFILTRATION DURING POSTOPERATIVE PERIOD

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Introduction: Cardiorenal syndrome (CRS) is categorized into 5 types based upon the organ that initiated the insult as well as the chronicity of the precipitating event. Type 3 is characterized by acute worsening of kidney function leading to heart dysfunction. This report discusses a case diagnosed type 3 CRS who was successfully treated with levosimendan and ultrafiltration in intensive care unit (ICU).

Case: A case of a 60-year-old, female and type II diabetic patient with a prosthetic aorta and mitral valve that underwent a total prosthetic of hip joint replacement was referred to the ICU. CRS associated with acute renal injury was diagnosed. Patient displayed volume overload because of acute decompensated heart failure. Standard therapy including diuretics and high dose inotropes failed to ameliorate hypotension, tachycardia and elevated central venous pressure. The patient’s urine output decreased over the therapy period, levosimendan and ultrafiltration therapy was initiated at the simultaneously. After starting therapy with ultrafiltration and levosimendan at the third hour, urine output increased, mean arterial pressure and heart rate improved and need for inotropes decreased.

Discussion: The vasodilatory effect of levosimendan, a myofilament Ca2+ sensitizer with inotropic effects, is achieved through activation of ATP-dependent potassium channels. This leads to a decrease in both afterload and preload without impairing the diastolic function of the heart. Continuous hemofiltration, which has minimal effect on cardiovascular stability, is a very effective method of renal support for patients with acute renal failure, especially in those with oliguria and anuria. In our patient with CRS, hypervolemia leading to cardiac decompensation must be treated urgently. Ultrafiltration and levosimendan can be additional treatment options in patients with CRS that is refractory to standard diuretic and inotrope therapy.
H1N1 IN PREGNANCY: TWO CASES

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Objective: H1N1 infection is usually associated with seasonal influenza-like symptoms such as fever, coughing, and sore throat. The infection may be a more severe prognosis for risk groups: over 65 years of age; children under 5 years of age; pregnant women; health workers; patient with chronic diseases including lung disease, neurological disorders, and diabetes; and those receiving immunsuppressive therapy. In this report, we summarize the cases of 2 pregnant women with H1N1 Influenza.

Cases: The study included 2 pregnant women hospitalized in our hospital between October and December 2009. The diagnosis of pandemic H1N1 Influenza was confirmed on nasopharyngeal specimens using real-time reverse-transcriptase polymerase chain reaction in both patients.

Case 1: 30-years-old patient, gravida 1 para 0, went to a hospital in an other city, triplet pregnancy, 15-week gestation, complaining of high fever, cough, rhinorrhea and myalgia. Antibiotherapy had been given. After 5 days, bilateral pneumonia infiltration was identified and 2x75 mg dose of oseltamivir (tamiflu) was administered orally. Because of dyspnea, cyanosis, bloody sputum and agitaion, 2 days after oseltamivir treatment beginning she was accepted to our intensive care unit (ICU). In admission respiratory rate; 36/min, heart rate; 138/min and blood pressure were 170/80mmHg and had 39°C fewer. Laboratory findings were WBC;9400/µl, Hb;8.4gr/dl, PLT;184000/µl, AST;120 U/L, ALT;36U/L and blood gas values were pH:7.4 pO2:48.6, pCO2:17.4, pH:7.4 pO2:46, pCO2:22, SpO2: 84, HCO3;13.9. Beside oseltamivir treatment, 3x1gr dose of meronem, 1x400mg dose of teikoplanin (Targosid) and 3x2gr dose of meronem were also given. Though mechanical ventilation with FiO2:%100, SpO2 below %50 and she died after 30 hours of ICU admission.

Case 2: 21-years-old patient, gravida 1 para 0, went to a special hospital, 34-week gestation, complaining of high fever, cough, rhinorrhea. After a week she was accepted to our ICU complaining of dyspnea, cyanosis, nausea, vomiting, diarrhea, limbs weakness and myalgia. Bilateral pneumonia infiltration was identified and 2x75 mg dose of oseltamivir (tamiflu) was administered orally for ten days. After 5 days, bilateral pneumonic infiltration was identified and 2x75 mg dose of oseltamivir (tamiflu) was administered orally for ten days. After intubation, the patient was admitted to the ICU. She was put under tracheostomy, but she could not perform the oro-tracheal intubation with a ID:7,0mm endotracheal tube therefore the patient could be intubated with a ID:5,0mm tube. After intubation, the patient was admitted to the ICU. She was put under isolated room. ICU physician decided to place a nasogastric tube in order to administer the oral anti-TB medications. However, she was not able to direct the tube to the stomach. General Surgery consultant used an endoscope for placing the tube but the endoscope could not pass the obstructed oesophagus either. Finally the patient was taken into OR and a surgical feeding gastrostomy was performed and later the medications were successfully administered via this route.

Discussion: Everyday we see patients with acute respiratory distress. We should always bear in mind that acute respiratory distress may be the result of a tracheal compression by a tumour, abscess or etc. Therefore, we should perform a thorough physical exam and run relevant imaging studies.
METABOLIC ACIDOSIS, RHABDOMYOLYSIS AND CARDIOVASCULAR COLLAPSE AFTER PROPOFOL INFUSION: CASE REPORT

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Metabolic acidosis, rhabdomyolysis and cardiovascular collapse after propofol infusion: Case report Introduction: Common presenting features of propofol infusion syndrome (PRIS) are new-onset metabolic acidosis, cardiac dysfunction, rhabdomyolysis, renal failure and hypertriglyceridemia. Patients of all ages with severe critical illness such as neurological injuries, severe trauma, severe sepsis are at risk for PRIS. Case presentation: A 55 year-old man was assessed in the emergency department. His initial Glasgow Coma Score was 8 (E2V1M5). The patient was sedated and intubated. The patient’s vital signs were stable. Computed tomographic (CT) scan showed intraparenchymal hematoma diffused to lateral ventricles. ICP monitoring via ventriculostomy was performed for intracranial pressure evaluation (initial ICP was 28 mmHg). Deep sedation with midazolam 0.12 mg/kg/h and fentanyl 0.02 mcg/kg/min and osmotherapy with mannitol was maintained. Cerebral perfusion pressure (CPP) between 60-70 mmHg and ICP below 20 mmHg was targeted. Laboratory values were within normal limits. Midazolam was replaced by propofol 6 mg/kg/h on day 6 for a rapid recovery. Repeated CT scans showed no hematoma growth but moderate diffuse brain edema with no indication for neurosurgical intervention. Lactate and base excess (BE) values remained within normal ranges. On the 30th hour of propofol infusion green discoloration of urine was noted. Following the urine discoloration, the patient developed a severe shock state with metabolic acidosis (BE -6 mmol/L), lactate elevation (3.5 mmol/L), and creatine kinase activity increased to 1505 U/L. Renal and hepatic impairment were developed. Respiratory function was impaired also (PaO2/FiO2 ratio: 100 mmHg). Propofol infusion was stopped. The patient suddenly developed ventricular tachycardia, fibrillation and arrest. CPR was started. However, after 50 minutes, resuscitation efforts ceased. Conclusion: High-dose propofol for prolonged periods (>4 mg/kg/h for >48 h) should be avoided, or if used, should only be with regular CK and lactate monitoring. Warning signs such as lactic acidosis must lead to the immediate cessation of propofol infusion. Early hemofiltration and ECMO are essential for the successful treatment of PRIS, but in general, prognosis is poor.

LOCKED-IN SYNDROME CAUSED BY THE PRESSURE EXERTED BY THE SOUND GUN

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Locked-in syndrome caused by the pressure exerted by the sound gun

Background: Locked-in syndrome is a clinical condition characterized by the experience of quadriplegia and anartria with preservation of consciousness as a result of damage to the ventral pons. Patients can only communicate with vertical eye movements and blinking. We are presenting the case of a 19 year-old male patient with a head injury that occurred as a result of sound gun trauma, where increased intracranial pressures lead to cerebellar damage and post-traumatic locked-in syndrome.

Case report: A 19 year-old male patient who wounded himself with a sound gun in the right temporal region had a Glasgow Coma Scale of 3E. Light and corneal reflexes were bilaterally negative. The patient was not breathing spontaneously and was intubated when admitted to the intensive care unit and was treated with mechanical ventilation. The patient had low blood pressure and CVP and was administered a crystalloid fluid. Despite the adequate fluid resuscitation the desired increase in blood pressure was not obtained, thus dopamine and noradrenalin infusion were started and titrated according to the patient’s hemodynamics. Other medical treatment (nutrition, mannitol, furosemid, metoclopramide HCl, famotidine and acetylcysteine) were started. At post-traumatic day 3, the patient began to open and close his eyes intermittently. A percutaneous tracheotomy was performed on the 6th post-traumatic day. At post-traumatic day 7, locked-in syndrome was considered upon detection of vertical eye movements, meaningful winks and quadriplegia. Apart from the classical view, computed tomography of the brain showed an infarct area in the cerebellum. An MRI was planned, but the MRI was delayed due to the increase in accompanying hemodynamic problems, fever and infection. The patient died at post-traumatic day 36 due to multiorgan failure. The postmortem examination showed ischemia in the cerebellum, however the verteobasilar artery system was normal. No further examination could be done due to the severity of the situation, although careful clinical follow-up and examination of the patient lead to the locked-in syndrome diagnosis.

Discussion: As a result, we suggest that careful clinical follow-up and neurological examination in patients in the intensive care unit could allow for a faster diagnosis of LIS. In addition, in post-traumatic cases that are not like ischemic patients, specific CT findings may not be observed and the pressure produced by the sound gun may cause ischemia in the cerebellum, which may lead to the formation of LIS.
PROTECTIVE VENTILATION WITH CO2-REMOVAL TECHNIQUE

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30% of ARDS patients ventilated according to the standardised protocol presents morphological and functional conditions of hyperinflation even with plateau pressures (Pplat) < 30 cmH2O. Values of Pplat lower than 26 cmH2O are associated with a condition of more protective ventilation with the risk of severe respiratory acidosis [1]. In such patients, use of alternative techniques such as CO2-removal may allow the reduction of Tidal Volume (VT) and Pplat. We present a case with severe ARDS where the CO2 removal technique was used to control severe hypercarbia and acidosis.

Case: 48 years old woman was admitted with politrauma following a traffic accident. She had hemorrhagic shock, cerebral contusion (GCS: 7), multiple rib fractures and lung contusion on the left hemithorax, pelvic fracture, multiple fractures on the right arm and open fracture on the right cruris. She was operated, sedated and mechanically ventilated (MV). She developed abdominal complications followed by sepsis and ARDS on the 7th day of her stay.

MV parameters were adjusted to keep the PIP below 30cmH2O, when FiO2: 70%, VT: 6-7ml/kg(Vt.450ml), I: 18 and PEEP 16cmH2O, blood gas measurement revealed as PaO2: 92mmHg, PaCO2: 112mmHg, PaO2/FiO2: 131, HCO3: 22 and pH: 7.02. We decided to use extracorporeal carbon dioxide removal technique (Decap®, Hemodec, Salerno, Italy). Blood gas analysis were done every half an hour, hourly and every two hours for 24 hours without changing the ventilatory parameters:

- PaO2: 92, 89, 100, 120, 127, 98, 92, 104, 114, 153, 155, 151, 128, 78, 115, 121, 95mmHg
- PaCO2: 112, 79, 74, 70, 57, 76, 71, 75, 95, 87, 80, 75, 82, 78, 60, 64 mmHg
- PH: 7.03: 7.16, 7.20, 7.22, 7.04, 7.18, 7.20, 7.19, 7.17, 7.15, 7.12: 7.13 ,7.10, 7.11, 7.20, 7.20

The CO2 removal and the rise in pH was significant in the first four hours, the effectivity of the technique was decreased in the following hours resulting a poor control of acidosis. After the 36th hour, CO2 removal was stopped. CVVHDF was initiated. MOF was developed and the patient died on the 11th day.

Conclusions: Severe hypercapnic acidosis that can be seen during protective ventilation in ARDS is detrimental and should be avoided. Moreover, the buffering of acidosis with bicarbonate may be deleterious in some conditions. Low-flow veno-venous DECAP can help gain time in patients with severe refractory respiratory insufficiency. In our case, CO2 retention could be lowered with DECAP in the early course, but the acidosis has become aggravated by metabolic derangement of the patient and although CVVHDF was added to the treatment she deteriorated very fast.

Reference

THE EFFECT OF INFECTION ON MORTALITY RATE OF PEDIATRIC PATIENT IN BURN INTENSIVE CARE

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This study in pediatric patients with burns in intensive care unit mortality, to determine the effect of the infection and the patient was to evaluate the prognosis.

Method and Material: Burn intensive care unit between December 2008 and December 2012 the 0-14 age group follow-up of 105 patients were screened retrospectively. The age, gender, length of stay, type of burn, burn degree of burn severity, living situation, need for mechanical ventilation, ABSI [Abbreviated Burn Severity Index / burn severity score], presence of catheter, culture, and the results to be evaluated. SPSS 15.0 statistical software package was used to evaluate the data.

Findings: Of the patients 41 (39%) female and 64 (61%) were men and the mean age was 3.62. By type of 65.7% of the hot liquid burns, 23.8% of the flame burns, 7.6% of electricity was burn. 25.7% of burn between 11-20% (27), 21-30% from 26.7% (26) between 31-40%, and 17.1% (18). Degree burns, 24.8% 2 ≤ 2 ≤ 3 ≤ 53.3%, respectively. Mortality rate was 16.2%. Patients, 36.2% had received mechanical ventilatory support. Average length of stay 7.67 days. 11.6% mortality in patients with burning with hot liquid, flame burns was 28%. Mean score of 7.47 ABSI patients who died, patients who score ABSI was 5.08 and statistically was significant (p = 0.001). 43 patients (41%) patients’ arteries, dialysis, central venous pressure’ at least one of the catheters was performed. 76.2% of blood cultures, catheter tip were positive in 18.1% (p > 0.05). Tissue cultures were found to be inadequate. Acinetobacter baumanni blood culture positive rate of 12.8% (14), Pseudomonas aeruginosa 8.25% (9), MRSA (methicillin-resistant Staphylococcus aureus) 4.58% (5), respectively. Acinetobacter baumanni 12.5% (3) and pseudomonas aeruginosa 8.3% (2) seen by breeding. ABSI score of 8-9 according to the scores of the 12 patients of 32 patients with 100% of 6 -7 points 78.1% when the breeding group (p <0.001).

Results: According to Abside expected mortality, intensive care unit mortality was consistent with. Absi score and score were significantly higher in patients with high reproductive rates. This is an advanced level was significant (p <0.001). A multidisciplinary approach to these patients, possible factors for the purpose of early detection and timely initiation of antimicrobial therapy will increase surveillance of the opinion that taking regular surveillance cultures.
WEANING MODES FROM MECHANICAL VENTILATION FOR SURGICAL INTENSIVE CARE UNIT PATIENTS

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Surgical intensive care unit patients, weaning from mechanical ventilation process plays an important role in mortality and morbidity. The aim of this study is to investigate the modes used for weaning in the surgical intensive care unit patients receiving mechanical ventilation in the postoperative period.

Method and Material: February, 2012-March, 2013, between 654 patients who were followed in the surgical intensive care unit, invasive mechanical ventilation therapy (eVolution® 3e Ventilator, eVent Medical) were retrospectively analyzed in 140 cases. Patients were separated according to surgical clinics. After then age, sex, invasive modes of ventilation, duration of mechanical ventilation and intensive care, and mortality rates were recorded. Parameters were recorded as follows: 20th min before the NIMV, initial time of NIMV, every 30 min of NIMV until 120th min. Thirty min, 24 and 48 hours after NIMV, and prior to ICU discharge.

Findings: Forty eight patients completed this study. Two patients were excluded from study due to resistance respiratory acidosis in Group F. Hemodynamic parameters, SpO2, RR, Ppeak, PEEP, FiO2, and ABG values were similar between the groups. Diminishing of PaCO2 was statistically significant at time 60th min of NIMV in Group F (p<0.05), whereas there was no significant difference in Group H according to initial PaCO2 value. ICU stay, duration of NIMV, and mortality rate were not different between the groups.

Results: However all parameters including PaCO2 values were similar between the groups, declining of PaCO2 in Group F was significant at 60th min of NIMV. Therefore, physician should pay attention for hypercapnia related complications in case of Helmey usage.
COST REDUCTION ASSOCIATED WITH USE OF SUBGLOTTIC ASPIRATION TO REDUCE VENTILATOR-ASSOCIATED PNEUMONIA IN TURKEY

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Ventilator-associated pneumonia (VAP) is a serious complication risk for patients who require invasive mechanical ventilation (IMV). VAP is associated with longer intensive care unit and hospital stays, which may increase healthcare expenditures. VAP may occur in 8% of IMV patients (insert reference). Subglottic aspiration (SA) may decrease VAP by up to 45% in IMV patients (insert reference). The goal of this analysis is to calculate the potential cost reduction associated with SA use for VAP reduction in IMV patients in Turkey.

Method and Material: A literature analysis was conducted in PubMed (2000-present) to determine the published cost of VAP in Turkey. “Cost of VAP” “IMV,” and “Turkey” were used as keywords. The costs of VAP in Turkey were published in three separate cost analyses with costs stated in United States Dollars (USD). Published costs were used for the conversion to Turkish Lira (TL). An annual inflation rate of 3% was applied to the cost data to project the estimated cost in 2013. The exchange rate for USD to TL was estimated at 1.8. A weighted average of the number of patients in each study was used to calculate the cost of treatment. The cost of SA to the Social Security Institution (SGK) was calculated as 33.94 TL, which includes the cost of the SA tube (TaperGuard EVAC; 25 TL) and the SA service reimbursement amount from the SGK of 8.94 TL. 8% and 45% were taken as the VAP rate and the VAP reduction with SA rate in IMV patients, respectively. The number of patients requiring IMV in a hospital was estimated at 1,000 per year.

Findings: The average inpatient costs of IMV patients with and without VAP were identified in three published cost analyses and were calculated to be 13,556 TL and 3,971 TL, respectively. The total VAP cost, based on 80 VAP cases in 1,000 IMV cases without SA, was calculated as 1,085,297 TL. The total VAP cost includes the cost of SA use was calculated as 562,973 TL.

Results: VAP increases health expenditures by 9,595 TL per patient. A hospital with 1,000 IMV patients per year that uses SA in all IMV patients, has an average 8% VAP rate as published, and achieves a 45% reduction in VAP rate as a result of SA usage, may realize an estimated cost reduction of 562,973 TL associated with use of SA in IMV patients.

WHAT HAPPENS IF A BLOOD GROUP CAN NOT BE DETERMINED BY ROUTINE TESTS?

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Human red cell membranes are estimated to contain at least 300 different antigenic determinants. At least 20 separate blood group systems are known, under genetic control from a separate chromosomal locus. This was a case that whose blood group could not be determined by routine analysis.

Case: A 35-year-old male patient who was politraumatic following an accident needed blood grouping as a routine procedure. The blood sample was sent, but the blood group of the patient could not be determined by the methods for the routine typing. The blood sample then was sent to the Blood Center of Istanbul University, but the methods there were again unsuccessful for grouping of the sample. The blood group of the patient was accepted to be “O” type in accordance with the procedure followed in this type of patients; Rh depending on the patients being (+) or (-). The blood transfusion was not indicated for the patient during the follow-up.

In conclusion: the blood group not determined by routine methods can be defined by genetic tests with very high costs, but when cost-effectiveness matters, it is accepted that transfusion of washed O type of human blood and follow-up of the patient is sufficient.
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PRELIMINARY REPORT: METHYLPRÉNDSOLONE THERAPY IN SEVERE ARDS

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It was aimed to determine the effectiveness of low-dose methylprednisolone therapy in critically ill patients with diagnosis of Acute Respiratory Distress Syndrome (ARDS).

Method and Material: 21 patients in whom ARDS was developed during Intensive Care Unit (ICU) follow-up period, could not be treated by conventional methods and received methylprednisolone therapy were included in the study. The demographic data and diagnoses of ICU admission were recorded. All patients with the diagnosis of ARDS underwent standard methylprednisolone protocol. Day 1: 2 mg/kg loading dose; Days 2-15: 4x0.5 mg/kg; Days 16-22: 4x0.25 mg/kg. Physiological improvement in the respiratory system was evaluated with the 4-point Lung Injury Score (LIS) and the presence of multi-organ failure with the Multiple Organ Dysfunction Syndrome Score (MODS). Length of stay in the ICU and survival rates of the patients were also recorded.

Findings: Demographic data of the patients were similar. 10 patients were discharged from the ICU, 11 patients died. The rate of ARDS with pulmonary origin was higher in the survivors. LIS and MODS scores of Day 22 were significantly lower than baseline scores in all patients (p<0.001, p<0.001). Baseline LIS scores and the LIS scores at days 6, 9, and 12 of nonsurvivors were significantly higher (p<0.001) than the patients who survived. There was no difference between the survivors and nonsurvivors in terms of length of stay in ICU.

Results: The treatment with low-dose methylprednisolone provides a significant improvement in pulmonary function in ARDS patients who do not respond to conventional therapies. ARDS patients with pulmonary origin response better to methylprednisolone therapy than ARDS patients with extrapulmonary origin.

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PULMONARY EDEMA DUE TO CHLORINE INHALATION

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Introduction: Chlorine gas, which destroyed the lungs is a yellow, green gas that is soluble in water. The most common cause of poisoning by mixing hypochlorite and acid containing cleaning agents results bronchoconstriction. Mild symptoms as well as pulmonary edema, chemical pneumonitis, tracheobronchitis, adult respiratory syndrome (ARDS), respiratory failure can lead to fatal and severe consequences.

Case: Fifty-one-year-old female patient was brought to the emergency room with cough, chest pain and respiratory distress complaints after using mixed spirit of salt with bleach for household cleaning. Dopamine infusion was started to patient in the emergency department with respiratory arrest and was taken to anesthesia intensive care under these conditions. Bilateral diffuse coarse crackles were present by listening the lungs. Pink color, foam liquid was aspirated from the endotracheal tube. Addition to dopamine, noradrenaline infusion was started. Bedside echo was done. Ejection fraction was 50%. Caps were in normal view, there were no signs of the right loading. There was no cardiac pathology determined to create this table. Pulmonary edema was present, was not considered pulmonary embolism as the differential diagnosis. The patient was extubated at the 18. hour and was discharged home at the 3. day of acception to intensive care unit.

Conclusion: Most accidents that occur while cleaning the house is the result of carelessness. Society needs to be trained about the appropriate use of cleaning agents and the serious consequences of poisoning with the help of media.

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POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME; A CASE REPORT

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Introduction: Management of the patient with seizures in antepartum and postpartum periods whom diagnosed with posterior reversible encephalopathy syndrome (PRES).

Case Report: A 27 year female in 36th week and 5 days of pregnancy had sudden loss of consciousness, high blood pressure and convulsion. After she loaded with IV MgSO4 emergency cesarean was done under general anesthesia. Perioperative and postoperative period hypertension persisted. After extubation she developed generalized, tonic-clonic convulsion. Postoperatively she was admitted to the intensive care unit with the diagnosis of eclampsia. Her CT brain revealed an hypodense areas regions of bilateral parieto-occipital lobes and cortical-subcortical areas of both vertex level. In her MRI Brain showed edema-like hyperintense signal changes on T2-weighted imaging bilateral frontoparietal, occipital and cortical-subcortical areas. Appearance was consistent with PRES. Patient received anti-edema and anti-hypertensive therapy and her hypertension and convulsion was fully controlled, and she discharged from ICU on day 3.

PRES is a recently described clinicoradiologic syndrome that is associated with several medical conditions such as pregnancy, solid organ or bone marrow transplantation, immunosuppressive therapy, cancer chemotherapy, autoimmune diseases, hypertension, (1) It has been described as clinical findings of headache, visual changes, altered mental status, and seizures with radiologic findings of posterior parieto-occipital region of the brain edema typically.(2) PRES is usually reversible with appropriate treatment. However, rapid diagnosis is important to prevent complications such as infarction and haemorrhage. Proper diagnosis requires careful attention to the clinical and radiographic presentation. Our patient developed PRES due to a pregnancy-induced hypertension and eclampsia.

Key Words: Hypertensive encephalopathy, cerebral edema, preeclampsia / eclampsia, posterior reversible encephalopathy syndrome

References
Fungal infections, might clinically and radiologically be confused with lung Ca and are usually seen as a result of infection by Aspergillus species. In this report we present a patient with a tumor-like shadow in his chest x-ray and disseminated invasive candidiasis. A 76-year-old male who suffered from cough, general weakness, general poor health for the last six months, and tumor-like shadow in his chest x-ray was prediagnosed with Lung CA in the right middle lung field. Further evaluation and treatment of the patient was not accepted by patient and his family. 40 days later after he applied to the emergency service and was found to be in an alerted state of consciousness and have shortness of breath in first evaluation. He was intubated in the emergency department and hospitalized to the ICU. In his history, he had a history of 60 pack years of smoking. No rales were evident on auscultation of both lungs. He was not clinically febrile (36.6 C). BP 61/21 mmHg, heart rate 128 beats / min, GCS: 3, APACHE: 38, respectively. Dopamine 5 - 20 mcg / kg / min, noradrenaline 0.1 to 1 mcg / kg / min infusion were initiated. Laboratory investigations were as follows; WBC: 18.9x10^3 / ul, Sedimentation 77mm/hr, C-reactive protein 17.4 mg/dL, procalcitonine 0.5 ng/mL. There was a 4 cm sized slightly necrotic soft tissue mass on the first CT scan of thorax.

The patient is dispatched to the Algology clinic after observation of respiratory distress patient is orotracheally intubated and transferred to intensive care unit.

In the ICU follow-up to exclude epileptic seizure EEG is checked out and non-convulsive myoclonic contractions are evaluated. Neurosurgical consultation suggest intravenous hydration in order to increase the CSF production and 45o head elevation in order to prevent the spread of contrast material. The patient is followed with the fluoroscopy in prone position under sedoanalgesia. Eight mg dexamethasone is given thorough the catheter. No hemodynamic instability is observed during the intervention.

After the intervention during the first hour the patient is cooperative and conscious. However myoclonic contractions started from the lower extremities through upper extremities, hypertension and tachycardia is seen at the same time. Due to increased frequency of contraction and respiratory distress patient is orotracheally intubated and transferred to intensive care unit.

Result and Discussion: In the literature some lethal neurotoxic reactions after ionic contrast material are reported(1). Therefore it is recommended not to use any ionic contrast materials in the radiological interventions affiliated with the central nervous system.
METHANOL POISONING

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Introduction: Methanol poisoning may result in metabolic acidosis, blindness, and death. Treatment of methanol poisoning includes basic supportive care, alcohol dehydrogenase inhibition, and hemodialysis. Recent data have suggested that hemodialysis may not be necessary incase of methanol poisoning that can be treated with fomepizole as blocking therapy before acidosis or renal dysfunction develops.

Case Report: A 46 year-old man admitted to the emergency department with neurologic deficite and coma. During the last days, patient was reported a repetitive abuse of wine with wood alcohol(methanol).

Vital sings were it follows: blood pressure 110/70 mmHg, pulse 54 beats/minute, respiratory rate 6-8 breaths/minute, GKS: 5/15, pupils bilateral fixed dilated and no reaction to light. At blood gas analysis: pH: 6.9, HCO3: 4 mmol, BE: -22. Patient was crush entubated and hemodialysis began as soon as possible. After dialysis, 10% ethyle alcohol solution was given 10 mLkg-1 bolus dose and maintained with 1,4 mLkg-1 , NaHCO3 infusion was started with 10 mEqhour-1 intravenously(IV). Twelve hours later fomepizole was supplied and a loading dose of 15 mgkg-1 was administred (over a 30 minutes period), followed by 10 mgkg-1 IV every 12 hours. Oral folic acid was also given every 6 hours. Vital signs, conscious level, vision and acid-base status got better quickly with fomepizole. Twenty-fourth hour of admission of hospital patent was extubated. Serum methyl alcohol concentration was 44 mgdL-1 after dialysis and 10% ethyle alcohol treatment. Serum chemistry and arterial blood gases on the second day of hospitalization were within normal ranges. Ophthalmic evaluation revealed a normal visual acuity. The patient was discharged after 4 days of hospital stay.

Discussion: Clinical manifestations of methanol poisoning are nonspecific and making the diagnosis challenging. Early signs include abdominal discomfort, nausea, vomiting and central nerves system depression. Late onset signs include anion gap acidosis, neurologic dysfunction and visual disturbances. Definitive diagnosis requires measurement of the serum concentration of methanol level more than 20 mgdL-1.(1)

The apropriate management relies on the prompt inhibition of enzymatic oxidation of methanol to formic acid from fomepizole or ethanol. Patients with severe anion gap methabolic acidosis which pH less than 7.20, signs of end organ toxicity including coma, seizure and renal failure, therapy should be started with hemodialysis(2).

References
**DELAYED NEUROPSYCHOLOGICAL SEQUELAE AFTER CARBON MONOXIDE POISONING**

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**Objective:** Carbon monoxide (CO) intoxication is one of the most common types of poisoning, and it is the leading cause of death by poisoning in the world. Brain and heart may be severely affected by CO exposure because these organs are very sensitive to hypoxic injury. We report 2 cases of CO poisoning who exposed to the same amount of CO in the same room but showed different delayed neuropsychiatric sequelae and variable course of recovery.

**Cases:** 40-year-old female, 35-year-old male and their 7-years-old girl exposed CO for all approximately 12 hours. When they were found 7-years-old girl was death and the other patients had been unconscious. They had been brought to a hospital in an other city. The first CO-Hb levels were 58% for male and 56% for female patient. We learned from the relatives that male patient is a cigarette smoker for more than 15 years, 2 pack of cigarettes/day. 24 hours after exposure two patients were accepted to hyperbaric oxygen (HBO) and then to our Intensive Care Unit (ICU). Before 1st sasons of HBO Glasgow coma scale (GCS) were 8 for both patients. Between HBO treatments both patients were administered 100% oxygen till carboxyhaemoglobin level dropped. And then O2 administration was subsequently stepped down to 4L/minute. After second seasons of HBO male patient’s GCS was 13, female patient’s GCS was still 8. After 2nd seasons of HBO female patient was discharged to an other ICU. Male patient’s GCS became better progressively after the HBO seasons. But it was learned from HBO specialist that there wasn’t any change female patient’s GCS score. After 5th seasons HBO male patient GCS was 15 and became conscious. Ten HBO seasons were applied for male patient and then discharged to a clinic. Though 20 seasons of HBO, female patient’s GCS was still 10. It was learned from the patients relatives that on the 30th day of ICU admission female patient was discharged with PEG to an other ICU in the other city. 70 days after exposure we made a phone contact with the patients’ relatives and learned that female patient was also conscious and could feed orally.

**Discussion:** HBO therapy is believed to decrease neurologic injury that may occur after a latent period of 2 to 21 days (“delayed neurologic sequelae”) after mild to moderate CO poisoning. Our decision to treat with HBO was based on the patient’s loss of consciousness and neurologic symptoms. Male patients showed better recovery than female one, may be because of being cigarette smoker.

**Conclusion:** HBO treatment of severely poisoned patients appeared to reduce the risk of serious neurologic deficit.

**Reference**

Reperfusion damage is inflammatory injury of tissues which are recirculated with high risk blood after period of ischemia. Reperfusion of ischemic tissues causes producing of oxidative free radicals which damage structural components of cells by breaking down synthesis of lipids and proteins. We are introducing a 68 years old male patient who had elective left upper lobectomy operation for pulmoner malignancy. During the operation due to pulmonary artery injury, the patient had approximately 6000cc. massive bleeding and cardiac arrest. Successfully resuscitated patient was transferred to intensive care unit with deep bradycardia and hypotension despite of high dose dopamine and dobutamine infusions. The patient had hypotension, tachycardia and needed FiO2 100% for adequate oxygenation according to blood gas analyses when he was transferred to our institution. Dopamine and dobutamine infusions decreased to 5 mcg/kg/min by adding low dose norepinephrine infusion to patient’s treatment who was mechanically ventilated in P-SIMV mode and had no urine output for 2 hours despite of fluid resuscitation (2 U Fresh Frozen Plasma, 6 U Trombocyte suspension, 2 U Erytrocyte suspension, 2000 ml HES%). At 6 hour of hospitalization at our unit, PaO2 was 73 mmHg in blood gas analyse and FiO2 could be decreased 80%, mechanical ventilation mode was changed to ASB mode with PEEP/PS; 5/15 cmH2O set. At 7 hour PaO2 was 148 mmHg and FiO2 was decreased to 50%. While inotro-vasoconstrictor levels were lowered due to stabilized blood pressure, at 9 hour PaO2 was 340 mmHg and FiO2 was decreased to 30%. At 11 hour PaO2 was determined as 478 mmHg so that PEEP/PS was decreased to 5/10 cmH2O. Patient, had stable vital signs with low dose norepinephrine infusion with PaO2 290 mmHg, was extubated. At 36 hour, norepinephrine infusion was stopped due to stable hemodynamic parameters and PaO2 was 110 mmHg in room air, patient was transferred to ward. In patients, who are exposed to ischemia/reperfusion injury stroke and experience serious hemodynamic instability such as tachycardia and deep hypotension despite of dopamine and/or dobutamine infusions and oxygenation problems in case of contraindication of high PEEP because of hemodynamic instability, low dose norepinephrine infusion in early period is very important to provide organ perfusion and to prevent organ dysfunctions. In this case, effects of global reperfusion on mitochondrial level result as PaO2 values over 400 mmHg with FiO2 25%. Providing less exposure to reactive oxygen products by decreasing FiO2 values rapidly according to blood gas analyses checked in short intervals, seems to be second important point to prevent organ dysfunctions due to reactive oxygen products in periods of hemodynamic reperfusion.

**Discussion:** Even with intense treatment, we couldn’t have prevented mortality. Predictors of poor outcome were increased age, cardiovascular compromise and reduced consciousness in our patient. We’ve concluded that pneumonia and sepsis were the precipitating causes with our patient, and elevated liver enzymes were due to ischemic hepatitis because of hypoxia and hypotension.
A CASE OF DELIRIUM IN A HIP SURGERY AND POSTOPERATIVE ACUTE CORONARY SYNDROME PATIENT

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Delirium is a clinical syndrome that develops acutely or subacutely, due to physical and organic problems and characterized by variable symptoms of diffuse cerebral dysfunction. Mortality rates might reach up to 15-30% in elder patients. In this report we want to share our experience of a delirium case that developed in an elder patient after orthopedic surgery that was complicated by a myocardial infarction. 75 years old male patient with hypertension and coronary heart disease history has undergone hip prosthesis surgery due to osteoarthritis. He was clinically stable at the end of surgery however developed ventricular tachycardia and atrial fibrillation at postoperative 1 hour. After administration of 50 mg metoprolol and 0.6 cc enoxaparine cardiac rhythm was stabilized. However in following 2 hours patient developed anxiety, agitation, irritability, loss of orientation and consciousness. Patient was diagnosed as delirium according to DSMN-IV criterias. After administration of 1 mg i.v. haloperidol patient was stabilized and became cooperative and oriented. Patient was diagnosed as non-ST elevated myocardial infarction as cardiac enzymes elevated without any ECG change in the following 18 hours (CKMB:36.66 mcg/ml Troponin:0.258 ng/ml and Myoglobin:4000 ng/ml) and clopidogrel 1x75mg, ASA 1x100 mg were initiated. In follow-up period patient was stabilized and discharged from ICU. Delirium could be the first symptom of myocardial infarction or might develop in follow-up. Main etiologic factors for delirium are as follows; infection, alcohol withdrawal syndrome, trauma, burn, central nervous system pathologies, hypoxia, hypotension, pulmonary embolism, heart failure, anemia, hipo-hyperthyroidism, dehydration, malnutrition, toxins, sleeping disorders, and myocardial infarction. Elder orthopedic surgery patients were reported to be under increased risk (35-60%) of delirium. This risk might increase upto 80% in ICU patients. As a conclusion, here we report a case of delirium that developed in a postoperative elder patient who has been complicated with acute myocardial infarction. Delirium increases mortality and morbidity rates if not treated properly. We recomend that delirium cases should be evaluated for underlying etiology and proper treatment should be started as soon as possible to decrease mortality and morbidity rates.

Reference
THYROID STORM CAUSED BY POSTOPERATIVE DELIRIUM: CASE REPORT

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Introduction: Delirium is a syndrome of different physical or pathophysiological etiologies characterized by a disturbance of consciousness with accompanying changes in cognition. One of these etiologies is a severe life-threatening thyrotoxicosis, which can progress to stupor, obtundation, and coma.

We present a case of a previously unknown hyperthyroid patient who underwent suspension laryngoscopy under general anesthesia (GA) and was admitted postoperatively to the intensive care unit (ICU) because of negative pressure pulmonary edema, and who then developed severe delirium caused by thyrotoxicosis during the ICU treatment.

Case Report: A 50-year-old male without any comorbidity underwent suspension laryngoscopy under GA because of a mass on the vocal cord. With the exception of tachycardia, all other preoperative routine monitoring parameters were normal. After premedication with midazolam, anesthesia was induced with propofol, fentanyl and rocuronium, and maintained 50/50% air/oxygen was maintained with 2% sevoflurane. Surgery was uneventful. Before the extubation, a sinus tachycardia, hypercarbia, acidosis and serohemorrhagic fluid through to the endotracheal tube were observed so he was transported to the ICU with a diagnosis of negative pressure pulmonary edema. The following day in ICU, he was unconscious with intermittent tachycardia and agitation. He was extubated at 7th days, but despite the use of sedative drugs, the delirium could not be controlled. The patient’s relatives were questioned for detailed previous medical history and medical records. Very small thyroid nodules were detected in the thyroid gland on the neck CT but the nodules were not significant on examination. Thyroid function tests were performed immediately and the values were consistent with thyroid storm (free T4 > 6 ng/dL (normal range: 0.70-1.48), free T3 > 30 ng/mL (1.71-3.71), TSH:0.000 mIU/mL (0.35-4.94)]. Antithyroid therapy, propranolol and steroid treatment were started. On the 3rd day of treatment, the patient’s agitation decreased and he was transferred to the clinic as cooperative and oriented.

Discussion: Many conditions can provoke thyrotoxicosis, such as acute infection, operations or post-traumatic stress. The presentation of thyroid storm includes fever, tachycardia, hypertension, anxiety, agitation, and delirium. It usually ends within 24-48 hours with the use of specific therapy.

In conclusion; thyroid function disorders are often nonspecific, but can also be seen such as thyroid storm. It can be diagnosed by a detailed examination of the patient’s medical history. It should be kept in mind that undiagnosed hyperthyroid may be one of the underlying reasons for severe agitation and delirium in critical patients.

THE RETROSPECTIVE ANALYSIS OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Chronic obstructive pulmonary disease (COPD) is a disorder that causes considerable morbidity and mortality. COPD exacerbations are associated with increased airway and systemic inflammation and physiological changes, especially the development of hyperinflation. They are triggered mainly by respiratory viruses and bacteria, which infect the lower airway and increase airway inflammation. Management of Mechanical ventilation strategies and intensive care treatment are extremely difficult for patients with COPD. Patients followed up under intensive care unit (ICU) between 2010-2013 years were evaluated.

Method and Material: 149 patients with COPD exacerbation treated and followed at ICU were evaluated retrospectively between October 2010-February 2013. Their Age, sex, days stayed at hospital, treatment and mortality values were taken from their files and utilized in the evaluation.

Findings: Average age of 149 patients was 71 (min 46 - max 96). Number of geriatric patients (> 65 years) was 70%. Of all the patients, 101 patients (67.8%) were male and 48 patients (32.2%) were female. The mean duration of hospitalization in intensive care was 25 days. Invasive mechanical ventilation was applied to only fifty-seven (38.2%) patients as intubated the others were followed noninvasive mechanical ventilation. Percutaneous tracheostomy was applied to 21 patients (23.3%). Total mortality of Patients was found as 36.2%.

Results: Progressive airflow limitation and resultant hyperinflation-the respiratory hallmarks of this complex and often under-diagnosed disease-can be treated with pharmacotherapies and technological innovations with mechanical ventilation strategies. Despite of updated guidelines and a better understanding of this condition, Chronic obstructive pulmonary disease (COPD) continues to be associated with increased morbidity and mortality risk.
FIVE-YEAR NOSOCOMIAL INFECTION AGENTS IN OUR INTENSIVE CARE UNIT

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The aims of our study were to evaluate the nosocomial infections in patients who were followed a five-year period, and to identify the problematic areas in our intensive care unit.

Method and Material: Intensive care unit patients hospitalized for periods between January 2008 to December 2012 were evaluated. According to the criteria of Centers for Disease Control and Prevention (CDC), nosocomial infections were classified. Evaluations of nosocomial infection were done by considering density rates.

Findings: In five-year period, 1494 patients were followed up for 11 339 patient days. Two hundred and sixty-three (263) nosocomial infections were classified. Evaluations of nosocomial infection density rates of general hospital intensive care unit were found to be decreased. While Acinetobacter species were the most frequently isolated pathogens (Acinetobacter spp) 31.34%, Candida and non-Candida yeast (Candida yeast species and noncandida) were 20.89%, Staphylococcus species (Staphylococcus spp) were 13.43%, Escherichia coli was 13.43%, Pseudomonas species (Pseudomonas spp) were 11.19%, respectively. Of all, Acinetobacter baumannii was the most common infection agent with 29.3%, while Staphylococcus aureus was the second (17.2%), and Pseudomonas aeruginosa was in the third place (13.8%). Ventilator Associated Pneumonia (VAP) infection factors that increased in recent years were analyzed, and gram negative bacteria were found to be 69%, while gram-positive bacteria were 19%, and Candida yeast species were 10.3%. The rate of non-isolated agent was 1.7%. The rate of MRSA in S. aureus was 60%, while ESBL rates in E. coli and Klebsiella species were found to be 92%.

Results: Because the majority of our patients were elderly persons hospitalized for a long time, multi-resistant Gram (-) bacteria and methicillin-resistant Staphylococcus aureus infection rates were found to be increased. Owing to the fact that taking effective infection control precautions and hand hygiene training activities, the incidence of the blood circulation and the urinary tract infection were significantly decreased. However, we couldn’t reached the desired goal in the prevention of VAP infection. Additional precautions need to be taken in this regard.

Reference
PATIENT WITH BOTULISM POISONING WHOSE 24-WEEK PREGNANCY RESULTED IN ABORTUS: CASE REPORT

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Background: Botulism is a rare neuroparalytic disease caused by neurotoxin produced by anaerobic Clostridium botulinum bacteria, which are commonly found in nature. Botulism affects small muscles, such as the extraocular muscles, and can cause diplopia, nystagmus, bulbar and respiratory paralysis, cardiac arrest, and death. In addition to the administration of antitoxin, intensive care support with mechanical ventilation is required for treatment. Although the effects of botulism on other populations are well known, its effects on fetuses are still unclear. In the present report, the case of a 19-year-old patient diagnosed with botulism poisoning whose 24-week pregnancy resulted in abortion is presented.

Case Report: Twenty-four hours after consumption of canned food, a 19-year-old pregnant patient experienced weakness, stomach ache, nausea, and vomiting. Initial symptoms were followed by failure to thrive, diplopia, blurred vision, respiratory distress, mydriatic pupils, and nystagmus when looking to the right. The patient was taken to the intensive care unit. Endotracheal intubation was performed, and the patient was connected to a mechanical ventilator (SIMV, FiO2: 40%, PEEP: 5, ASB: 15 cmH2O). Muscle strength was 4-5/5 for each of the four extremities, deep tendon reflexes were hypoactive, and Babinski sign was negative. The patient’s biochemical parameters were within normal limits. The patient’s consumption of canned food (homemade canned portulaca) was included in the detailed anamnesis obtained from her family, thus 1000 ml botulism antitoxin in two equal dosages was administered to the patient by slow infusion (Behring Trivalan botulism antitoxin). With her relatives’ consent, the patient underwent tracheostomy. EMG was performed on the abductor digiti quinti (ADQ) muscle by stimulating the ulnar nerve. Speed of motor transmission was normal. BKAP amplitude was low. Increased BKAP amplitude was observed with repetitive nerve stimulation using the same stimulation intensity. The patient had a spontaneous abortion on the 16th day of her hospitalization. The mechanical ventilator was removed on the 21st day, and the patient was referred to the neurology clinic. The patient, whose tracheostomy was closed, was discharged from the hospital with full recovery.

Conclusion: Botulinum neurotoxin cannot pass through the placental barrier because it forms heavy and light polypeptides with 140-165 kDa molecular weights. Nevertheless, the toxin may affect the fetus in pregnant women at the neuromuscular junction or an active transport mechanism may exist. In a previous case report, two pregnant women with botulism poisoning in the 23rd and 24th weeks gave birth to healthy babies.

Botulism is a rare disease, although, in recent years, the incidence has increased. In both the obstetrics and non-obstetrics populations, cases with suspected botulism should be urgently treated with antitoxin. Furthermore, physicians should consider that respiratory muscles could become stiff, and intensive care support should not be delayed.

References:
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SEQUENTIAL COMPLICATIONS OF WARFARIN THERAPY: SPINAL EPIDURAL HEMATOMA, HEMOTHORAX AND INTRAALVEOLAR HEMORAGIA

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Bleeding is the most serious complication of oral anticoagulant treatment, spinal epidural hematoma, hemothorax and intraalveolar hemorrhagia are rare complications. In this case, we report rare sequential complications in a patient with a mechanical aortic valve taking warfarin.

**Case:**
A 65 years old female who has been taking warfarin sodium 5 mgr orally on daily basis following an aortic valve replacement for three months developed a severe neck pain and paraplegia following numbness and weakness of the legs. MRI scan of the spine showed epidural hematoma at the T3-T7 level. The patient’s INR was 24.9. Warfarin therapy was discontinued and 500 mgr prothrombin complex concentrate (Cofact-CLB) was administrated intravenously. INR level decreased to 1.8 on the same day. The epidural hematoma was removed via laminectomy. After the operation, she was transfered to the ICU. On physical examination she was conscious and fully orientated. She remained paraplegic. She needed noninvasive mechanical ventilation (NIMV). INR were maintained between 2.5-4.5. Thoracal CT revealed left sided hemothorax on the 3rd day postoperatively. Approximately 1500 mL blood were drained from the thorax via the thorax drain. Respiratory failure developed, she was intubated and mechanically ventilated after the two days of the drainage. Thoracal CT revealed homogeneous infiltration on the right lung, some blood in the aspirated bronchial secretions were also notified (intraalveolar hemorragia?).

After a week, infiltrations were resolved, INR was in the normal range, and the patient was extubated.

**Discussion:** Oral anticoagulant therapy has been associated with increased incidence of hemorrhagic complications, which may require surgical management. Although GIS hemorrhage has been reported up to 79.9 % following warfarin overdose(1) , intraspinal hematoma or hemothorax are rare complications in the literature(2,3) The patients receiving warfarin therapy should be monitored for effective anticoagulation and adverse effects, if neurologic symptoms occurs, spinal epidural hematoma should be kept in mind in the differential diagnosis.

**References**

GAPO SYNDROME IN THE ICU

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The GAPO syndrome is a rare but distinct genetic disorder. GAPO is an acronym for the manifestation of growth retardation, alopecia, pseudoanodontia and optic atrophy. The syndrome was first reported in 1947; to date, 24 cases have been reported. We report a case who presented with acute respiratory failure.

Case:
37 years old male who was diagnosed GAPO syndrome. He was demonstrated all the typical features of the syndrome, having short stature, dysmorphic craniofacial features, total alopecia and pseudoanodontia. He was fully cooperated. He suffered from respiratory distress. He was intubated and mechanically ventilated. Chest radiography was showed pneumonic infiltration and antibiotic therapy was started. After 5 days he was extubated. On the 10th day he was discharged.

GAPO syndrome is a very rare genetic disorder. Growth retardation with delayed bone age, alopecia (acquired after birth), pseudoanodontia (unerupted decidual and permanent teeth) and optic atrophy observed in this syndrome. Facial appearance of patients is strikingly similar and characteristic with high and bossing forehead, hypertelorism, puffy eyelids, midfacial hypolasia, depressed nasal bridge, anteverted wide nostrils, micrognathia, thick everted lower lip, low-set ears. Other manifestations have often been reported such as, redundant hyperplastic skin conferring gerodermic facial appearance with unusual wrinkless, umbilical hernia, hyperextensible joints, cutaneous lesions, chonal atresia and deafness. No mental retardation has been observed.

Patient’s life expectancy seems to be reduced; among 5 adult patients, 3 died in their third or fourth decade of life. As these patients general condition is poor, they may confine to bed and may be prone to especially pulmonary infections, as is the case with our patient.

Reference
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NON-FATAL SINGLE DOSE INGESTION OF MEPHENOXALON IN A TODDLER

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Unintentional ingestions of many drugs or chemical substances by children under 6 years of age is a common phenomenon. These ingestions may cause serious illnesses or injuries especially in toddlers and even just a single dose of drugs or substances may be fatal in this pediatric population. We present a case of unintentional ingestion of a myorelaxant tablet which contains mephenoxalon and acetaminophen as ingredient. Though a wide variety of clinical knowledge has been known by the clinicians about acetaminophen intoxication we have found only incidental information about the intoxication of mephenoxalon which has centrally active myorelaxant properties. CASE REPORT: A 14 month-old, 12 kg female toddler brought to our emergency department by his parents. She had ingested a myorelaxant tablet which had been prescribed for her grandmother about an hour ago. The family had witnessed the ingestion but could not be able to prevent it. The myorelaxant tablet contains 450 mg of acetaminophen and 200 mg of mephenoxalon. The patient was anxious otherwise stable. Her heart rate was 120 bpm, her blood pressure was 75/40 mm Hg. We first contacted with Poison Consultation Line which suggests us routine precautions including nasogastric insertion, gastric lavage and charcoal use. Due to lack of knowledge about the effect of centrally acting myorelaxant and mild anxiolytic-sedative effects of mephenoxalon, monitored care in the intensive care unit was advised. After completing these procedures we admit the toddler in our intensive care. After a night long follow up except a mild drowsiness no clinical or laboratory change has been observed. The toddler was discharged next day completely normal condition. The literature contains incidental knowledge about the use of mephenoxalon. In a study, in which newborn rats was used. There was no evidence of toxicity in newborn dogs treated with daily oral doses of mephenoxaline, 200 or 100 mg/kg, for 30-34 days. In our case the total amount of mephenoxalon was 200 mg. Though our case was a well prognosis one, one tablet ingestions of drugs in pediatric population especially in toddlers should not be overlooked and routine precautions should be taken including monitored care in an intensive care unit.

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AIRWAY PRESSURE RELEASE VENTILATION (APRV) APPLICATION IN PATIENTS WITH ACUTE RESPIRATORY DISTRESS SYNDROME

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Objectives of Study: In cases with ARDS, due to heterogenous pathologic changes in lungs, clinicians face up with a challenging state of hypoxemia. It is known that "Airway Pressure Release Ventilation" is one of the ventilation modes used to overcome this problem. APRV prevents collaps of the lungs and improves oxygenation. In the present report 3 cases in which APRV was applied with diagnosis of ARDS are presented.

Cases: Three cases at ages of 46, 50 and 70 were admitted to our ICU with diagnosis of ARDS. All 3 patients had severe hypoxemia, metabolic acidosis, tachypnea and were intubated at admission. Lung injury scores of the patients were 4.5 ± 2.4. PIP were 36-38 cm H2O with PEEP of 10-12 cm H2O. After deterioration of blood gases with P-SIMV mode, ventilators were switched to APRV mode with Pmax=24-28 cmH2O, Pmin= 4-9 cmH2O, Tmax= 3.5-5 sec's, Tmin= 1-2 sec's and patients received deep sedation. Blood gases improved in about an hour in all three patients. Patients were followed with APRV mode for, 7, 12, 8 days, respectively. Percutaneous tracheostomy was applied in 2 patients. 2 patients were followed for 45 days and discharged, the other patient had died in the 15th day of follow up.

Conclusions: APRV application has two determinants as "high airway pressures and preservation of spontaneous ventilation." In most of the studies, it is reported that with the APRV mode peak airway pressures are decreased, ventilation is increased in dependent areas of the lungs, and oxygenation is improved. As a conclusion APRV mode is safe and improves blood gases and ventilation mechanics in cases with ARDS.
ARTERIAL CANNULATION RELATED MASSIVE HEMORRHAGE AND NECROSIS

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Aim: Arterial cannulation is frequently performed in the intensive care units for invasive blood pressure monitorization. Long term arterial cannulation may be necessary in some cases due to prolonged invasive blood pressure monitoring. Proper follow-up could not always prevent the occurrence of the catheter related complications. We report a case of massive hemorrhage and necrosis due to prolonged radial artery cannulation in a patient with traumatic head injury.

Case Report: Forty five years old male with traumatic head injury was admitted to intensive care unit. He was intubated and mechanical ventilation was initiated. Arterial cannulation was performed for invasive blood pressure monitorization. He was fully monitored with invasive techniques including radial artery cannulation during the intensive care course. On the 50th day, cyanosis was observed in the patient’s index finger of the right hand. Both ulnar and radial artery pulses were palpable and Doppler findings were also normal. The patient was consulted with the vascular surgeon and the treatment was planned as removal of the arterial cannula, pentoxyphiline, enoxaparin and dextran 40. Massive bleeding was observed from the equimotic region around the cannula entry side at the 3rd day of the treatment. Exploration of the radial artery revealed a 4-5 cm of injured region of radial artery with no blood flow around the cannula entry point. Doppler examination of the radial artery, distal to the injured region was normal which revealed an intact ulnar artery and palmar arcus blood flow. The distal and proximal blood flow of the radial artery was normal. Therefore, only bleeding was controlled with the suturing the both ends of the artery as a treatment. Also, debridement of the subcutaneous necrotic tissue was performed. The further treatment of the wound was done with daily dressings. At 3th month of the treatment the primer closure of the wound was achieved without further surgical intervention. Also the cyanotic lesion of the index finger improved dramatically.

Discussion: Tissue necrosis or even amputation of the fingers is possible complications of radial artery cannulation. Basic principles such as Allen test should always be performed before the procedure. Besides, routine and close examination of the cannulated region should always be performed. Thus, early diagnosis and treatment of complications are possible.
OUR CADAVERIC DONOR POOL

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Our hospital is one of the most frequently brain death detected centers in Istanbul. But still we have not achieved the optimal number of donors compared to our brain death declarations. In this study, we investigated the determining factors in our cadaveric donor pool.

Method and Material: All brain death declared patients in our institution between January 2007- January 2013 were included in this retrospective study. Age, gender, cause of death, hospitalization time (in ICU), permission for donation time and serology were recorded.

Findings: 107 brain death and 38 (35.51%) multi-organ donor were detected. Age ranged between 2-83 (median 58) years, 59 (55.1%) were male and 48 (44.9%) were female. The leading reason for brain death was intra-cerebral hemorrhage (78.12%), either caused by trauma (42.9%) or aneurysm (33.3%). Distribution of brain death and donor (B/D) frequency in the intensive care units (ICU) was as follows: 35.8/31.4% in the brain surgery ICU, 34.9/37.2% in the general adult ICU, 20.8/25.7% in the postoperative ICU and 8.55/5.7% in the pediatric ICU. Hospitalization time of the donors was Mean±SD 6.92±1.41 days. Brain death was detected only by apnea test in 48 patients, in 5 patients apnea test was unable to do and brain death was detected by transcranial Doppler; in one patient angiography , in 54 patients apnea and transcranial Doppler were used for detection. After suspicion of brain death all tests were performed in Mean±SD 5.86±4.27 h. Permission for donation time varied between 2-30 (5.11±6.87) hours. One patient was anti HCV (+), control was negative.

Results: Brain death detection is the responsibility of the healthcare team and their approach is the most important determining factor for donation. Especially in head injury patients, and also in pediatric patients brain death should be kept in mind. The medical team should act professionally and strive to increase the number of organ donations.
EARLY COMPLICATIONS OF PERCUTANEOUS TRACHEOSTOMY USING THE GRIGGS METHOD

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Tracheostomy is indicated when airway protection, airway access or mechanical ventilation are required for prolonged periods and in many critical care units the percutaneous tracheostomy has become the technique of choice. This study was decided to determine the incidence of early complications of percutaneous tracheostomy using the Griggs method and to investigate the effect of cricosternal distance and experience on complication ratio in a new ICU.

Method and Material:
Fifty five patients were prospectively selected for percutaneous tracheostomy (PCT) in a new 15 bed combined medical-surgical intensive care unit. PCT was performed at bedside with the Portex Percutaneous Tracheostomy Kit that uses the Griggs technique. All procedures were performed electively by intensive care unit staff or by residents supervised by the intensive care unit staff. Before the procedure cricosternal distance is measured (< 3 cm or >3 cm). The early complications were recorded.

Findings:
There were 55 percutaneous dilational tracheostomies performed during the study period. No complications were observed in 45 patients (% 81.8) during the first 24 hours. Complications occurred in 10 patients (5 minor bleeding (%8.1), 3 major bleeding (%5.5), 1 thyroid damage (1.8), 1 airway losses (%1.8)). Complication ratio was not related with cricosternal distance or with performer’s experience.

Results:
Our complication ratio was greater than the literature findings. The reason of high complication ratio was lack of experience (first attempts for PCT) and minority of the case number. But bedside percutaneous tracheostomy can be performed safely as a routine procedure in daily care of intensive care unit patients.

ACUTE ABDOMEN- NECROTIZAN FASIITIS AND ANAESTHESIA

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Background: Necrotizan soft tissue infection (NSTI) is occured in cutaneous and subcutaneous area. Clinical feature of NSTI is ranged between superficial erizipel to death.

Case: Sixty three years old man who had abdominal pain came to emergency service. Abdominal distension and about 3x5 cm skin ecimosis in upper left knee area are found in examination. In his medical history, he took a blunt trauma to knee area yesterday. Laboratory results are found as WBC: 81200, Hgb:11.6 g/dl, platelet: 81000. Intraabdominal free fluid is determined near the caecum in abdominal CT. An internist who had examined the patient said that this laboratory findings seem leukemia. However, The Surgeon decided to an emergency operation due to intestinal perforation possibility. Unfortunately his general performance was ASA 4. In operation room, orthopedic consultation was taken because of his extended skin ecimosis to along the femur. There is no pathologic fracture of bones on lower extremity. After about 20 cm part of necrotic intestine was resected. Vital sings got worse intraoperative period and some drugs and fluids were given for stabilization. In intensive care unit, crepitation was determined with palpation in ecimotic area. Free air was seen in subcutaneous tissue and muscles on Doppler US. Fasciotomy was performed to left leg by orthopaedist diagnosis of compartment syndrome.

But, his worsened vital sings were not stabilized and he died five hours after operation in intensive care unit.

Conclusion: NSTI was occured not only some predisposition factors such as trauma, surgical procedures, systemic diseases, chickenpox, insect bite, immune deficiency conductions, drug abuse but also healthy person.

In this case report, the patient have no previous known disease. However, the internist said that it maybe leukemia. As our knowledge, pinching the leg skin as a joke was reported that is NSTI trigger for the first time. Probably, surgical procedure and possible leukemia were facilitated NSTI in this patient.

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THE EVALUATION OF SCORING SYSTEMS, CENTRAL VENOUS AND ARTERIAL BLOOD GAS ANALYSIS AND SERUM PROCALCITONIN LEVELS IN SEPTIC AND NON-SEPTIC PATIENTS

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Sepsis, the result of systemic inflammatory response to infection, still remains one of the leading causes of deaths in adult intensive care units. Hence early diagnosis, treatment and follow-up of patients in septic state are important. It is known that infection is not determined always in septic state and clinical symptoms and conventional laboratory parameters are inadequate for diagnosis and follow-up. Today, for the prediction of organ dysfunction and mortality, scoring systems like APACHE (Acute Physiological and Chronic Health Evaluation) and SOFA (Sequential Organ Failure Assessment Score) are used. In our study, prognosis determining scores used follow-up of the septic and non-septic patients like APACHE II and SOFA, blood gas parameters for the follow-up of metabolic and respiratory parameters, and procalcitonin used as infection determinant are aimed to compare.

Method and Material: Fifty patients assumed to stay more 24 hours in ICU enrolled to septic and nonseptic study groups. All patients enrolled are evaluated with APACHE II and organ dysfunction evaluating score SOFA at the beginning and 24th, 48th, 72nd and 120th hours. In addition, SO2, PO2, PCO2, PaO2/FiO2 ratio are analyzed in arterial and central venous blood gas samples, and plasma procalcitonin levels are measured. In group and between group changes and correlations are evaluated.

Findings: In between group evaluation, APACHE II and SOFA scores were significantly higher in septic group in all evaluation times. There were no significant difference between the PO2, PCO2, SO2 values and PaO2/FiO2 ratios of the septic and nonseptic group. Serum procalcitonin levels were also significantly higher in septic group when compared to nonseptic group in all times.

Results: Procalcitonin levels are important for diagnosis of sepsis and correlation between scoring systems used for evaluation of septic and nonseptic patients and serum procalcitonin levels. In addition central venous blood gas analysis can be used as an alternative for arterial blood gas analysis.

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THERAPEUTIC HYPOTHERMIA TO THE BOY PATIENT COMING WITH CARDIAC ARREST AFTER DROWNING

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Aim: Drowning in the water is one of the most common causes of accidental deaths in the world. Drowning in the water is common especially in children. The most important problem in the cardiopulmonary resuscitated (CPR) patient is poor neurological outcome.

Case: To the cardiopulmonary resuscitated patients, therapeutıc hypothermia (TH) is applied to ensure the recovery of neurological state, to improve life expectancy and to improve the quality of life. 2 year old TH applied case was discussed. The 2 year old patient coming with the diagnosis of cardiac arrest after drowning in the fresh water was accepted to our intensive care unit after 2,5 hours performing 20 minute cardiopulmonary resuscitation. Glascow coma scale was 4, light reflex was -/- and there was widespread ralles bilaterally in the lungs. Vital findings were like that pulse rate 200/minute, BP:110/60 mm Hg, SPO2:84, body temperature: 35 oC. In the arterial blood gas analysis: pH: 7,09, pCO2: 64, pO2: 36, BE: -14,6, HCO3: 11. In CT investigation; in the right lower lobe and in the left lung diffuse parenchymal consolidation and diffuse cerebral edema was seen. The patient was connected to the mechanical ventilation in PCV mode. Dopamine 5 mcg/kg/min, sodium thiopental 5 mg/kg/h and dexamethasone 0,6 mg/kg/d was applied. Therapeutic hipotermia was performed 24 hours at the 28-30 oC. The patient was extubated at the end of the 6 th day, the patient was moving 4 extremities with painful stimuli and was crying.

Conclusion: We think that TH can be effective in the cardiopulmonary resuscitated patients by preventing the some chemical reactions mediated with ischemia/reperfusion injury and suppressing the cerebral metabolic activity.
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PERCUTANEOUS TRACHEOSTOMY: A RETROSPECTIVE ANALYSIS OF 62 PATIENTS

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In the ICU, the most common indication for tracheostomy is a need for prolonged mechanical ventilation. This need may arise from pneumonia refractory to treatment, severe chronic obstructive pulmonary disease, acute respiratory distress syndrome, severe brain injury, or multiple organ system dysfunctions.

Since Ciaglia et al introduced the percutaneous dilatational tracheotomy (PDT) in 1985, percutaneous tracheotomy (PCT) has become increasingly popular and has gained widespread acceptance in many ICU.

In 1990, Griggs and colleagues reported the guide-wire dilating forceps (GWDF) method. Below we present our two years experience in tracheostomy with GWDF in our intensive care unit.

Method and Material: In our experience 62 patients who were underwent percutaneous tracheostomy by Griggs method in the intensive care unit between April 2011 - February 2013, were analyzed retrospectively. Demographic data and diagnoses of patients, and percutaneous tracheostomy complications were evaluated.

Findings: The average age of 62 patients was 58.3 (Min 16 - Max 86). 41 patients (66.1%) were male, 21 patients (33.9%) were female. Patient’s diagnosis was 25 COPD, 6 trauma, 10 ARDS, 11 hypoxic encephalopathy and 10 due to other diseases. During the percutaneous tracheostomy on 19 (30.8%) patients minimal bleeding was occurred with not requiring intervention, wound haemorrhage was occurred in 3 (4.8%) patients and pneumothorax was developed in two patients (3.2%). They were treated by A tube inserted into the pleural space. No mortality complication was developed.

Results: Percutaneous tracheostomy has already replaced the surgical route in several intensive care units and it is indeed the procedure of choice in the majority of cases.

We believe that percutaneous tracheostomy with guide wire dilating forceps (GWDF) method, in experienced hands, is safe, easy and quick, and there is no need to move the patient to the operating room.

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SYRIAN REFUGEES FOLLOWED UP IN INTENSIVE CARE UNITS’ OF SANLIURFA

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The Prime Ministry’s Disaster and Emergency Management Directorate (AFAD) has announced that the Turkey is currently hosting 183,540 Syrian refugees who have fled almost two years of conflict in war-torn Syria. Total number of refugee camps in Turkey is 14 and four were in Sanliurfa. In this study we aimed to evaluate the demographic data of the patients from Syria who were followed up in intensive care units of Sanliurfa, Turkey in last 10 months.

Method and Material: Demographic data of Syrian refugees were analyzed retrospectively. The number of admission, number of transferred patients and number of patients followed in intensive care units were analyzed. Morbidity and mortality rate were obtained.

Findings: There were 83283 Syrian refugees in Sanliurfa in last 10 months of 2012. There were 186,728 policlinic admission and 34,813 of these transferred to hospitals in Sanliurfa. 711 patients of these followed in hospitals and 362 of them followed up in intensive care units. Mean age of patients in ICU was 32±13 years. 102 patients were injured with firearm and 105 patients were died.

Results: As the crisis in Syria continues to intensify, the humanitarian needs both in Syria and in surrounding countries are increasing significantly. Although Turkish authorities are still seemed to cover all the medical necessities of the Syrian refugees the problem is growing especially in intensive care units faster and dramatically than expected.
PHRENIC NERVE PALSY AFTER SURGERY FOR CONGENITAL HEART DISEASES: CASE REPORT

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Objective: Paralysis of diaphragm on one or, exceptionally, both sides is a common cause of delayed recovery and excessive morbidity following pediatric cardiac surgery. Early diaphragmatic plication vs. conservative therapy has been a debateable issue. Here, we have reported a case of left phrenic nerve paralysis occurred after the surgery for congenital heart disease.

Case report: A five months aged female patient was admitted to our hospital for the operation of congenital heart disease, VSD. After the successfully operation, she was admitted to our intensive care unit (ICU) for postoperative management. After the second day of ICU staying she was extubated when her spontaneous breathing was adequate. At the end of fifth day of ICU staying because of paradoxical abdominal movement with respiration, tachypnea, dyspnea and respiratory acidosis she was reintubated. After detecting left diaphragmatic paralysis on the chest X-ray, echocardiography, and on fluoroscopy, diaphragmatic plication was planned to perform to decrease lung compression, stabilise the thoracic cage and mediastinum, and strengthen the respiratory action of intercostal and abdominal muscles. The patient was extubated when his spontaneous breathing was adequate 48 hours later after the second operation. She was discharged from hospital at the end of the follow-up period, day 12.

Discussion: Paralysis of diaphragm on one or, exceptionally, both sides is a common cause of delayed recovery and excessive morbidity following pediatric cardiac surgery. Paralysis of the diaphragm may produce severe respiratory difficulties due to the paradoxical motion of the affected diaphragm and a similar shift of the mobile mediastinum. Tachypnoea, atelectasis, pneumonia, and continued respiratory distress and CO2 retention may develop after extubation. Diaphragmatic dysfunction can result in inability of the patient to be weaned from mechanical ventilation after surgery.

Results: Diaphragmatic plication offers a significant benefit to children with diaphragmatic paralysis and should be performed early to facilitate weaning from mechanical ventilation.

REFRACTORY STATUS EPILEPTICUS IN THE INTENSIVE CARE UNIT: A CASE OF LAFORA’S DISEASE

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Introduction: Lafora disease constitutes approximately 10% of patients with progressive myoclonic epilepsy, is often occurred between the ages of 10-18, and inherited as an autosomal recessive disease that affects both sexes equally(1). The disease is resistant to antiepileptic therapy, and has poor prognosis. Generalized status epilepticus in Lafora disease may not be controlled with antiepileptic drugs (AEDs), in these situations general anesthesia is preferred as a last step in the treatment(2).

Case: A 17-years-old male patient was diagnosed as “Lafora Disease” before 9 months ago, came to emergency department with complaint of generalized tonic-clonic convulsion continuous for 2 hours. Although diazepam infusion was given to the patient, his seizures continued and they were administered intravenously. Because the patient did not respond to treatment, he was admitted in the intensive care unit (ICU) with the diagnosis of “Status Epilepticus”(SE). In intensive care unit he was intubated under anesthesia of Thiopental sodium and he was undertaken on the control of mechanical ventilation as Synchronized Intermittent Mandatory Ventilation mode. Thiopental Sodium infusion was given 4 mg/kg/h and epileptic activity was terminated. Triple therapy with intravenous levetiracetam, oral valproic acid and clonazepam was applied. Initial Cranial Computer Tomography (CT) scan was normal. Thiopental sodium dose was reduced progressively at third day of hospitalization. However, convulsive activity was noticed again under observation “lamotrigine” as fourth AEDs was added to the treatment. Second Cranial CT was reported as “periavernicular area of cerebrospinal fluid width increased and sulcus of cortex get deeper” and mannitol treatment was started. Because the dosage of sodium thiopental could not decreased, the patient had to be followed under mechanical ventilation so tracheostomy was needed for airway rehabilitation of the patient. “ventilator associated pneumonia” developed which finally resulted in septic shock. Followed by 67 days in the ICU, cardiopulmonary arrest developed and the patient was accepted died.

Discussion: A case with refractory SE disease which do not respond to antiepileptic treatment must be followed in the ICU to have GA. Thiopental sodium provides highly effective reduction of cerebral blood flow, slowing down the electrical activity of EEG so it causes electrical silence and terminating convulsion, because of all these purposes, it is a preferred agent in the case of SE (2). In our case, due to the continuation of refractory SE, infusion dose of thiopental sodium could not be reduced. Although multiple antiepileptic drugs with effective dosage and even GA was administered to the patient, seizure could not be controlled. We think that, the failure of controlling the epileptic activity is due to a progressive characther of Lafora disease. As a result, cases such as Lafora’s disease is characterized by refractory SE should be followed-up with neurologists and control of epileptic activity in the ICU should be taken with GA.

References
1. Yu WL, Lin CW, Wang DY. Clinical and microbiologic characteristics of sterilization and infection control guidelines to prevent infection. clinically significant, fatal infections in immunocompromised patients. In spite of intensive treatment, the condition of patient continued to deteriorate and he died with sepsis signs on the 11th day of admission. Laboratory findings were as following; PLT: 192,000 µl, INR: 6.23. In spite of intensive treatment, the condition of patient continued to deteriorate and he died with sepsis signs on the 11th day of admission. Laboratory findings were as following; PLT: 192,000 µl, INR: 0.89. On admission, piperasilin-tazobaktam (Tazocin) 4x2.25mg administering was approved by the Infection Diseases Control Group. On the 7th day of admission still WBC: 15,600 µl and physical signs were worse (BP:90/50 mmHg, RR: 24/min, HR: 108/min). She was entubated and followed with mechanical ventilator. On the 8th day of admission, meronem sensitive Ochrobactrum anthropi from blood culture that was detected as normal. With these findings, the patient was sent from the internal medicine service of our hospital to an external facility for charcoal hemoperfusion treatment.

Since the encephalopathy, high level of liver transaminases and thrombocytopenia continued, the patient was admitted to our intensive care unit on the second day of the treatment in the internal medicine service. 2-3 hours of daily hemoperfusion treatment was added to the conventional treatment comprising a high dose of penicillin-G, N-acetylcysteine, cimetidine, vitamin K and ascorbic acid. During the ICU treatment, the patient received charcoal hemoperfusion for 6 times in total; and the liver function tests demonstrated a recovery (AST:79 U/L, ALT:596 U/L, INR:1:4, platelet count:109,000/103mm3). During the 7 days of treatment in the ICU, 8 units of fresh frozen plasma (FFP) and 16 units of random donor platelet were given to the patient. On the 7th day of his admission to the ICU, the patient’s physical examination was normal and vital findings were stable; therefore the patient was transferred to the internal medicine service. On the 11th day of his admission to the hospital, he was discharged with values as AST: 43 U/L, ALT: 233 U/L, INR:1:2, platelet count: 152,000/103mm3.

Discussion: There is no standard treatment strategy or antidote suggestion for cases diagnosed with mushroom poisoning. In conventional treatment, together with fluid electrolyte support, gastric lavage is applied and activated charcoal is given in order to prevent absorption of toxic substances on gastrointestinal system in an early stage. Since the anatoxins in the plasma are discharged by kidneys, urine flow must be increased. Other treatment agents are silibinin, penicillin-G, Vitamin C, corticosteroids, thioctic acid and N-acetylcysteine. Besides, plasmapheresis, hemoperfusion and hemodialysis are other invasive treatment options. In case of a severe liver insufficiency, the only treatment method is liver transplantation.

Hemoperfusion is a process where blood is passed through a filter containing carbon or active charcoal. Through hemoperfusion, agents substantially binding to protein and soluble in fat can more easily be removed from the circulation. The beneficial effect of hemoperfusion is not only removing alpha-aminatin from plasma but also removing neurotoxic agents such as methionine, tryptophan, and phenylalanine. Through hemoperfusion, hepatic encephalopathy in 75% of the patients also heals. It is emphasized in the literature that early hemoperfusion plays an essential role in A. Phalloides poisoning.

Mushroom poisoning constitutes a typical public health problem in low-income societies. Therefore, early application of extracorporeal methods apart from symptomatic support treatment in mushroom poisoning will increase the effectiveness of treatment and decrease organ insufficiency and mortality risks.
ACUTE RENAL FAILURE DUE TO ETHYLEN GLYCOL INTOXICATION

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Objective: Ethylene Glycol (EG-antifreeze) is an odorless, colorless, sweet-tasting substance. Minimal lethal dose of EG for an adult is 1.0 to 1.5 mL/kg or 100 mL. After 24-36 h post ingestion, renal failure may develop due to combination of oxalate crystal deposition and cardiovascular instability. We herein report the treatment of a patient with fomepizole and hemodialysis who had an increased serum osmol gap-metabolic acidosis and acute renal failure after antifreeze ingestion.

Case report: A 79-yr-old female was admitted to emergency service with continuous vomiting started 30 minutes after ingestion of 300 mL of antifreeze. In emergency service, her general condition was good and she had a heart rate of 88 beats/min, a blood pressure of 140/90 mmHg, a respiratory rate of 20/min, a Glasgow Coma Scale score of 15, isochronic pupils, bilateral positive light reflexes and normal fundus examination. Arterial blood gas values drawn on room air were: pH: 7.39, HCO3: 16.4 mmol/L, BE: -8.5 mmol/L, lactate: 0.28 mmol/L, BUN: 15 mg/dL, Cr: 0.6 mg/dL, Na: 8.7 mg/dL, K: 3.8 mmol/L, Cl: 106 mmol/L, Anion Gap: 21.4 mEq/L. It is reported that the oxalate crystals in the urine were not assessed because of the hematuric urine. Control arterial blood gas values were: pH: 7.24, HCO3: 6.9 mmol/L, BE: -17.7 mmol/L, lactate: 0.04 mmol/L and Anion Gap: 28 mEq/L. Patient received 100 mL bolus and 30 mL/h infusion of 43% ethyl alcohol via a nasogastric tube until fomepizole was provided. The patient underwent four hours of hemodialysis. Blood parameters improved after hemodialysis. Patient received 15 mg/kg of fomepizol infusion in 30 minutes and followed by 10 mg/kg of fomepizol boluses in every 12 hours for 3 days. On the 32. hour, hypocalcemia beside renal failure was observed. The patient was treated with 4 seance hemodialysis and other treatments and was discharged to her home on the 10. day after admission. In Ethylene Glycol intoxication, although the treatments with ethyl alcohol and fomepizole can decrease the formation of toxic metabolites, there are difficulties in ethyl alcohol serum level measurement and fomepizole procurement. It should be kept in mind that hemodialysis performed in the early period can decrease the morbidity and mortality.

A CASE REPORT: AN ACUTE FATTY LIVER OF PREGNANCY

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Introduction: Acute fatty liver of pregnancy (AFLP) is an uncommon, fatal metabolic disorder seen in the third trimester or early postpartum period. Early diagnosis and prompt termination of pregnancy is necessary for better maternal and fetal outcomes. We present a case report of 20 years old woman who was diagnosed with acute fatty liver of pregnancy at postpartum period.

Case: A 20-year-old woman was admitted to our hospital at 36 weeks of gestation. Considering the patient’s increasing pain and breech presentations, it was decided to perform an emergency caesarean section. All parameters except liver transaminase levels (ALT: 180, AST: 239) were normal in third trimester. Before surgery; platelet count: 124,000/cumm, aspartate aminotransferase: 91 U/l, alanine aminotransferase: 158 U/l. Coagulogram revealed a prothrombin time of 26 seconds with international normalized ratio (INR) of 2.3, activated protrombine time 53. Urine analysis showed mild proteinuria. Anaesthesia was induced with propofol 2 mg.kg, rocuronium bromur 0.5 mg.kg and maintained with sevoflurane 1-1.5% oxygen-air 50-50% and. A female fetus suffered from spina bifida and clitoromegaly was delivered. Three units of fresh frozen plasma were infused during the surgery, the urine output was 350 mL, the estimated blood loss was 500 mL. The patient was awakened and extubated after she followed commands. She was admitted to the recovery room and transferred to the obgyn service. The patient was admitted to ICU 6 hours later from the operation with low hemoglobin and hematocrit levels and dispnea. Acute fatty liver of pregnancy was considered in the patient who had trombocytopenia, anemia, high transaminase and bilirubin levels and hypoglisemia attacks. USG showed fatty changes. Supportive treatment was applied to the patient. Transaminase levels were decreased gradually. Bilirubin values reached to normal levels later. At the end of the fifth day, the patient discharged from the ICU.
**CLINICAL MANIFESTATIONS OF VON HIPPEL-LINDAU SYNDROME , REPORT OF A CASE**

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**Introduction:** Von Hippel-Lindau (VHL) syndrome is an autosomal dominant neoplastic disorder, characterized with hemangioblastomas localized at central nervous system and retina, pancreatic cysts and tumors and renal cell carcinoma.

**Case:** Twenty six years old, female patient presented with syncope, was referred to the emergency department of our hospital. The patient was intubated right after the respiratory depression was arised and admitted to our intensive care unit (ICU). Computarised tomography (CT) revealed hydrocephalus at 3 th, 4 th, lateral ventricle and cystic lesion localized at posterior fossa. Within the same day patient was operated for hydrocephalus and medication was started with dexamethasone, fenitoin and mannitol (GCS= 9 APACHE II= 13).

Two days after the initial surgery, patient was reoperated and the cystic lesion was excised, thus the compression on the base of 4 th ventricle was relieved. Patient was not extubated after surgery and connected to the mechanical ventilation on SIMV mode. Enteral nutrition was started at 3 th day in ICU. After 8 days in ICU, tracheostomy was achieved. Enteral nutrition was replaced with parenteral after the patient was suffered from diarrea. At 15 th day in ICU, ALT and AST values were elevated, therefore parenteral nutrition was abandoned.

Abdominal ultrasonography was made with an initial diagnosis of toxic hepatitis and multiple cystic lesions of pancreas and kidney was observed and hepatic parachymal disease was predicted. Both cranial CT and ultrasonographic imaging was supported the diagnosis of VHL syndrome. At 18 th day in ICU, antibiotic medication was started due to high body temperature. Patient was died according to sepsis and multiple organ failure at 21 th day in ICU.

**Discussion and Conclusion:** Hemangioblastomas are the most common lesions associated with VHL disease. Patients with hemangioblastomas usually present a long history of minor neurological symptoms followed by a sudden exacerbation. Therefore, most of the time the diagnosis of VHL syndrome is delayed likewise in our patient.

Pancreatic tumors commonly present with renal lesions. Pancreatic lesions are mostly neuroendocrine tumors and asymptomatic. In conclusion, initial neurological manifestations in our patient was eventuate with multiple organ failure. Therefore realising the mortality and variety of clinical manifestations in VHL syndrome is necessary.

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**MULTIPLE DRUG INTOXICATION**

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**Multiple Drug Intoxication**

**Introduction:** Bupropion is a monocyclic antidepressant and has a similar structure to amphetamine. It is inhibitor of dopamine, noradrenaline and serotonin re-uptake. It also regulates the anticholinergic activity. Besides using in the treatment of depression, it is also effective in reducing withdrawal symptoms due to smoking cessation (1).

**Case:** A 28-year-old female patient with a history of depression was admitted to emergency department (ED) an hour after ingestion of 5.4 gr bupropion, 250 mg quetiapine, and 1.4 mg levotroxin. Gastric lavage was performed and activated charcoal was administered in the ED.

When accepting to the ICU, she was awake, alert, disoriented and agitated, GCS 13/15, normal blood pressure (116/79 mmHg), tachycardia (120 beats per minute), normal body temperature (36 °C), normal blood glucose (104 mg/dl). Blood gases report was pH: 7.35, PCO2: 13.8 mmHg, PO2: 144 mmHg, and HCO3: 7.7 mEq /l. NaHCO3 infusion was started. After 2 hours, the patient had a generalised tonic-clonic seizure and 2 mg midazolom was administered.

Shallow breathing, hypotension (83/44 mmHg) and bradycardia were detected in patient. Then she was intubated with 75 mg ketamine and 6 mg vecuronium. For hypotension 500 ml colloid and 10 mcg/kg/min dopamine infusion were started. The patient was consulted to internal medicine doctor because of levotroxin. The doctor proposed to start of prednisolone and propranalol, because TSH was below 0.1 mIU/L.

9 hours later with haemodynamic improvement, the patients mental status improved and she self-extubated. She was discharged home after psychiatry examination.

**Discussion:** Our patient had ingested 250 mg of quetiapine. This dose was below the toxic dose of this drug (4.5 g). But the side effects of quetiapine such as hypotension, respiratory depression, and convulsions were seen. We thought that these are common side effects of bupropion and quetiapine. The fundamental of treatment for bupropion, quetiapine, and levotroxin overdose is supportive care.

We want to emphasize the importance of early gastric lavage and administration of activated charcoal.

**References**

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CONSECUTIVE COMPLICATIONS AFTER RESECTION OF SECRETORY MENINGIOMA: PERITUMORAL EDEMA, SINKING FLAP, FOCAL EDEMA AND MIDLINE SHIFT

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Secretory meningiomas with histologically benign characteristics tend to cause peritumoral edema, frequently leading to severe medical and neurological complications in postoperative management. Here we present a case with unusual life-threatening complications.

Case: Left sided multiple meningiomas diagnosed in a 56-year-old female. She underwent total removal of convexity and frontotemporal junction meningiomas (GCS 15). Pathological examination revealed secretory meningioma. 4 days after the operation, she developed left sided peritumoral brain edema and midline shift with deterioration of the neurological status. Left craniectomy was performed followed by revision of the flap after two days. One day later, her GCS was deteriorated again. CT scan showed left sided focal edema, this time away from the peritumoral region causing focal midline shift towards right and concomitantly, sinking flap syndrome again on the left site. This looked unusual as the depression of the flap was on the edematous side of the brain. She was sedated and intubated. Antiedematous therapy, right sided head down position, vasoconstrictive agents to elevate the systolic blood pressure above 100 mmHg, and erythrocyte suspension to keep hemoglobin level about 8 g/dl were all applied with the patient under mechanical ventilation. After a week, regression of the brain edema on CT scan was seen, sedation was decreased. She is extubated and discharged from the ICU after a week.

Discussion: Secretory meningiomas differ from overall group of meningiomas in that they contain cells expressing carcinoembryonic antigen and cytokeratin, which may cause cytotoxic edema. According to the literature, one third of the cases with developed brain edema may need ICU management. Our case showed a different characteristics with non-peritumoral focal edema which might probably be due to compromised or thrombosed veins and sinking of the craniectomy side against the edema on the same site, as well as peritumoral edema occurred earlier on. The management of such cases may consist of antiedematous therapy, preserving sufficient perfusion and complex thinking of pressure balances.

References:

DEXTROFLOP TROMETAMOL OVERDOSE: A CASE REPORT

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Nonsteroidal anti-inflammatory drugs (NSAIDs) have been widely used for pain relief in patients. Due to their easy accessibility, NSAIDs presents a major part of drugs that used for suicide attempts in our country. Dextrofloxaprofen trometamol is a relatively new NSAID in the medical usage and the clinical experience with their overdoses is limited. In this case report we would like to share our experience of a patient who took 32 tablets of 25 mg dextrofloxaprofen trometamol for suicide attempt.

Case report: A 40-year-old female who took 32 tablets of dextrofloxaprofen trometamol 25 mg (total amount of 800 mg) for suicide attempt was admitted to our hospital emergency department. She had taken the tablets 2 hours ago. She was alert but agitated. She was brought to hospital by her neighbors. The initial examination of her vital signs were stable. A nasogastric tube was inserted and gastric lavage with tap water was done as initial intervention. The particles of the tablets were observed during gastric lavage. She had given 60 mg of activated liquid charcoal (1 mg per kg body weight). Her blood samples were taken for chemical analyses and coagulation parameters. She was then given 40 mg of intravenous pantoprazole for gastrointestinal protection. She was then taken to intensive care unit for monitored care for the next 48 hours. The electrolytes, complete blood count, liver functions tests, coagulation parameters (PT, aPTT, INR) blood urea nitrogen, creatinine and glucose were all in normal limits. Only mild elevations in liver function tests were detected in consecutive analyses but they were all in normal limits after 24 hour follow up. Stool tests for occult blood were also negative. We could not have done the drug analyses due to lack of our hospitals laboratory capacity. The patient was discharged with the referral to a psychiatry clinic. The over dose of NSAID may present versatile clinical situations but in our case routine approach to our intoxication cases and primary back up revealed a favourable outcome. Nevertheless we suggest that whether new or not in the market all overdose cases with NSAIDs should be followed in the ICUs.
A CASE OF H1N1 INFECTION IN A PATIENT WITH FAMILIAL MEDITERRANEAN ANEMIA AND UNDERGONE SURGERY FOR STABBING

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Influenza virus is a RNA virus and a member of orthomyxovirus family. There are 3 types of influenza viruses classified as A, B and C types. Influenza A might cause epidemics and pandemics due to mutations in hemaglutinin and neuroaminidase antigens. Most common clinical features are fever, cough, sore throat, myalgia, diarrhea. Severe clinical features might develop due to secondary pneumonia which is the most common etiology for death in Influenza A infections. In this case report we want to present a H1N1 infection which developed in a case with knife stabbing and Familial Mediterranian Anemia (FMA). 29 years old female patient was stabbed from right thigh and has been consulted before surgery. She had history of FMA and allergic to paracetamol and metamizole. After surgical hematoma drainage she developed hemoptysis in postoperative day 1 and levofloxacin and oseltamivir were added to her treatment ampirically. Due to severe respiratory distress she was accepted to intensive care unit (ICU) and has been intubated in postoperative day 2. In thoracal computerized tomography diffuse pneumonic consolidations in both lungs were observed. H1N1 PCR was found to be positive in nasal and sputum samples. Patient developed severe septic shock and did not response any theraupotic approach. She developd a cardiopulmonary arrest in postoperative day 10 and was lost despite of all interventions. H1N1 infection usually causes a nonsevere clinical presentation that is similar to common cold and does not require hospitalization. However in patients with chronic disease history, children, and young adults it might develop severe pneumonia, interstitial pneumonia and diffuse alveolar hemorhagia. In this case patient had a history of FMA, severe anemia, erythrocyte transfusion, stabing and surgery. We think that these accompanying problems caused immunesupression and disposed patient for severe H1N1 pneumonia and mortality risk. As a conclusion by reporting this case we hope to attract attention of clinicians that H1N1 infection might cause severe pneumonia and mortality in patients that are not normally in risk group but have history of chronic and/or acute diseases.

References:
DO WE REALLY NEED TO PANIC IN ALL ACUTE VISION LOSS IN ICU? ACUTE ANGLE-CLOSURE GLAUCOMA

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Introduction: Visual loss in critical care patients is a point of concern which warrants a through assessment and also expensive investigations to rule out a serious reason. We report a progressive visual loss case due to acute angle-closure glaucoma (AACG) in a 59 year old patient who was followed in ICU due to massive pulmonary embolism.

Case: A 59 year old female patient was admitted to our ICU with the diagnosis of massive pulmonary embolism. Dopamine and noradrenaline infusions was started for hemodynamic support. After 36th hour the patient begun the complaint of a right and left eye visual loss together with a bilateral frontal headache. A right and left eye acute angle closure glaucoma was diagnosed and treated with oral acetazolamide and timolol, pilocarpine, eyedrops. Two days after this acute attack, the right and left eye intraocular pressure remained normal, and visual acuity had completely recovered. A right and left eye laser iridotomy was performed, 3 week later after ICU discharge.

Discussion: Ophthalmologic complications are frequently encountered in intensive care unit (ICU) patients. Uncommon eye disorders reported in ICU include metastatic endogenous endophthalmitis, ischemic optic neuropathy, pupil abnormalities, vascular occlusions, and rhino-orbital cerebral mucormycosis and acute angle closure glaucoma. Intensivist using multi drug regimens should be aware of their potential to cause acute angle closure. Any patient presenting with signs or symptoms of AACG should be referred immediately to an ophthalmologist. Early diagnosis and effective treatment will help to prevent visual loss.

INITIALLY MISDIAGNOSED SUBARACHNOID HEMORRHAGE IN A PREGNANT PATIENT WITH BEHÇET’S DISEASE

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Objectives of study: Behçet’s Disease (BD) is a chronic, relapsing and multisystemic inflammatory process described in 1937 by the Turkish dermatologist Hulusi Behçet. The etiology is unknown, though the most likely an autoimmune reaction and mucocutaneous lesions, ocular, vascular, articular, urogenital, pulmonary and neurological involvement are the main clinical features (1). Pregnancy, however, is a physiologic condition that causes many alterations on whole body system so symptoms related with Behçet’s Disease may easily be confused with the clinical findings induced by pregnancy.

Case: A 30– year-old, gravida 4 para 3 pregnant woman at 35 weeks gestation was admitted to hospital with acute onset of severe headache and projectile vomiting. She was previously diagnosed as Behçet’s Disease and treated with colchicine over 5 years. The patient had no similar complaints in the previous pregnancies. Laboratory results were unremarkable so the cause of projectile vomiting was unexplained. Cranial computed tomography (CT) revealed a suspicious image considered as subarachnoid haemorrhage in right frontotemporal sulcus. The parturient was scheduled to undergo Caesarean section under general anesthesia. A healthy infant was delivered weighing 2270 gr with 1. and 5. min Apgar scores of 8 and 9. Intra operative period was uneventful and she was transferred to intensive care unit (ICU) for further follow-up. Following extubation, she was awake, fully conscious but she has still complaint of headache. Magnetic resonance (MR) angiography and venography did not support the radiological findings previously reported on CT. The mother and the baby were discharged home on the 5th day of hospital admission.

Conclusions: Headache is a frequent symptom in BD including those with no clinical evidence for neurological involvement. Magnetic resonance imaging (MRI) is more sensitive than computed tomography revealing mass-like lesions, isolated brain stem and basal ganglia lesions, multiple small white matter lesions, or lesions in the spinal cord (2). MRI studies of patients with BD have shown that in patients with headache as the sole neurological symptoms, around half had normal MRI scans and the remainder showed small white-matter lesions within the hemispheres (3). Pregnancy is a triggering factor for headache in 80% of the patients (4) It must be considered that, in some conditions symptoms triggered by pregnancy may be confused with the symptoms related with the underlying disease and the differential diagnosis may be a troublesome.

References
**“HEMOLYTIC-UREMIC SYNDROME” CASE TREATED BY APPLYING PLASMAPHERESIS WITH FRESH PLASMA**

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**Objectives of study:** Thrombotic micro-angiopathies (TMAs) are rare microvascular diseases characterized by occlusive systemic microvascular thrombi, thrombocytopenia, and microangiopathic haemolytic anaemia. TMAs include thrombotic thrombocytopenic purpura (TTP), with predominant neurological manifestations and adult hemolytic and uremic syndrome (HUS), with predominant renal failure (1).

**Case:** The 39-years-old female patient had applied to our emergency department with complaints of bloody diarrhea, asthenia and somnolence in consciousness. The patient diagnosed with Hemolytic-Uremic Syndrome (HUS) was hospitalized in our internal medicine department. As her conscious got somnolent in her follow-up, the patient was transferred to our Intensive Care Unit to apply NIMV intermittently. As the patient had decreasing PaO2 in arterial blood gas analyses, deteriorating breathing pattern, and convulsions; the patient was intubated and instuted to the mechanic ventilation (MV). Propofol infusion, levetiracetam, phenytoin, steroid, meropenem, rifampicin, amlodipine and doxazosin started to be given to the patient after hospitalization. The patient was admitted in 2nd and 7th days of her hospitalization and re-instuted to the MV as her convulsion could not be treated with midazolam. The patient underwent to hemodialysis 5 times and she started to urinate on 11th day of her hospitalization. She was treated plasmapheresis twice a day beginning from the 4th day of her hospitalization. She was given fresh erythrocyte suspension twice a day. She was given fresh plasma used without being frozen. The administration of heparin 10.000 IU/day was started and a serum D-dimer level is obtained; it is 6439 ng/mL (reference range<500). The patient in these 12 days, she was treated plasmapheresis with fresh plasma used without being frozen. She was transferred to the obstetric clinic on the third postoperative day. Enoxaparin Sodium was stopped 36 hours before surgery. She refused regional anesthesia. For this reason general anesthesia was performed.

In the operating room, routine monitors (ECG, pulse oximeter) were attached. A 15° wedge was given for left uterine displacement. She was pre-oxygenated with 100% O2 for 3 min. Anesthesia induction was performed with thiopentone 6 mg/kg and rocuronium 0.6mg/kg IV. She had difficulty during intubation and was intubated with a 7.5 mm-sized oral cuffed endotracheal tube at the third attempt and ventilated on volume control mode with a tidal volume of 10 mL/kg. Anesthesia was maintained with oxygen/air mixture at 50:50, sevoflurane in concentrations of 1-1.5%. After delivery of the baby, syntocinon 10 units in infusion was started. Fentanyl 1 µg/kg body weight IV was given and she was reversed with atropine 0.01 mg/kg IV and neostigmine 0.05 mg/kg IV. She was extubated successfully. Respiratory distress and hypoxemia of the patient was started in the service at the end of postoperative first hour. The patient was admitted to intensive care unit. In her examination her blood pressure was 110/72 mmHg, heart rate 118 beats per minute, oxygen saturation 90 % on room air. Chest examination revealed diminished vesicular breathing in both of the lungs. Electrocardiography showed sinus tachycardia. Chest radiography showed infiltratic changes at the upper right lung. Arterial blood pH was 7.46, pCO2: 31.5 and pO2:55 mmHg with oxygen saturation of 89%. Pulmonary embolism is suspected and a serum D-dimer level is obtained; it is 6439 ng/mL (reference range<500). The administration of heparin 10.000 IU/day was started CPAP treatment was performed. Computed tomography of the chest without contrast media showed parenchymal abnormalities of the upper right lung including consolidation, atelectasis and focal patchy increases attenuation. Mediastinal vascular structures were not evaluated effectively.

**Conclusions:** It was observed that clinics of patients - who had not responded to treatment of plasmapheresis [2] used for a long time as well as the routine treatment applied in Thrombotic Microangiopathy - improved significantly after the plasmapheresis treatment applied with fresh plasma used without being frozen.

**References**


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**IMPORTANCE OF FAMILY TRAINING IN CARE OF THE PATIENT UNDERGOING MECHANICAL VENTILATION AT HOME**

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**Introduction:** Home mechanical ventilator (HMV) therapy is a method that increases the life quality of the patient with the selection of appropriate equipment and patient, with the education of patients’ relatives (1, 2). A patient who showed clinical improvement with HMV therapy was discussed in this case report.

**Case:** 75 years old female patient that was connected to mechanical ventilator (MV), was admitted to our intensive care unit (ICU) with the diagnosis of hypoxic-ischemic encephalopathy after one week of follow-up the open heart surgery performed in an external center. In the first examination in our unit she was non-oriented and non-cooperative and GKP: 5. Acute respiratory distress syndrome, acute kidney failure, mediastinititis developed during follow-up period of 6 months in our unit while she was connected to MV from tracheostomy, was treated. General conditions and vital findings recovered in the 3rd month of hospitalization. When attempts to remove her from MV were unsuccessful, we planned to follow up the patient on MV at home and patients’ relatives were trained with regular programs on patient care. Physical Treatment and Rehabilitation program were applied. With the moderation of specialist concerned, requirements of the room in which HMV would be used, were fulfilled and necessary medical materials were provided. The patient who was oriented and partially cooperative in follow up, was transferred to our service when she was clinically stable, in pressure assisted spontaneous mode with home type MV, with Percutaneous Endoscopic Gastrostomy feeding and enteral drug treatment. The patient was discharged after one month of follow-up period in our service. The patient was evaluated weekly by personnel of home care unit. When spontaneous respiration of the patient was sufficient, she was weaned from MV. Ten months later we plan to close tracheostomy of the patient who is oriented, cooperative, mobilized in bed, and breathing spontaneously in room air with silver cannula from tracheotomy and starts oral intake.

**Discussion:** HMV use is gradually increasing in recent years (3). Intensive care specialists play an important role in HMV application; in choosing the appropriate patient, ventilator and mode, and in providing the necessary equipment, physical conditions for the patient and in the training of patients’ relatives (4). Main problems encountered in HMV therapy are airway problems related to insufficient aspiration, not noticing the findings during acute attacks, physical and psychological burdens to patient and family members (5). In our case clinical recovery of the patient was secured with correct selection of patient, by preparing the environment in which HMV will be used, with trainings given to family members and with regular home visits. In conclusions, we consider that correct patient selection, supply of necessary medical devices, use of appropriate MV and mode, and physical and psychosocial rehabilitation applied and training provided to patient and patients’ relatives and regular doctor visits will increase the success of HMV therapy and patient’s life quality.

**References:**


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**SPHINGOMONAS PAUCIMOBILIS**

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**Objective:** Sphingomonas paucimobilis (formerly Pseudomonas paucimobilis) is a yellow-pigmented, nonfermenting, gram-negative bacillus that has a single polar flagellum with slow motility. This organism is widely distributed in the natural environment (especially water and soil) and has been implicated in a variety of community-acquired and nosocomial infections, including bacteremia, catheter-related sepsis, meningitis, peritonitis, cutaneous infections, visceral abscesses, urinary tract infections, enderitis, and diabetic foot disease. It’s also reported that can be colonised in water systems of hospitals and cause infection in immunosuppressive patients. In the present study we noted the clinical features of a case of S. Paucimobilis infection 1,2.

**Case:** A 80-year-old female with ischemic cerebrovascular disease for 4 years, was a care patient in her house. After admitting to intensive care unit (ICU) with hypotension (Na: 104 mmol/L) and aspiration pneumonia, ventilated with respirator. On admission her temperature was 38.50°C, blood pressure 110/70 mmHg and heart rate 92/ beats/minute. Blood results were as follows: hemoglobin 12.7 g/dL, hematocrit 34.6%, WBC count 61x10^3/mm3, and erythrocyte sedimentation rate 65 mm/hour, and C-reactive protein (CRP) 7.50 mg/dL (normal: <0.5 mg/dL). While having treatment of hyponatremia, she was also given empirical piperasalin sodium, tazobaktam sodium for aspiration pneumonia. S. paucimobilis was isolated from admission day of blood cultures (both peripheric and central blood samples) but antibiotic sensitivity was unpredictable. Because there was no clinical sign of infection, antibiotic therapy wasn’t changed. For control, blood culture sampling was repeated. Tenth day of admission no bacteria was isolated from the control blood cultures.

**Discussion:** S. paucimobilis is responsible for two types of infection in humans: sporadic or community-acquired infections, probably of endogenous or environmental origin (bacteremia, meningitis, urinary tract infection, and nosocomial infections associated with the contamination of sterile fluids employed in hospitals). In our case we thought that it was sporadic or community-acquired infection, and empirical antibiotic choice was well-directed.

**Conclusion:** S. Paucimobilis should be suggested as rare infection agent for care patients and also antibiotic therapy should be organised due to antibiotic sensitivity, if possible.

**References:**

TOXIC EPIDERMAL NECROLYSIS DURING TREATMENT OF VALPROATE AND CEFTRIAXONE

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Toxic epidermal necrolysis (TEN) is a severe episodic mucocutaneous reaction due largely to ingested drugs and/or occasionally to infections. TEN presents as sheets of erythema, necrosis and bullous detachment of the epidermis, with a mortality rate of 30–35%. The most commonly implicated drugs are sulphonamides, chlorromazine, non-steroidal anti-inflammatory drugs, imidazole antifungals, cephalosporins, anticonvulsants, and allopurinol. We describe here one patient who developed TEN while using valproic acid for epilepsy prophylaxis and ceftriaxone for upper airway infection.

A 70-year-old man with head injury three months ago was taking valproic acid 1 g daily for three months. Because of upper airway infection, ceftriaxone was added. On the 7th day of the anti-infectious treatment, he experienced fever and pain with maculopapular eruption in the whole body. The skin lesions became vesicular and bullous, involving mucosa and conjunctiva. Physical examination revealed widespread lesions with large areas of skin denudation and a positive Nikolsky sign. There were hemorrhage and erosions on lips, gums, buccal and oral mucosa. When the diagnosis was established, all the previously used drugs were discontinued and the patient was admitted intensive care unit. The standard symptomatic management included pain control with opioid analgesics, wound management, prevention of stress ulcers, nutrition and fluid support. Corticosteroid and cyclosporine treatments were started. Plasmapheresis and IVlg were therefore begun. On the 4th day of admission he was entubated due to respiratory failure. After 3 sessions of plasmapheresis and IVlg treatment, extensive reepithelialization rapidly occurred. The patient’s condition had almost healed at the end of 45 days.

Due to previous head injury intensive care duration was prolonged. He was discharged to the rehabilitation at the end of the 45 days. TEN is an acute, life-threatening, exfoliative disorder with a high mortality rate. High clinical suspicion, prompt recognition, and initiation of treatment in the intensive care unit is mandatory.

NEUROLOGICAL AND CARDIOVASCULAR TOXICITY WITH BUPROPION OVERDOSE

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Aim: Treatment of an overdose of an antidepressant agent also used for cigarette aid treatment named bupropion proceeded with cardiovascular and neurological complications is reviewed.

Case: 35 years old female patients who has taken 12 g bupropion and 2 g lamotrigine for suicide attempt presented with symptoms such as blurred consciousness, agitation, tachycardia, acidosis and nausea/vomiting. Despite symptomatic treatments and repeated doses midazolam, the case progressed with recurrent convulsions, hypotension and desaturation. The supportive therapy; entubation, midazolam and isotropic agent infusions and anti-epileptic treatments are added. The heart rate was increased and ventricular fibrillation developed. She was defibrillated for a normal sinus rhythm. Four hours after the presentation to the ICU, hemodialiftration was started because of the resistant cardiovascular and neurological effects. On the 5th day of admission to the ICU, sedation and hemodialiftration was stopped. On the 7th day, the patient was extubated. On the 9th day the patient was discharged from the ICU.

Conclusion: It is concluded that hemodialiftration is an urgent therapy for symptomatic treatment of cardiac and neurological effects of bupropion.
A RARE CAUSE OF EPILEPTIC SEIZURES AFTER CESAREAN SECTION DELIVERY UNDER EPIDURAL ANAESTHESIA: CASE REPORT

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Cranial arteriovenous malformations are cases that may potentially result in fatality. The symptoms may show up in a wide range from nausea, vomiting, headache, diplopia, papillae edema, neurologic deficit to epileptic seizure and coma. Especially for young women with neurologic symptoms in early puerperium, making possible diagnoses (particularly as cerebral venous thrombosis) in early period is essential.

We present the 29 year-old patient admitted into emergency with generalized tonic clonic seizures over 120 min. period on 20th day postpartum whose symptoms started with absence and persistent headache two days prior. There was not history of pregnancy-related hypertension. As a remarkable history she had a cesarean section delivery under epidural anesthesia before 20 days ago and one day before the symptoms she went a dentist for extraction of maxillary first molar tooth without prophylactic antibiotics. After a stable condition cranial computed tomography scan performed but did not show characteristic evidence.

We performed CT angiography, MRI and MR venography considering cerebral venous thrombosis in the differential diagnosis. MRI revealed heterogenous hyperintence lesion in right cingulate gyrus and CT angiography revealed right frontal linear vascularized lesion connected with the pericallosal branche of left anterior cerebral artery (ACA-A3) considering arteriovenous fistula. After fourth days of admittance in ICU her general condition improved and she transferred to neurosurgery for transarterial embolization.

Spinal, epidural or CSE block procedures are contraindicated with intracranial mass or cerebrovascualr events caused increased ICP. In this case postpartum neurologic symptoms may be relevant to epidural anesthesia. Using advanced imaging techniques for diagnosis maybe prevented fatal conclusions. We could image lesions that can not be seen with CT with MRI and CT angiography. Advanced imaging techniques are valuable for differential diagnosis.

References

TETANUS IN OUR INTENSIVE CARE UNIT: ASSESSMENT OF TREATMENTS, COMPLICATIONS AND MORTALITY IN SIX PATIENTS BETWEEN 2010-2013

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Tetanus is an acute and sometimes fatal disease. Exotoxins produced by Clostridium tetani play an important role in the pathogenesis of the disease. This disease is caused by a high mortality rate in patients over 60 years of age. Respiratory involvement is the most serious problem encountered in generalized tetanus (1).

Method and Material: The purpose of this study, patients with tetanus treated in the intensive care unit were retrospectively assessed. In this study, in all patients in terms of frequency of tetanus, circumstances of infection, immunization status, clinical findings, treatments modalities, mechanic ventilation period, complications, duration of stay in intensive care unit and mortality ratios were evaluated.

Findings: Between 2010 and 2013, a total of 6 patients with tetanus were followed in our intensive care unit. The average age of the patients was 65.33±13.45 years (between 41-79 years). Five of these patients were male (83.3%), and one patient was female (16.7%). Half of the patients were injured by gunshot from the lower extremity, while the other half were injured in the head and neck region in the same way. The average time between gunshot injury and to apply to the emergency room with symptoms of tetanus was 17.66±8.33 days (9-30 days). The time of the latest vaccination was unknown none of the patients. While two-thirds of all patients suffering from trismus and difficulty breathing, one-third of the patients had contractions of the lower extremities. The mean duration of mechanical ventilation of the patients was 16±4.09 days (average: 9-20 days). Average duration of the patients’ stay in intensive care unit was 20.83±9.82 days (9-35 days). The most frequently observed complication was the ventilator-related pneumonia. Our mortality rate was determined as %66.6.

Results: There has been a dramatic decline in the number of reported cases of tetanus in western countries but this disease is still a major health problem for our country. This clinical problem is still a fatal disease despite intensive care facilities. For this reason, vaccination and public awareness is of utmost importance.

References
IN THE CASE OF HIGH MORTALITY RATES PEDIATRIC BURN SILVER INTOXICATION

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Introduction: Silver-containing products are widely used for many years in the treatment of topical application of burn wound infections. Silver intoxication causes occurs liver & kidney dysfunction, leukopenia and neurotoxicity(1). 46% of TBSA burned, two-year-old male was hospitalized due to 2°-3° scald burns, after usage of topical silver sulfadiazine (Acticrat) touch base silver intoxication and neurological dysfunction. Pediatric cases are discussed with medical literature data.

Case: The patient was followed at another hospital because of scalding burns for 14 days and topical silver nanocrystalline (nano crystalline) was used at the health institution. The patient was hospitalized at our intensive care unit of our hospital. The burned areas were wrapped. GS: 14, according to PRISM Score expected mortality was 92.7%. HR: 139/min, RR: 43/min, hypothermic, SpO2: 94%, Respiratur: bilateral, equal and rough. Laboratory findings within normal limits but PLT: 24000/mm3, pPTT: 47.1sn, PT: 77.6sn, activity: 9%, INR: 6.78. The increase in tachypnea (> 45/dk) on the first day of hospitalization, the patient was intubated. Burned areas were applied Acticrat. On the second day of hospitalization WBC: 6400/mm3, AST: 523, ALT: 171 was measured. 12th day of BICU all Acticrat products removed from surface. Cranial MR was taken, the result was normal. Blood silver level: 12mcg / L (N:0.0-1mcg / L) and urine nanocrystalline: 45.2mcg / L (N: 0.1 mcg / L). 22th day of BICU blood nanocrystalline: 0.48mcg / L, urine nanocrystalline: 0.40mcg / L were found. On the 32th day of hospitalisation he left MV support; on 34th day debridement and grafting was performed. The patient was discharged from the hospital on 59th day.

Discussion &Conclusion: It should be kept in mind that Long-term applications of nanocrystalline may cause silver intoxication.

References:

DAPTOMISIN

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Infections due to gram-positive bacteria are increasing all over the world. With the emergence of methicillin-resistant staphylococcus aureus, vancomycin intermediate or vancomycin-resistant s. aureus bacteria and with the spread of vancomycin-resistant enterococci, safe and effective methods in the treatment of these infections become difficult to find. Daptomycin is the first member of cyclic lipopeptides with a broad-spectrum effect against gram-positive pathogens including the resistant bacteria.

In our case 78-year-old female patient was followed in intensive care unit after the excision of left atrial myxoma operation. In the intensive care unit, MRSA-related skin and soft tissue infections were seen; starting from the tenth day and healed in the twenty-fifth day. The patient does not have any other known medical conditions. We discussed the use of daptomycin in the skin and soft tissue infections caused by the vancomisin-resistant MRSA in this case report in company with the literature.
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RETROSPECTIVE EVALUATION OF POISONINGS IN PREGNANCY IN SOUTHEAST OF TURKEY

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The aim of this study is to investigate and analyse the acute poisonings in pregnancy who were followed up in our intensive care unit.

Method and Material: All cases were collected between 10.01.2009 and 10.01.2013. Mean age, gestational week, whether the poisoning was deliberate or accidental, causative agent or reason, hospital and intensive care length of stay, number of cases per month and mortality outcome were collected and analyzed, retrospectively.

Findings: Fifty two pregnant women admitted with acute poisoning and followed in intensive care. Poisoning was accidental in %36.4 of the cases, while %63.6 were suicidal intoxications. Accidental intoxications were due to carbon monoxide, scorpions sting and shock. %64.2 of the suicidal poisonings were caused by medical drugs, especially with non-steroidal anti-inflammatory, psychiatric drugs and antibiotics. %81.8 of patients were in the 21-34 age group. In terms of gestational week, %40.9 of suicidal poisonings were within the second trimester. Cases were seen particularly in summer and winter. In this study, only one patient poisoned with organophosphate was dead.

Results: Suicides and poisonings in pregnancy are a problem for clinicians because of the untoward effects of the toxic agent and the antidote therapy on the unborn. In this study, most cases of acute poisonings during pregnancy were suicidal and within the second trimester of gestation and also most common agents used for suicidal attempt were found to be medical drugs.

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POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME IN A PATIENT WITH ULCERATIVE COLITIS

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A 20 year old woman was admitted to the our hospital for a severe abdominal pain, before hospitalization, she described this pain since one month ago. Abdominal radiography showed air-fluid levels and surgeons decided to operation. After operation surgeons evolution was inflammation bowel disease: ulcerative colitis. She was admitted to ICU postoperatively and had a severe sepsis for 15 days. The 20th of ICU day, she discharged to ward. During hospitalization in ward, suddenly she complicated with unconsciousness, visual loss and epileptic seizures and she was transformed to our I.C.U again. CT scan showed hypodense areas in the parietal occipital cortex. According to control MR Supported the same result: focal reversible vasogenic edema. We reported the case as posterior reversible encephalopathy syndrome (PRES). We added our therapy, steroid and antiepileptic drugs. The second day of treatment, seizures began to stop and the third day noticed that she began to see better. The fifth day she started to contact us and her family.

PRES presents with headache, alertness, seizures and cortical blindness, damage typically involves parietal-occipital lobes. PRES is associated with number of different causes most commonly in our case ulcerative colitis.

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THE EFFECTS OF HUMAN ALBUMIN REPLACEMENT ON ARTERIAL BLOOD GASES

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The aim of this study was to evaluate the effects of human albumin replacement on arterial blood gases in patients with low serum albumin levels.

Method and Material: This retrospective database study included patients admitted between April 2008 and September 2011 to a 15-bed medical/surgical ICU in a university hospital. We analyzed data from 52 patients who received Human Albumin (% 20) infusion because of their low plasma albumin level (< 2 gr/dl). Human albumin administration continued 3 days, twice a day and as an infusion lasted 1 hour. We evaluated the arterial blood gas analysis (pH, pCO2, pO2, HCO3) of these patients before, between and after human albumin infusion each day.

Findings: There were significant differences in patient’s pH and pO2 levels during albumin replacement in the first tree days (first day before albumin infusion pH: 7.40, second day before albumin infusion pH: 7.39 (p=0.003), second day before albumin infusion pH: 7.41 after albumin infusion pH: 7.39 (p=0.031), third day before albumin infusion pH: 7.42 between albumin infusion pH: 7.40 (p=0.006), second day before albumin infusion pO2: 103 after albumin infusion pO2:116 (p=0.006), third day before albumin infusion pO2:103 after albumin infusion pO2:114 (p=0.031). But the differences in HCO3 and pCO2 levels were not significant at the same time. There were any differences between all parameters since 4. day.

Results: Albumin replacement therapy may improve oxygenation in patients with low albumin levels during the replacement period but this effect is transient.
SHALL WE APPLY CENTRAL VENOUS CATHETERIZATION TO THE PATIENT WITH INR VALUE OF 5 TO WHOM NOT BE ABLE TO FOUND INTRAVENOUS LINE?

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Aim: Central venous catheterization is an application which has an important position and wide range. For haemodialysis, parenteral nutrition, haemodynamic monitoring and prior to major surgery, central venous catheterization is applied. Subclavian and internal jugular veins are usually preferred sites for central venous catheterization. We have presented successful and without complications jugular central venous catheterization case performed to a 5,5 months old patient with INR value of 4,54 suffering from severe dehydration, hyponatremia, acute renal failure, sepsis, pneumonia, gastroenteritis for a month and later measles diagnosis has been made. It has not been having enteral or parenteral treatment, and haven’t been able to found any intravenous lines for three days.

Case: 5,5 month old male patient with diarrhoea and vomitus for a month who is apathic, severe dehydrated, mucouse membranes dry, fontanelles sunken, with tachycardia and tachypnea, hyponatremic, acute renal failuric, septic and lack of nutrition for three days because of not having been able to found intravenous lines. The blood values were like these; WBC: 2,18, Hb: 8.2, Htc: 23, K: 2.8, Sodyum: 115meq/l, kalsiyum 6.9, INR: 4.54, PT: 57.9. Results: Nowadays, it is known central venous line placement applications having lots of usages have some complications. These complications can sometimes reach severe levels. One of these complications is fear of haemorrhage because of the deficits in coagulation profile especially INR value highness. However, in life threatening situations such as with no other lines to treat the patient, INR value highness shouldn’t prevent us to apply central venous catheterization. Otherwise the loss of patient will be inevitable.

Conclusions: We think that complication fear shouldn’t prevent us to reach the result if it is necessary, considering the profits and loses.
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