

P-001

The Investigation of Protective Effect of Quercetin Against Kidney Damage in Experimental Sepsis Model (*)

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Introduction: The onset of renal failure in sepsis indicates a poor prognosis. Therefore, the management of sepsis should include kidney protection. Quercetin (QE) is a flavonoid having powerful antioxidant properties commonly found in nature. In this study, we researched on the renal protective effect of QE in sepsis model.

Material and Method: We studied on 28 Sprague-Dawley rats in 4 groups. Group 1: Control. Group 2: 50 mg/kg intraperitoneal QE injected healthy rats. Group 3: Intravenous E.coli lipopolysaccharide (LPS) administered rats as sepsis model. Group 4: QE and LPS administered with a 30 minutes interval. After 6 hours of LPS administration renal tissue samples were obtained to study Malondialdehyde (MDA) to evaluate oxidative damage, and superoxide dismutase (SOD) and catalase (CAT) for antioxidant parameters. Furthermore, histopathological examination was performed on renal tissue samples. Serum urea, creatinine, IL-6, MMIF, MCP-1 levels were also studied.

Results: Serum IL-6, MMIF, MCP-1 levels were elevated in group 3 compared to the control group. These markers were significantly decreased in group 4 compared to group 3. Tissue MDA levels were determined significantly higher in group 3 compared to groups 1 and 4. While SOD and CAT activities were significantly decreased in sepsis group, this enzyme activities were significantly higher in group 4.

Conclusion: Although there is no specific treatment of sepsis, positive effects of antioxidant drugs were shown in several studies. Antioxidant properties of QE have been shown in vivo and in vitro studies. But, in English literature there is no study on the renal protective effects of QE in sepsis. Our results revealed that QE administration decreases renal injury in sepsis compared to the non QE administered group. We believe that, this study will guide for new approaches for preventing and/or treating potential acute renal failure in sepsis.

Key words: Quercetin, sepsis, kidney, antioxidant, rat

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P-002

Effects of Dexmedetomidine on Carbon Tetrachloride-Induced Liver Injury in Rats

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Introduction: Dexmedetomidine usage is reported to be advantageous for intensive care unit (ICU) patients requiring mechanical ventilation because of its sedative, anxiolytic and analgesic effects, and it provides sedation characterised by a quick response to stimulation without respiratory depression. It has also anti-inflammatory and antioxidant effects. The aim of this experimental study is to investigate whether dexmedetomidine administration has a hepatotoxicity-reducing effect.

Material and Method: Rats were randomly divided into four groups. Hepatotoxicity was induced by injecting carbon tetrachloride (CCl₄) intraperitoneally in all groups except group 4. Fifty µg/kg dexmedetomidine was given 30 minutes before CCl₄ administration in group 1 and 21 hours after CCl₄ administration in group 2. For group 3 and group 4, only CCl₄ and olive oil were administered, respectively. Total antioxidant status (TAS), total oxidant status (TOS), aspartate transaminase (AST), alanine transaminase (ALT) and malondialdehyde (MDA) levels and histopathological changes in the liver were investigated. The levels of Anti-Caspase-3 and Anti-Caspase-9 were immunohistochemically studied.

Results: The values of TOS were significantly lower in groups 1 and 4 compared to groups 2 and 3. The levels of AST, ALT and MDA were significantly higher in groups 1, 2, and 3 compared to group 4. The levels of ALT were significantly lower in group 1 compared to groups 2 and 3. The degree of Anti-Caspase-3 and Anti-Caspase-9 immunopositivity increased significantly in groups 1, 2, and 3 compared to group 4. Additionally, Anti-Caspase-9 was significantly lower in groups 1 and 3 compared to group 2.

Conclusion: Dexmedetomidine administration before hepatotoxicity caused significantly reduced ALT and TOS levels. This suggests that it might have a hepatoprotective effect in ICU patients. Additionally, we observed that dexmedetomidine did not exhibit a protective effect when it was used in case of hepatotoxicity and actually increased the toxicity.

Key words: Dexmedetomidine, carbon tetrachloride toxicity, liver injury

P-003

The Efficacy of Extracorporeal Cytokine Hemoadsorption Device in Septic Patients

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Introduction: Extracorporeal blood purification has been used for treating sepsis patients last decade. This approach is based on evidence that a long-lasting and excessive inflammatory reaction which is related to a continuous release of inflammatory mediators can lead to multiple organ failure resulting in death. CytoSorb® is a novel sorbent hemoadsorption device for cytokine removal. In experimental and limited human trials, it was demonstrated that CytoSorb® improves mean arterial pressure and survival by reducing inflammatory cytokines in septic shock. The aim of this study is to establish whether CytoSorb® is efficient on decreasing vasopressor requirement, organ failures and improving short-term survival in critically ill patients.

Results: Fourteen patients who obtained CytoSorb® were analyzed. The median age was 64.85 ± 14.9 years and 5 patients were female (35.7%). Incidence of organ dysfunction was septic shock (n=11), acute respiratory distress syndrome (n=1), acute pancreatitis (n=2). APACHE II score was 27.57 ± 8.37 and the mean SOFA 16.35 ± 3.77 . In five patients inotropic drugs dosage were reduced, on the other hand 9 patients were not. There were no changes in hematology and other blood parameters. Fourteen days mortality %50. Five patients who were reduced inotropic drugs dosage and 2 of 9 patients who were not reduced inotropic drugs dosage survived in 14 days. General mortality was 71.43%.

Conclusion: Sepsis, the leading cause of mortality in intensive care units, is a complex series of interrelated effects caused by the overproduction of multiple mediators and their unrestrained biological activity. Cytokine removal successfully tested in animal models of sepsis and the experience in the clinical setting is still limited to case reports. Although we found improvement on hemodynamic parameters in some cases, we could not measure sepsis mediators. We consider that using cytokine adsorbing columns for patients with septic shock might be an option as rescue therapy.

Key words: Sepsis, cytosorb

P-004

Comparison of Outcomes Two Tracheostomy Methods in Short-Neck Patients: Ultrasound and Bronchoscopy Guided Versus Bronchoscopy Guided

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Introduction: Percutaneous tracheostomy is common procedure in the intensive care unit (ICU). Although most of the complications of this procedure are minor, still there are serious complications reported. Patients with short neck may cause some airway problems during intubation and tracheostomy procedure. Mallampati score, thyromental and sternomental distance, neck extension examination and neck circumference are some of the predictors of difficult airway. In addition to many complications of percutaneous tracheostomy, short neck patients makes the procedure more complicated and difficult. In our study we aimed to examine the safety and efficacy of ultrasound and fiberoptic bronchoscopy guided tracheostomy (U+F) versus fiberoptic (F) guided tracheostomy.

Material and Method: Twelve patients with short neck who required tracheostomy were enrolled study. All tracheotomies were performed with Grigg's technique. There was 8 and 4 patients in U+F and F group respectively. In a patient in U+F group, venous anomaly over tracheal rings was seen with ultrasound and excluded from the study. ICU admission diagnosis, demographic variables, guidance method (U+F or B), thyromental, sternomental distances, neck circumference, procedure duration, complications were noted.

Results: Thyromental and sternomental distances were 5.57 cm and 6.5 cm in U+F and F group respectively. Neck circumference in U+F group was 37.4 cm and 39.7 cm in F group. Timing of the percutaneous tracheostomy was 12.7 and 11.7 day of intubation in U+F and F group respectively. Minor bleeding occurred in 1 (14.2%) patient in group UF and 1 (25%) in group F. In 1 patient U+F group a venous anomaly over tracheal rings identified with ultrasound who underwent surgical tracheostomy and excluded from the study. Duration of the procedure was 9.1 min and 7.5 min in U+F and F group respectively.

Conclusion: Using ultrasound and fiberoptic bronchoscope together may enhance the safety of the tracheostomy procedure in short neck patients.

Key words: Tracheostomy, ultrasound, fiberoptic

P-005

The Effects of Dexmedetomidine on Prolidase Enzyme and Oxidative Stress Factors in Experimental Acute Lung Model

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Introduction: In this study, we aimed to research the effectiveness of dexmedetomidine (Dex) on a hydrochloric acid (HCl) induced-acute lung injury model by measuring the prolidase enzyme and oxidative status parameters.

Material and Method: Twenty-eight male Wistar albino rats were divided into 4 equal groups. The control group rats were given normal

saline (NS) intratracheally, and the HCl group rats were given hydrochloric acid intratracheally. The Dex group rats were given NS followed by 100 µg/kg of dexmedetomidine intraperitoneally after 30 minutes. Similarly, the HCl+Dex group rats were given HCl followed by 100 µg/kg of dexmedetomidine intraperitoneally after 30 minutes. Blood samples and lung tissue specimens were examined by biochemical and, histopathological methods. Total oxidant activity (TOA), total antioxidant capacity (TAC), and prolidase enzyme activity (PEA) were measured from the collected bloods. In addition, lung tissue was evaluated by histopathological assessment.

Results: In the HCl group, TAC was decreased significantly ($p \leq 0.001$), whereas the TOA and OSI were increased significantly ($p \leq 0.001$). When compared to the HCl group, TAC was increased significantly ($p < 0.01$) compared to the Dex group and the HCl+Dex group, whereas TOA and OSI were decreased significantly ($p < 0.01$). PEA showed a significant increase in the HCl group ($p \leq 0.001$). When compared to HCl Group, PEA was decreased significantly ($p < 0.01$) in the HCl+Dex group. In addition, dexmedetomidine ameliorated histopathological changes in the lungs.

Conclusion: The presented data provide that dexmedetomidine treatment reduced lung injury caused by aspiration of HCl and prolidase may be useful marker for ALI associated with HCl aspiration.

Key words: Dexmedetomidine, prolidase, oxidative stress, acute lung injury

Table 1. Diagnostic scanning tests for expected mortality and ROC curve results

	Cut off value	Sensitivity	Specificity	AUC	95% Confidence Interval	p
Apache IV	95	69.57	91.04	0.870	0.782-0.959	0.001**
SAPS III	45	91.30	80.60	0.933	0.882-0.984	0.001**

P-006

Sensitivity of Apache IV and Saps III Score in Predicting the Mortality of Surviving Trauma Patients

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Introduction: Scoring systems assess disease severity to predict outcome. We evaluated the effectiveness of two prediction scores (Saps III and Apache IV) to estimate mortality in surviving multitrauma patients.

Material and Method: Ninety trauma patients treated in our hospital's ICU within two years were determined retrospectively. Apache IV and Saps III were calculated from the worst values obtained during the first 24 hours of ICU admission. Predicted mortality rates (PMR) were recorded. Efficacy of the two scoring systems tested by means of diagnostic scanning tests and ROC curve analyses.

Results: Mean age of the patients was 38.83 ± 18.67 . 63.3% (n=57) were discharged to service after accurate treatment in ICU, 25.6% (n=23) died, 11.1% (n=10) were referred to a tertiary hospital. Apache IV was 106.09 ± 38.55 , which was significantly high in patients who died in ICU, and it was 56.63 ± 21.82 in patients who were survived ($p < 0.001$). Saps III was 65.87 ± 17.54 in patients who died in ICU, and it was 34.05 ± 13.11 who were survived ($p < 0.001$). We considered to calculate a cut-off value based on the significance of these mean Apache IV and Saps III scores. ROC analyses and scanning tests are used to determine the cut-off value according to mortality (Table 1). Saps III scoring system was established to be more sensitive to predict mortality than Apache IV for surviving trauma patients. (AUC; area under curve Saps III=0.933, Apache IV=0.870 $p < 0.001$).

Conclusion: Decision of the proper prediction scores can vary in different hospitals' ICU and emergency department conditions. We decided that Saps III is more effective than Apache IV for predicting mortality rate for surviving trauma patients in our hospital. This study will inform intensivists to identify the risk of mortality by using the right parameters to find the suitable prediction score for trauma patients.

Key words: SAPS III, APACHE IV, predicted mortality rate, trauma

P-007

Trace Element Balances During High-Volume Hemofiltration in Septic and Non-Septic Critically Ill Patients with Acute Renal Injury

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Introduction: Continous renal replacement therapies (CRRT) are commonly used in intensive care units (ICU) for hemodynamically unstable critically ill patients with septic or non-septic acute renal injury. High volume hemofiltration (HVHF) removes inflammatory molecules in septic patients. CRRT removes waste products and inflammatory molecules, but also nutrients such as trace elements. The aim of this clinical trial was to study trace element balances during CRRT at critically ill patients with acute renal injury in ICU.

Material and Method: This was a prospective clinical trial conducted at two ICUs in Ankara, Turkey. We enrolled 20 critically ill patients, septic and non-septic, with therated CRRT for 72 hours in ICU. The CRRT therapy modality was HVHF with continius venovenous hemodiafiltration in all patients. Chromium, copper, zinc and manganese concentrations were measured in blood, with highly sensitive analytic methods, at the 0.24.48 and 72. hours. The primer outcome was to study trace elements balances during CRRT. The secondary outcomes included change in creatinin, acid-base balances, APACHE II and SOFA score at the 72. hour of the CRRT.

Results: There was significant difference and negative balances of chromium, copper and manganese concentrations at the 72. hour of the CRRT (Chromium 0. hour 9.82 mcg/L, 72. hour 4.74 mcg/L, $p < 0.001$; copper 119.69 mcg/L, 90.57 mcg/L, $p = 0.002$; manganese 8.9 mcg/L, 6.02 mcg/L, $p = 0.005$). There was no significant difference in zinc balances (200.57 mcg/L, 170.19 mcg/L, $p = 0.126$). Creatinin concentration decreased (3.09 mg/dl, 1.25 mg/dl, $p < 0.001$) and acid-base balances improved (Ph 7.31, 7.38, $p = 0.002$) at the 72. hour of the CRRT. APACHE 2 score decreased (21.40, 17.15, $p = 0.009$) and SOFA score was not significantly different (10.7, 9.90, $p = 0.4$) at the 72. hour.

Conclusion: CRRT resulted in significant loses and negative balances of chromium, copper and manganese. There was no significant difference in zinc balances. Acid-base balances improved, creatinin concentration and APACHE 2 score decreased; there was no significant difference in SOFA score at the 72. hour.

Key words: Acute renal injury, trace elements, sepsis, continius renal replacement therapy, high-volume hemofiltration

P-008

Evaluation of predictive effect of PAF-AH on the prognosis of intensive care unit patients

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Introduction: Determination of the factors associated with the intensive care unit (ICU) prognosis and mortality has important role in the clinical follow-up of the patients. Definition of novel biomarkers, beside older biomarkers available for evaluation of the outcome of these patients has been proposed. Platelet-activating factor acetylhydrolase (PAF-AH) is an enzyme that inactivates the platelet-activating factor (PAF). A reduction in the level of the PAF-AH has been demonstrated during systemic inflammation and multiple organ failure. In this study, we set out to analyze the role of the PAF-AH enzyme activity evaluation as a prognostic marker in ICU patients.

Material and Method: In this ethics committee approved prospective study, 85 adult patients have been included. Following data have been recorded: preliminary C-reactive protein (CRP), lactate, albumin and PAF-AH values, APACHE II scores, rate of mortality. Patients were divided in two groups with respect to APACHE II values; group 1 (1-19) and group 2 (≥ 20).

Results: Observed mortality was 51.2%. The ratio of exitus was recorded as 93.3% in APACHE II group 2 ($p = 0.001$). In the APACHE II group 2 patients, the values of CRP ($p = 0.000$) and lactate ($p = 0.008$) were significantly high, and the values of PAF-AH ($p = 0.007$) and albumin ($p = 0.001$) were significantly low. A statistically significant difference was found between PAF-AH values of exitus and alive patients ($p = 0.001$). According to ROC analysis, the sensitivity and specificity of predicting mortality was 70.5% and 70.7% for CRP, 63.6% and 70.7% for lactate, 90.2% and 61.4% for albumin and 63.6% and 70% PAF-AH, respectively.

Conclusion: Our study demonstrated that, in predicting the ICU mortality risk, sensitivity of the PAF-AH is similar to the sensitivity of the lactate, and specificity of the PAF-AH is better than that of the albumin. According to our results, PAF-AH can be included in the novel biomarkers.

Key words: ICU, biomarker, PAF-AH

P-009

Comparative Antineuroapoptotic Effects of Dexmedetomidine and Propofol in Cranial Injury: An Animal Study

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Introduction: Traumatic brain injury (TBI) is a common consequence of accidents, and apoptosis is now recognized as one of its important pathophysiological factors. The primary hypothesis of this study was to show the early antineuroapoptotic effects of propofol and

dexmedetomidine by indicating the low quantity of apoptotic cells after mild TBI.

Material and Method: Forty-five rats, anesthetized with intraperitoneal 50 mg/kg ketamine hydrochloride and 5 mg/kg xylazine, were randomly assigned into 5 groups. Groups 1 (trauma) and 2 (no trauma) were applied propofol 20-30 mg/kg/h, groups 3 (trauma) and 4 (no trauma) were applied dexmedetomidine 3 µg/kg/min. No additional anesthetics was applied to group 5 (trauma). The mean arterial pressures (MAPs), rectal temperatures and blood glucose levels were monitored for 2 hours. Then, the brains of the rats were extracted after sacrifice and craniectomy, and the apoptotic cell analysis in midsagittal, parasagittal and hippocampal regions were performed.

Results: The median values for mean body weights, MAPs, and temperatures were similar ($p > 0.05$), but glucose levels were significantly higher in group 5 in the first 45 minutes ($p < 0.05$) (Figure 1). Between the trauma groups, the apoptotic cells were significantly higher in group 5 in all regions ($p < 0.05$) (Table 1) (Figure 2). Adversely, there was no significant difference in the number of apoptotic cells in any of the regions of groups without trauma (groups 2 and 4) ($p > 0.05$) (Table 2).

Conclusion: The number of apoptotic cells in rat brains with mild TBI, in which propofol and dexmedetomidine applied, was lower. However; these two agents had no superiority to each other in terms of antineuroapoptotic effectiveness. These agents were thought to be protective against the early phase brain damage.

Key words: Brain injuries, propofol, dexmedetomidine, apoptosis

Table 1. The comparison of the quantity of apoptotic cells in 3 regions of groups with trauma

	Group 1 (n=9)	Group 3 (n=9)	Group 5 (n=9)	p
Midsagittal region	156.6 (125.0-192.0)	156.5 (100.0-193.0)	188.5 (167.8-234.6)	0.001* (group 1-5: $p=0.002^{**}$) (group 3-5: $p=0.001^{**}$) (group 1-3: $p=0.739$)
Parasagittal region	63.3 (45.0-75.9)	60.8 (48.2-75.6)	75.3 (66.2-94.6)	0.023* (group 1-5: $p=0.019^{**}$) (group 3-5: $p=0.015^{**}$) (group 1-3: $p=0.971$)
Hippocampal region	7.5 (5.6-12.3)	8.2 (4.9-11.1)	12.9 (7.9-21.6)	0.019* (group 1-5: $p=0.015^{**}$) (group 3-5: $p=0.015^{**}$) (group 1-3: $p=0.853$)

* These statistically significant values show the comparison of all groups ($p < 0.05$). ** The groups were compared to each other one by one with Bonferroni adjustment ($p < 0.017$).

Table 2. The comparison of the quantity of apoptotic cells in 3 regions of groups without trauma.

	Group 2 (n=9)	Group 4 (n=9)	p
Midsagittal region	3.3 (1.1-6.1)	4.3 (1.3-6.2)	0.315
Parasagittal region	2.7 (1.2-4.6)	2.5 (1.6-4.1)	0.912
Hippocampal region	3.1 (2.3-8.1)	2.7 (1.6-5.9)	0.393

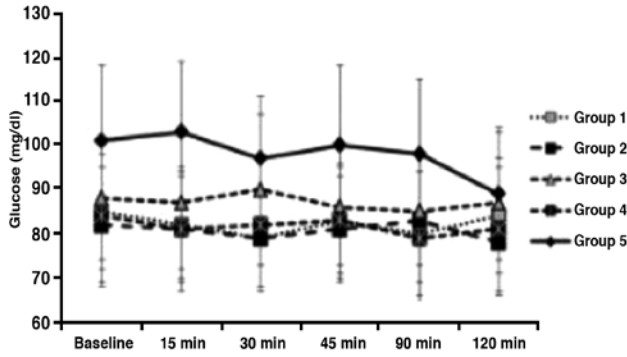


Figure 1. The Glucose levels of Rats during 2 hours. The blood glucose levels were significantly higher in group 5 in the first 45 min of the experiment ($p<0.05$); however there was no difference within the groups during 2h period ($p>0.05$)

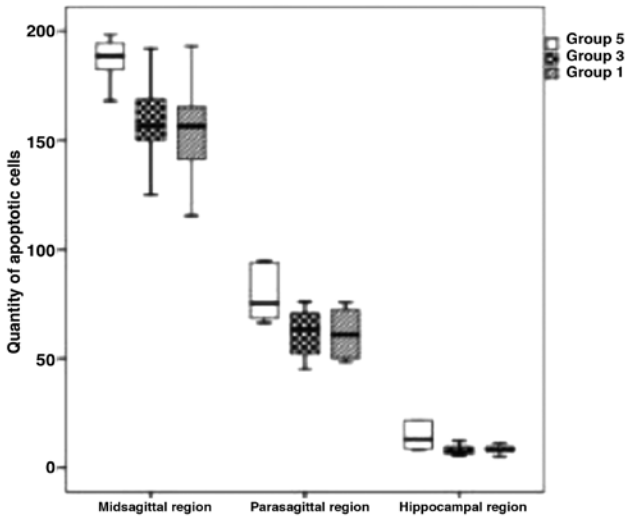


Figure 2. The comparison of the quantity of the apoptotic cells in different regions and the groups with trauma. Between the trauma groups (groups 1, 3, and 5), the apoptotic cells were significantly higher in group 5 in all regions ($p<0.05$).

P-010

An Evaluation of Postoperative Patients in Intensive Care Unit: Determining Predictors for Unnecessary Admission

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Introduction: Lack of intensive care unit (ICU) beds is a major problem worldwide. In the absence of Intermediate Care Units (IMCU) many surgical patients who need only close monitoring are admitted to the ICU, causing inappropriate use of limited resources and increased health costs. This study was designed to determine the unnecessary ICU admission of postoperative patients in a hospital with no IMCU and to evaluate the impact of ASA, POSSUM and SAPS II scores on identifying the patients who are likely to benefit from ICU.

Material and Method: The decision of ICU admission was made by anesthesiologist or surgeon without specific criteria. After admission ASA, POSSUM and SAPS II scores were calculated. Death in ICU, length of stay more than 48 hours, duration of MV more than 24 hours or the need for vasoactive agents were used to define "necessity of ICU".

Results: Among 100 postoperative admissions, 12 were unplanned. Of the 88-planned admissions, forty-one patients (46.6%) received observation only. All three scoring systems performed well in predicting the need for advanced ICU care. Total POSSUM score had the highest sensitivity (73%) and specificity (73%) with a cut off value of 35 (AUC=0.81). The correlation coefficients for ASA, POSSUM and SAPS II were 0.408, 0.516 and 0.336 respectively.

Conclusion: Scarcity of ICU beds has become a global problem. Many patients requiring intensive care are rejected or their admissions are delayed. In our study nearly half of the patients didn't need advanced ICU care. This result is consistent with previous studies. Solberg et al. reported more appropriate use of ICU beds with introducing an IMCU integrated in the ICU care. Identifying low risk patients with specific criteria and admitting them to IMCU's can prevent unnecessary use of ICU beds. POSSUM may be a reasonable alternative for this purpose.

Key words: postoperative care, intensive care, resource allocation, patient admission

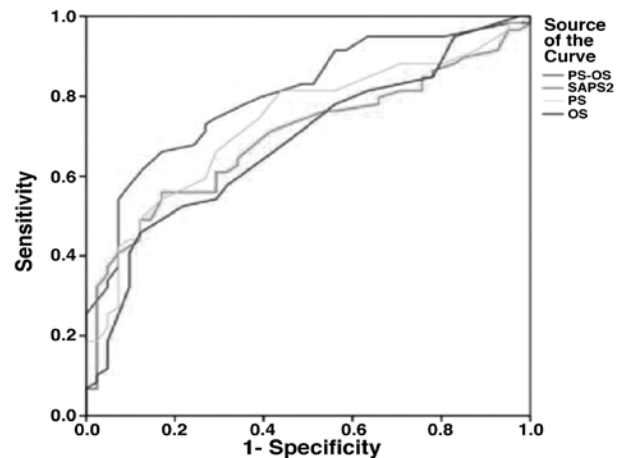


Figure 1. ROC Curves of numeric risk scores, SAPS II: Simplified Acute Physiology Score, POSSUM: Physiological and Operative Severity Score for the enumeration of Mortality and Morbidity, PS: Physiological score, OS: Operative score, PS-OS: Total of physiological and operative score

	Patients needed monitorization (41)	Patients needed intensive care (59)	p
Gender (female/male)	15/26	33/26	0.057
Age	67.83±16.02	67.37±15.80	0.888
Planned Admissions, n (%)	38 (92)	50 (84.7)	0.374
Duration of MV (hr)	0.39±1.45	49.51±87.70	0.000
Duration of VP therapy	0.00±0.00	15.44±41.75	0.006
LOS in ICU	19.78±7.91	138.69±128.88	0.000
Mortality, n (%)	0 (0)	16 (27.1)	0.000

MV: mechanical ventilation, VP: vasopressor therapy, LOS: length of stay,

	Patients needed monitorization (41)	Patients needed intensive care (59)	p	Correlation Coefficient
ASA (II/III-IV)	25/16	13/46	0.000	0.395
SAPS II	29.90±12.44	41.97±21.28	0.000	0.336
POSSUM-PS	21.29±5.59	27.98±9.17	0.000	0.395
POSSUM-OS	10.78±4.59	14.59±6.58	0.000	0.314
POSSUM-total	32.07±6.59	42.58±11.13	0.000	0.516

ASA: Risk index classification of the American Society of Anesthesiologists, SAPS II: Simplified Acute Physiology Score: Physiological and Operative Severity Score for the enumeration of Mortality and Morbidity, PS: Physiological scor, OS: Operative score

P-011

How Invasive Should the Approach be in the Treatment of Elderly Patients at Terminal Stage? A Survey Study

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Introduction: Generally, prolonged intensive care is determined based on the severity of the disease, prognosis, length of stay, views and expectations of the patient and relatives. However, addition of the age of the patient to these parameters is controversial. Currently accepted view is that advanced age is not considered a contradiction for admittance to ICU on itself. Most of the time, even if the elderly are admitted with progressive, unpreventable and fatal diseases, there is reason to restrict admittance to ICU. If medical necessity is present, the indications for ICU admittance should be the same for the elderly and younger patients.

On the other hand, these elderly should be distinguished from younger patients on some basic points and some questions should be answered. For patients with no hope of getting better and the elderly, how should the intensive care be and how invasive the treatment should be? Are the views of the relatives of the patient who are the decision makers similar to the healthcare professionals responsible for the treatment and care of the patient? Can hospice-palliative care services be an alternative for these patients? Are we ready to think?

Material and Method: The attitudes and opinions of healthcare staff and patient relatives regarding to terminal patients over 85 years old were investigated. A face-to-face survey consisting of closed-ended questions was performed by two intensive Care doctors. The answers were evaluated by statistical analysis.

Results: The percentages and the statistical analysis of the answers are shown in Tables 1-6.

Conclusion: All over the world, the unnecessary of futile treatment is debated. This topic should be discussed in a multidisciplinary platform and solutions should be suggested. Even though palliative care centers appear to be an alternative, it is evident that 50% of even doctors are away from this option.

Key words: Geriatri, terminal stage, ICU

Table 1. Evaluation of the answers according to groups

	Relative of Patient n (%)	Healthcare Staff n (%)	Doctor n (%)	p
Do you believe that intensive care is beneficial to the patient?	37 (71.1 %)	55 (44%)	41 (31.5 %)	0,001**
Would you prefer prolonging length of the intensive care unit stay of a patient who is unconscious, unresponsive and has no hope of improving using every opportunity currently available?	-	30 (24%)	32 (24.6 %)	0.909
Would you prefer prolonging length of the intensive care unit stay of your patient/ loved one who is unconscious, unresponsive and has no hope of improving using every opportunity currently available?	28 (59.6 %)	30 (24%)	33 (25.4 %)	0.001**
Would you prefer prolonging length of the intensive care unit stay a patient who is unconscious, unresponsive and has no hope of improving using every opportunity currently available, if the patient was yourself?	27 (58.7%)	16 (12.8 %)	27 (20.8 %)	0.001**
Would you prefer your patient passing in peace and comfort in a hospital room without loved ones and family?	7 (15.2 %)	28 (22.4%)	34 (26.2 %)	0.311
Would you prefer your patient passing in peace and comfort in a hospital room without loved ones and family?	8 (17.4%)	24 (19.2 %)	33 (25.4 %)	0.367
Would you prefer your patient passing in peace and comfort at home with family and loved ones?	39 (84.8%)	110 (88%)	106 (81.5%)	0.358
Would you prefer passing in peace and comfort at home with family and loved ones?	30 (65.2%)	109 (87.2%)	58 (44.6 %)	0.001**
Chi-square Test **p<0.01				

	Intensive Care n (%)	Surgical n (%)	Internal n (%)	p
Do you believe that intensive care is beneficial to the patient?	6 (13.6%)	18 (30.5%)	17 (63%)	0.001**
Would you prefer prolonging length of the intensive care unit stay of a patient who is unconscious, unresponsive and has no hope of improving using every opportunity currently available?	5 (11.4%)	12 (20.3%)	15 (55.6%)	0.001**
Would you prefer prolonging length of the intensive care unit stay of your patient/ loved one who is unconscious, unresponsive and has no hope of improving using every opportunity currently available?	4 (9.1%)	12 (20.3%)	17 (63.0%)	0.001**
Would you prefer prolonging length of the intensive care unit stay a patient who is unconscious, unresponsive and has no hope of improving using every opportunity currently available, if the patient was yourself?	1 (2.3%)	12 (20.3%)	14 (51.9%)	0.001**
Would you prefer your patient passing in peace and comfort in a hospital room without loved ones and family?	13 (29.5%)	13 (22.0%)	8 (29.6%)	0.622
Would you prefer passing in a hospital room without loved ones and family?	10 (22.7%)	17 (28.8%)	6 (22.2%)	0.714
Would you prefer your patient passing in peace and comfort at home with family and loved ones?	40 (90.9%)	47 (79.7%)	19 (70.4%)	0.085
Would you prefer passing in peace and comfort at home with family and loved ones?	26 (59.1%)	25 (42.4%)	7 (25.9%)	0.022*

Chi-square Test *p<0.05 **p<0.01

	Nurses n (%)	Anesthesia Technicians n (%)	Staff n (%)	p
Do you believe that intensive care is beneficial to the patient?	33 (44%)	8 (32%)	14(56)	0.232
Would you prefer prolonging length of the intensive care unit stay of a patient who is unconscious, unresponsive and has no hope of improving using every opportunity currently available?	14(18.7%)	9(36%)	7(28%)	0.186
Would you prefer prolonging length of the intensive care unit stay of your patient/ loved one who is unconscious, unresponsive and has no hope of improving using every opportunity currently available?	15(20%)	7(28%)	8(32%)	0.146
Would you prefer prolonging length of the intensive care unit stay a patient who is unconscious, unresponsive and has no hope of improving using every opportunity currently available, if the patient was yourself?	7(9.3%)	5(20%)	4(16%)	0.333
Would you prefer your patient passing in peace and comfort in a hospital room without loved ones and family?	17 (22.7%)	3 (12%)	8 (32%)	0.236
Would you prefer passing in a hospital room without loved ones and family?	14 (18.7%)	4 (16%)	6 (24%)	0.760
Would you prefer your patient passing in peace and comfort at home with family and loved ones?	67 (89.3%)	23 (92%)	20 (80%)	0.364
Would you prefer passing in peace and comfort at home with family and loved ones?	70 (93.3%)	19 (76%)	20 (80%)	0.039*

Chi-square Test *p<0.05 **p<0.01

Table 4. Evaluation of the consistency of the answers given to questions "prolonging length of icu stay" for different groups			
	Yes n (%)	No n (%)	p
Relative of the patient			1.000
Would you prefer prolonging length of the intensive care unit stay a patient who is unconscious, unresponsive and has no hope of improving using every opportunity currently available, if the patient was yourself?	27 (58%)	19 (41.3%)	
Would you prefer prolonging length of the intensive care unit stay of your patient/ loved one who is unconscious, unresponsive and has no hope of improving using every opportunity currently available?	27 (58.7%)	19 (41.3%)	
Healthcare staff			0.004**
Would you prefer prolonging length of the intensive care unit stay a patient who is unconscious, unresponsive and has no hope of improving using every opportunity currently available, if the patient was yourself?	16 (12.8%)	107 (87.2%)	
Would you prefer prolonging length of the intensive care unit stay of your patient/ loved one who is unconscious, unresponsive and has no hope of improving using every opportunity currently available?	30 (24%)	95 (76%)	
Doctor			0.070
Would you prefer prolonging length of the intensive care unit stay a patient who is unconscious, unresponsive and has no hope of improving using every opportunity currently available, if the patient was yourself?	27 (20.8%)	103 (79.2%)	
Would you prefer prolonging length of the intensive care unit stay of your patient/ loved one who is unconscious, unresponsive and has no hope of improving using every opportunity currently available?	33 (25.4%)	97 (74.6%)	
Mc Nemar Test **p<0.01			

Table 5. Evaluation of the consistency of the answers given to questions "passing in a hospital room/ family" for different groups			
	Yes n (%)	No n (%)	p
Relative of the patient			1.000
Would you prefer passing in a hospital room without loved ones and family?	8 (17.4%)	38 (82.6%)	
Would you prefer your patient passing in peace and comfort in a hospital room without loved ones and family?	7 (15.2%)	39 (84.4%)	
Healthcare staff			0.424
Would you prefer passing in a hospital room without loved ones and family?	24 (19.2%)	101 (80.8%)	
Would you prefer your patient passing in peace and comfort in a hospital room without loved ones and family?	28 (22.4%)	97 (77.6%)	
Doctor			1.000
Would you prefer passing in a hospital room without loved ones and family?	33 (25.4%)	97 (77.6%)	
Would you prefer your patient passing in peace and comfort in a hospital room without loved ones and family?	34 (26.2%)	96 (73.8%)	
Mc Nemar Test			

Table 6. Evaluation of the consistency of the answers given to questions "passing at home for yourself/patient" for different groups			
	Yes n (%)	No n (%)	p
Relative of the patient			0.035*
Would you prefer passing in peace and comfort at home with family and loved ones?	30 (65.2%)	16 (34.8%)	
Would you prefer your patient passing in peace and comfort at home with family and loved ones?	39 (84.8%)	7 (15.2%)	
Healthcare staff			1.000
Would you prefer passing in peace and comfort at home with family and loved ones?	109 (87.2%)	16 (12.8%)	
Would you prefer your patient passing in peace and comfort at home with family and loved ones?	110 (88%)	15 (12%)	
Doctor			0.001**
Would you prefer passing in peace and comfort at home with family and loved ones?	58 (44.6%)	72 (55.4%)	
Would you prefer your patient passing in peace and comfort at home with family and loved ones?	106 (81.5%)	24 (18.5%)	
Mc Nemar Test *p<0.05 **p<0.01			

P-012

Outcome of Living Kidney Donors According to National Data of Turkish Organ and Tissue Information System

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Introduction: Live kidney transplantation has several advantages than cadaver-kidney transplantation and is still frequently performed. When assessed in terms of donor consent and religious concepts, there is a negative relationship between these terms and live kidney transplantation. However, there is little information about renal disease, social and psychological problems of donors after donation. We assessed the outcome of living kidney donors after donation.

Material and Method: Outcome of living kidney donors between years 2011-2014 was reviewed. Age and gender of the patients were recorded. Mean follow-up time and 6 months, 1, 2 and 3 years survival of the patients were identified. Kaplan-Meier method was used to calculate the survival rates.

Results: The number of live kidney transplantation is 9473 between years 2011-2014 in Turkey. The mean age of the donors was 49.04 ± 12.80 (mean \pm SD), and 43% (4077) of the donors were male and 57% (5396) were female. The mean follow-up time of the living kidney donors was 27.28 ± 13.83 (mean \pm SD) and 6 months, 1, 2 and 3 years survival were 99.9%; 99.9%; 99.9% and 99.9%, respectively.

Conclusion: Live kidney donation is a frequent practice in our country and organized by scientific committees. Survival times of living kidney donors in our country are higher compared to results in the literature. In respect to high rates of live kidney transplantation in our country, potential kidney donors should be evaluated in detail before donation and there is a need for long term follow-up and consulting service after donation.

Key words: Donor, kidney, transplantation

P-013

Comparison of Two Different Feecal Drainage System

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Introduction: Feecal drainage system have been developed to prevent patient of ICU as an alternative to traditional methods such as pads or diapers. It can also be for diverting feces from the skin to help prevent infection. In this study; we aimed to compare Zassi Bowel Management System (ZBMS) and Feecal Collection System (FCS) the patient in ICU.

Material and Method: Twenty patients were included in this study. In group Z (n=13) applied Zassi Bowel Management System (Zassi Medical Evolutions, Fernandia Beach Florida) and in group F (n=7) applied Feecal Collection System (Pahsco Ltd, China) to the patients. Patients with previous rectal disease were excluded. Data regarding ease of application, incidence of rectal trauma, ratio of leakage, uncontrolled protrusion of the system, user satisfaction were collected.

Results: Total day of application was 113 day in group Z and 135 day in group F (p>0.05).

Ratio of leakage in group Z was higher than in group F (p=0.022) (Table 1). User satisfaction was inadequate in two groups.

Conclusion: The main different between two systems was ratio of leakage. The reason of high ratio of leakage in group Z might been the rigid part of the device which can lead to effect sphincter motility. Feecal Collection System hadn't been included any rigid part. Rectal trauma was observed two patients in group F. While ZBMS included the protective balloon, FCS didn't include this. Protective balloon could prevented rectal trauma. User satisfaction was inadequate in two groups. Although two systems were suitable for ICU patient, user practise was observed uncomfortable both of them.

Key words: Bowel management system, feecal collection system, ICU

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Table 1

	Group Z Zassi Bowel Management System	Group F Feecal Collection System	
	Mean \pm SS (Median) (min-max)	Mean \pm SS (Median) (min-max)	p
Number of Leakage	8.45 \pm 11.42 (0) (0-24)	6.41 \pm 9.68 (2) (0-24)	0.022
Number of protrusion	1.45 \pm 1.18 (1) (1-5)	1.2 \pm 0.41 (1) (1-2)	0.756
Mann Whitney U Test			

P-014

To Determine the Incidence of Intraabdominal Pressure and Related Risk Factors on Intensive Care Patients

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Introduction: To investigate the incidence and related risk factors for intra-abdominal pressure (IAP) on intensive care patients

Material and Method: Hundred and twenty-five patients between 18-65 years old, stayed in intensive care unit for more than 24 hours were included into study. Demographic data, body muscle index (BMI), the worst pH value, diagnosis (pneumonia, ileus), polytransfusion (over 10 packages of blood product during 24 hours) were all recorded. The intra-abdominal pressure of all patients were measured two times a day by using the foley catheter. Intraabdominal hypertension (IAH) was defined as the pathologic elevation of IAP ≥ 12 mmHg. The patients divided into IAH develop and no IAH developed. These factors were compared between groups.

Results: The incidence of IAH was found as 36%. No statistically significant difference was detected between groups on sex and age. The ICU stay was 6.8 ± 0.57 days in patients without IAH and 9.31 ± 0.99 with IAH ($p=0.027$). The duration of MV stay was 7.78 ± 1.00 days in IAH develop patients and 3.81 ± 0.57 days in patients without IAH ($p=0.001$). Patients with BMI ≥ 30 had higher incidence of IAH develop. 68.2% of the patients with pneumonia had IAP develop while 31.8% were not ($p=0.001$). Patients with ileus, had polytransfüzyon and pH < 7.2 had higher incidence of IAH develop than other group.

Conclusion: The increase in IAP in critically ill patients is one of the main factor of increased mortality, thus the measurement of IAP should be taken to routine critical care monitorization.

Key words: Intensive care unit, intra-abdominal pressure, intra-abdominal hypertension

P-015

The Evaluation of Treatment Responses to the Blood Stream Infections in Intensive Care Unit Patients and Reasons of Treatment Failures

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Introduction: We aimed to investigate the treatment responses of intensive care unit (ICU) acquired blood stream infections (BSI) cases and the reasons of treatment failures.

Material and Method: Data was prospectively collected from all patients with admission to ICU > 48 h during a 1-year period. According to resolution of signs and symptoms of infection, treatment outcomes were stratified into 2 cohorts; 1) successful and 2) failure treatment. Risk factors affecting the responses were recorded (source and severity of bacteremia, monitoring APACHEII and SOFA scores, isolated pathogens and resistance profile, appropriate antibiotic initiation and catheter removal time) Multivariate regression analysis was used to examine risk factors associated with treatment failure. Causes of treatment failures (presence of other infection focus, inappropriateness of empirical treatment, breakthrough bacteremia, superinfection, failure to control of source, deaths due to BSI) were also evaluated by subgroup analyses.

Results: Fifty of total 70 patients had treatment failure (71.4%), while 20 of whom had treatment success (28.6%). Multivariate regression analysis showed that "the high levels of APACHEII detected at the third day of the treatment" and "delayed appropriate treatment for ≥ 2 days with respect to the onset of bacteremia" were independent risk factors for treatment failure. The subgroup analyses for causes of treatment failure revealed that "other concomitant infections" and "superinfection" were the most frequent reasons in the treatment failures.

Conclusion: Delayed appropriate treatment was found to be the most important independent reason for treatment failure in patients with the ICU acquired BSI. In addition, "other concomitant infections" and "superinfection" are mostly observed other significant reasons in the treatment failure. This is the first study that evaluates the treatment responses to ICU acquired BSI in the widest spectrum.

Key words: Blood stream infections, ICU, treatment failure

P-016

ICU Robotic Physician's Assessment and Management for Unstable ICU Oncology Patients

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ICU Robotic Physician's assessment and management for unstable ICU Oncology patients.

Introduction: The timely assessment and treatment of ICU Oncology patients is important for Oncology Surgeons and Oncology ICU Intensivists. We hypothesized that the use of RTP can improve physician rapid response to unstable ICU patients.

Material and Method: We have study in 1200 ICU Oncology patients using a before-after and control design to test the effectiveness of RTP. Physicians used RTP to make rounds in the ICU in response to nursing pages. Data concerning several aspects of the RTP interaction including the latency of the response, the problem being treated, the intervention that was ordered, and the type of information gathered using the RTP were documented. The effect of RTP on ICU length of stay and cost was assessed.

Results: The use of RTP was associated with a reduction in latency of attending physician face-to-face response for routine and urgent pages compared to conventional care (RTP: 10.0 +/- 2.5 minutes vs conventional: 210.0 +/- 40 minutes). The response latencies to Septic Shock (8.0 +/- 2.2 vs 120 +/- 25 minutes) and Pneumonia (11 +/- 14 vs 108 +/- 55 minutes) were reduced ($p < .001$), as was the LOS for patients with Sepsis (4 days) and Pneumonia (2 day). There was an increase in ICU occupancy by 33% compared with the PreRobot Physician era, and there was an ICU cost savings of KD 1.5 million attributable to the use of RTP.

Conclusion: The use of RTP enabled rapid face-to-face attending physician response to ICU patients and resulted in decreased ICU cost and LOS.

Key words: Robotic physician, ICU oncology patients, improvement, management

P-017

Results of the Live Kidney Transplantations According to National Data of Turkish Organ and Tissue Information System

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Introduction: Although there are differences in criteria of live-kidney transplantation in organ transplantation programmes in the world, it is still performed widespread. Even though there are developments in tissue matching and immunosuppressive protocols, graft loss is still an important problem after live-kidney transplantations because of acute and chronic allograft nephropathy. We aimed to assess the survival rates of patients and grafts after live-kidney transplantation.

Material and Method: The results of live-kidney transplantations between years 2011-2014 were reviewed. Patients' age, gender and tissue antigen integration were determined. The chronic rejection and primary graft failure rates were recorded. Survival rates of the grafts and patients during 3, 6, 9, 12, 24, 36 and 48 months were determined.

Results: The number of kidney transplantations was 11755 between 2011-2014. The source of organ in 80.8% of the transplantations was live-donors. The mean age of the patients who had live-kidney transplantation was 40.8±11.6 (mean ± SD), and 65.1% (6182) were male and 34.9% (3314) were female. Chronic rejection and primary graft failure were determined in 2.4% (224). Patient and graft follow-up periods were 26.20±14.4 (mean ± SD) and 24.8±14.1 (mean ± SD) months, respectively. Mean survival time of the patients was 49.42±0.086 months, and survival rates for 3, 6, 9, 12, 24, 36 and 48 months were 98.5±0.001%; 97.7±0.02%; 97.3±0.002%; 97.1±0.002%; 96.9±0.002% and 96.7±0.002%, respectively. Mean survival time of the graft was 47.87±0.07 months in these patients and survival rates of the graft for 3, 6, 9, 12, 24, 36 and 48 months were 99.2±0.001%; 99±0.001%; 98.7±0.001%; 98.5±0.001%; 97.6±0.002%; 96.7±0.002% and 96.3±0.003%, respectively.

Conclusion: In recent years, there is a significant increase in live-kidney transplantations in our country, due to inadequate obtaining of organ from cadaver. We observed a quite high patient and graft survival times and a low chronic rejection incidence in our live-kidney transplantation patients. Although there is a high life quality and better graft function in live-kidney transplantations compared to cadaver-kidney transplantation, cadaver-kidney transplantations should be increased.

Key words: Living donor, kidney, transplantation

P-018

Correlation Between pRBC Transfusion and Ventilation Days Ratio in ICU Patients

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Introduction: Transfusion is not risk free, and is associated with allergic reactions, lung injury, infectious disease, circulatory overload and immunosuppression in recipients, while cost of blood screening and storage is high. On the other hand, prolonged mechanical ventilation may reflect impaired physical status and lead to increased demand for pRBC transfusion.

Material and Method: The aim of our retrospective observation study was to test the hypothesis that a correlation exists between pRBC transfusion and ventilation days per patients ventilated in our both medical and surgical ICU served in community hospital.

Results: From 2005 to 2014 admitted to our ICU 698 patients. Mean age

(years) 63.82, mean APACHE II score on admission: 20.25, mean length of ICU stay (LOS, days): 13.45, mean duration of mechanical ventilation per patients ventilated (VD, days): 11.63. From our database we looked for the age and the following values and indexes according pRBC per year from 2005 to 2014 (mean values): pRBC cross matched (c-m) and transfused (tran): Total, per patient, per hospitalization days (HD), per patient under mechanical ventilation (pts V), per ventilation days (VD) and the ratio pRBC cross matched over transfused. Using linear correlation method, we looked for linear slope, correlation coefficient (r), and coefficient of determination (r²), and by linear regression method using ANOVA test we looked for p value, according ventilation days and pRBC transfusion (Table 1).

Conclusion: According to our data, there was no statistically significant correlation detected between ventilation days and pRBC transfusion and cross matched indexes, nor cross matched over transfused. Our data suggest that even though when the duration of mechanical ventilation is prolonged in patients with impaired physical status, these patients did not perform increase demand for pRBC transfusion during their ICU hospitalization.

Key words: pRBC, transfusion, ventilation days

Table 1. Correlation between ventilation days and pRBC transfusion and cross matched indexes							
	Slope	r	r ²	S.E.	L. C.I.	U. C.I.	p value
Total c-m	16.54	0.228	0.052	24.94	-40.97	74.053	0.5258
Total Trans	15.66	0.3101	0.0961	16.986	-23.50	54.83	0.3833
c-m per Pt	0.2416	0.3281	0.1077	0.2459	-0.3255	0.8084	0.3546
Trans per Pt	0.2233	0.3702	0.1371	0.1980	-0.2334	0.6799	0.2923
c-m per H.D.	0.004	0.1215	0.0147	0.014	-0.027	0.0372	0.7389
Trans per H.D.	0.0096	0.2610	0.0681	0.0126	-0.0195	0.0388	0.4665
c-m per Pt V.	0.2055	0.2795	0.07809	0.2497	-0.3702	0.7813	0.4342
Trans per Pt.V	0.2193	0.3474	0.1207	0.2093	-0.2633	0.7018	0.3253
c-m per V. D.	0.0145	0.2181	0.0476	0.022	-0.038	0.0674	0.3445
Trans per V. D	0.01627	0.2976	0.088	0.0184	-0.262	0.0388	0.4036
c-m over Trans	0.1218	-0.4102	0.6653	0.0957	-0.342	0.098	0.2391

P-019

Results of the Cadaver Kidney Transplantations According to National Data of Turkish Organ and Tissue Information System

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Introduction: Demand for renal transplantation can not be met by the number of cadavers introduced to the information system because of the increase in number of patients with chronic renal failure who require renal transplantation. We reviewed the results of the patients who had cadaver kidney transplantation to assess the kidney transplantations in the system.

Material and Method: The results of the cadaver kidney transplantations between 2011-2014 were reviewed. Patients' age, gender and tissue antigen integration were determined. The chronic rejection and primary graft failure rates were recorded. Survival rates of the grafts and patients during 3, 6, 9, 12, 24, 36 and 48 months were determined.

Results: The number of kidney transplantations was 11755 between 2011-2014. The source of organ in 19.2% of the transplantations was cadaver. The mean age of the patients was 42.3 ± 14.4 (mean \pm SD) years, 57.6% (1301) were male and 42.4% (957) were female. Chronic rejection and primary graft failure were determined in 4.9% (110). Patient and graft follow-up periods were 23.4 ± 14.9 (mean \pm SD) months and 22.7 ± 14.4 (mean \pm SD) months, respectively. Mean survival time of the patients was 46.81 ± 0.288 months, and survival times for 3, 6, 9, 12, 24, 36 and 48 months were $95.3 \pm 0.004\%$; $93.4 \pm 0.005\%$; $92.4 \pm 0.006\%$; $91.8 \pm 0.006\%$; $91.4 \pm 0.006\%$; $91.3 \pm 0.006\%$ and $91.1 \pm 0.006\%$, respectively. Mean survival time of the graft was 46.56 ± 0.23 months and survival times of the graft for 3, 6, 9, 12, 24, 36 and 48 months were $98.1 \pm 0.003\%$; $97.2 \pm 0.004\%$; $96.3 \pm 0.004\%$; $96.4 \pm 0.004\%$; $95 \pm 0.005\%$; $94.1 \pm 0.006\%$ and $91.7 \pm 0.013\%$, respectively.

Conclusion: Although there are attempts to increase cadaveric donation in the whole World, it is still poor because of the reluctance and irrelevance of the donor families. Even though, the patient and graft survival rates were higher in live kidney transplantations than cadaver-kidney transplantations in the literature, in recent years cadaver-kidney transplantations also had high success rates. In our opinion, cadaver-kidney transplantations should be increased in respect of the results of the cadaver-kidney transplantations in our country.

Key words: Cadaveric donor, kidney, transplantation

P-020

The Correlation Between the Ramsey Sedation Scale, Richmond Agitation Sedation Scale and Riker Sedation Agitation Scale During Midazolam-Remifentanyl Sedation

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Introduction: Sedative and analgesic treatment administered to critically ill patients need to be regularly assessed to ensure that predefined goals are well achieved as the risk of complications of oversedation is minimized. We revised and prospectively tested the Ramsay sedation scale (RSS) for interrater reliability and compared it with the Riker Sedation-Agitation Scale (SAS) and the Richmond Agitation Sedation Scale (RASS) to test construct validity during midazolam-remifentanyl sedation.

Material and Method: A convenience sample of ICU patients was simultaneously and independently examined by pairs of trained evaluators by using the revised SAS, RSS, and RASS. Seventy-six ICU patients were examined a total of 228 times by evaluator pairs.

Results: The mean patient age was 71.6 yrs, 45.4% were female, 54.6% male and 75% were intubated. When classified by using RSS (2.7 ± 1.3), 10.4% were anxious or agitated (RSS1), 48.6% were calm (RSS 2 to 3), and 41% were sedated (RSS 4 to 6). When classified by using RASS (-0.7 ± 1.6), 10.7% were anxious or agitated (RASS+1 to +4), 50.9% were calm (RASS 0 to-2), and 38.4% were sedated (RASS -3 to-5). When classified by using SAS (2.3 ± 1.1), 10.3% were anxious or agitated (SAS 5 to 7), 11.8% were calm (SAS 4), and 77.9% were sedated (SAS 1 to 3). RSS was correlated with the SAS ($r = -0.658$ $p < 0.001$) and RASS was correlated with the SAS ($r = 0.558$ $p < 0.001$). RSS was highly correlated with the RASS ($r = -0.668$ $p < 0.001$)

Conclusion: Ramsay Sedation Scale is both reliable and valid (high correlation with the RASS) in assessing agitation and sedation in adult ICU patients.

Key words: Ramsay sedation scale, riker sedation-agitation scale, richmond agitation sedation scale

P-021

Central Venous Catheterization in Critically Ill Patients: Ultrasound is A Must?

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Introduction: Central venous cannulation is crucial in the management of the critical care patients. This study was designed to evaluate our clinical experience in catheterization of internal jugular or subclavian veins (IJV/SCV) either by help of ultrasound (US) or blinded.

Material and Method: A total of 596 patients observed and treated in the Intensive Care Unit (ICU) who were applied catheterization of IJV or SCV were evaluated retrospectively between January 2012 and December 2014. A computer-based analysis was done to determine if cannulation was performed in the guidance of US or blinded. Patient demographics and the success rates of cannulations were determined. The long-term complications such as infections were excluded from the study.

Results: Four hundred and twelve patients (69.1%) were applied IJV catheterization and the remaining 184 (30.8%) were by SCV. The catheterization procedure were seen to be done in blinded technique in 376 patients (91.2%) for IJV and 122 patients (66.3%) for SCV by experienced anesthesiologists. The insertion of the catheters were successful in the first attempt in 316 patients (84%) and in the second in 60 (15.9%) of IJV catheterized patients. The remaining 36 patients (8.7%) in this group was inserted catheters in the guidance of US as the first two attempts resulted in failure. As for the SCV catheterized patients, 113 patients (61.4%) were cannulated in the first attempt and 12 (6.5%) in the second. The remaining 59 patients (32%) in the SCV cannulation group was inserted catheters by help of US. Hematoma and pneumothorax were the two main complications seen in our patients (3.3% in IJV vs 8.1% in SCV and 0.4% vs 3.2%, respectively) who were applied cannulation in blinded technique. There was no complication in patients who were applied catheterization either IJV or SCV in US guidance.

Conclusion: US is a widely accepted method to guide catheterization in patients who are observed and treated in ICUs. However, in our experience, especially in IJC cannulations the blind technique is still highly successful in experienced hands. However SCV catheter insertions should be done in the guidance of US regarding the higher complication rates.

Key words: Central venous catheterization, IJV, SCV, US guide catheterization

P-022

Percutaneous Dilatational Tracheostomy in Intensive Care Unit Patients

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Introduction: Percutaneous Dilatational Tracheostomy (PDT) is a minimally invasive technique widely used in intensive care units due to some reasons such as being applicable at bedside, causing less complications when compared to surgical technique, reducing the procedure duration and the cost. In this study we assessed the results of our PDT implementations in the intensive care unit.

Material and Method: In our intensive care unit, patients who are transorally intubated and thought to be dependent on mechanical ventilation for a long time (more than 3 weeks) underwent either Ciaglia or Griggs PDT techniques. The prospectively recorded data with a standardized form, which included the type of tracheostomy procedure, whether the fiberoptic bronchoscope was used or not, on which day of the mechanical ventilation the tracheostomy was implemented, the implementation duration of tracheostomy and the complications like tracheal wound, bleeding, hypoxia and death was used for further analysis. The data was reviewed retrospectively using with.

Results: A total of 158 patients was included to the study, those of 114 received tracheostomy by Ciaglia procedure and 44 patients by Griggs procedure, were included. The procedure duration was significantly longer in the Ciaglia technique ($p < 0.05$). There was no difference in terms of complications between the two techniques. FB was used in 97 procedures and it was noticed that FB use did not extend the procedure duration ($p > 0.05$).

Conclusion: The duration of tracheostomy procedure is longer in Ciaglia technique when compared to Griggs. Besides, when used by experienced people, fiberoptic bronchoscope use during the procedure does not extend the procedure duration.

Key words: Tracheostomy, bronchoscopy, critical care, artificial respiration

P-023

The Prevalence of Risk Factors for Pressure Ulcers After Cardiac Surgery in a Cardiothoracic Intensive Care Unit

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Introduction: Patients undergoing cardiac surgery have increased risks for developing pressure ulcers. This study investigates preoperative, intraoperative, and postoperative factors associated with the development of pressure ulcers among patients undergoing cardiac surgery.

Material and Method: A total of 1956 patients who stayed in the intensive care unit for more than 48 hours were included into the study. The variables that were investigated include; gender, age, body mass index (BMI), co-morbidities, Braden risk scale, laboratory data, surgical position, duration of surgery, anesthesia type and use of positioning devices, with presence or absence of pressure ulcers.

Results: From the searched study group, the prevalence of pressure ulcers was 2.1%. The significant factors associated with pressure ulcer development in the study patients were advanced age, high euroscore values, diabetes mellitus, peripheral vascular disease, preoperative atrial fibrillation, ejection fraction less than 30%, low hemoglobin, high serum glucose, hypoalbuminemia, prolonged mechanical ventilation and intensive care period (> 72 hours) ($p < 0.05$).

Conclusion: For patients undergo,ng cardiac surgery, risk factors should be evaluated perioperatively to take preventive measures in the early postoperative period in the cardiac intensive care unit by surgical team.

Key words: Decubitus, pressure, ulcer, cardiac surgery, risk factors

P-024

Efficacy of Apache IV Scoring System as a Model on Length of Stay in Intensive Care Unit for Surviving Trauma Patients

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Introduction: There are many potential influencing factors that effect the duration of intensive care unit (ICU) treatment for patients who have survived multiple trauma. The aim of the present study was to investigate the efficacy of Apache IV scoring system that predicts the ICU length of stay (LOS) in surviving trauma patients.

Material and Method: We retrospectively analyzed 90 trauma patients treated one or more days in İstanbul Kanuni Sultan Süleyman Training and Research Hospital in ICU from 2013 to 2015. Apache IV scores were recorded according to the worst physiological data in the first 24 hours, predicted mortality rate (PMR) and estimated ICU LOS were calculated through these scores. Additionally actual ICU LOS days were determined.

Results: Mean age of the patients was 38.83 ± 18.67 . Of 90 surviving trauma patients, 63.3% ($n=57$) were discharged to service after accurate treatment in ICU, 25.6% ($n=23$) died, 11.1% ($n=10$) were referred to a tertiary center. Apache IV was calculated as 69.27 ± 34.51 . According to Apache IV, PMR was 26.36 ± 27.14 . Estimated ICU LOS based on Apache IV, ranged between 0.9 and 12.3 days, the mean was 6.96 ± 2.44 . Actual ICU LOS ranged between 1 and 78 days, the mean was 8.69 ± 14.30 .

The positive correlation between the actual ICU LOS and the estimated ICU LOS based on Apache IV was statistically significant ($r=0.431$; $p=0.001$, $p<0.01$) (Table 1).

Conclusion: Estimated ICU LOS and actual ICU LOS values should be close to each other in an ideal scoring system. In clinical practice, we recommend Apache IV as a useful prediction score for estimating length of stay in trauma patients.

Key words: Apache IV, intensive care unit, length of stay, predicted mortality rate

Table 1. Apache IV Score-PMR based on Apache IV-Estimated ICU LOS based on Apache IV

n=90	r	p
Apache IV Score & PMR based on Apache IV	0.883	0.001**
Apache IV Score & Estimated ICU LOS based on Apache IV	0.389	0.001**
Actual ICU LOS & Estimated ICU LOS based on Apache IV	0.431	0.001**

P-025

Correlation Between pRBC Transfusion and Predicted Mortality in ICU Patients

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Introduction: Transfusion is not risk free, and is associated with allergic reactions, lung injury, infectious disease, circulatory overload and immunosuppression in recipients, while cost of blood screening and storage is high. On the other hand, severely ill patients may have impaired physical status and increased demand for pRBC transfusion.

Material and Method: The aim of our retrospective observation study was to test the hypothesis that a correlation exists between pRBC transfusion and predicted mortality, in our both medical and surgical ICU served in community hospital.

Results: From 2005 to 2014 admitted to our ICU 698 patients. Mean age

(years) 63.82, mean APACHE II score on admission: 20.25, mean length of ICU stay (LOS, days): 13.45, mean duration of mechanical ventilation per patients ventilated (VD, days): 11.63. From our database we looked for the age and the following values and indexes according pRBC per year from 2005 to 2014 (mean values): pRBC cross matched (c-m) and transfused (tran): Total, per patient, per hospitalization days (HD), per patient under mechanical ventilation (pts V), per ventilation days (VD) and the ratio pRBC cross matched over transfused. Using linear correlation method, we looked for linear slope, correlation coefficient (r), and coefficient of determination (r²), and by linear regression method using ANOVA test we looked for p value, according predicted mortality and pRBC transfusion (Table 1).

Conclusion: According to our data, there was no statistically significant correlation detected between predicted mortality and pRBC transfusion and cross matched indexes, nor cross matched over transfused. Our data suggest that even though severely ill patients with impaired physical status on admission recorded high predicted mortality, these patients do not perform increased demand for pRBC transfusion during their ICU hospitalization.

Key words: pRBC, transfusion, predicted mortality

Table 1. Correlation between predicted mortality and pRBC transfusion and cross matched indexes

	Slope	r	r ²	S.E.	L. C.I	U. C.I.	p value
Total c-m	5.181	0.534	0.286	2.894	-1.493	11.855	0.1112
Total tran	3.353	0.496	0.246	2.074	-1.427	8.136	0.1443
c-m per pt	0.0124	0.1261	0.0159	0.034	-0.067	0.0920	0.7285
Trans per pt	0.0101	0.1257	0.0157	0.028	-0.055	0.075	0.7294
c-m per H.D	-0.000	-0.1728	0.0293	0.0018	-0.005	0.003	0.6331
Trans per H.D	-0.000	-0.042	0.001	0.001	-0.004	0.003	0.9062
c-m per Pt V.	0.004	0.0682	0.004	0.034	-0.073	0.086	0.8514
Trans per Pt V	0.0085	0.1016	0.0103	0.0296	-0.05	0.07	0.7800
c-m per V.D.	-0.000	-0.321	0.0010	0.003	-0.007	0.0069	0.9297
Trans per V.D.	3.41	0.004	2.183	0.002	-0.009	0.005	0.9818
c-m over trans	-0.014	-0.369	0.136	0.013	-0.04	0.015	0.2935

P-026

Prognosis of Patients with Acute Respiratory Distress Syndrome on Extracorporeal Membrane Oxygenation: Outcome Analysis

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Introduction: Acute respiratory distress syndrome (ARDS) which is a life threatening impairment remains an unresolved problem in the intensive care unit (ICU). Conventional treatment with lung protective ventilation is often insufficient to overcome hypoxemia/hyperkarbia in the patients with the acute lung injury. This group of patients can be treated with extracorporeal membrane oxygenation (ECMO). We summarized retrospectively collected data from an institutional experience with extracorporeal membrane oxygenation (ECMO) patients with ARDS and identified the clinical parameters associated with morbidity and mortality. Between 2011 and 2015, 24 patients with ARDS on ECMO in the ICU were enrolled in our study. According to Berlin ARDS definition were moderate (n=4), and severe patients (n=20). The median patient age was 49.5; 18 were male, APACHE II (25.66±16.51) and SOFA score was 11.14±3.18 on the first day ECMO. We did 18 VV, 2 VA, 2 VV and partial VA cannulation the patients who supported with ECMO in our center, also two patient who supported with ECMO transferred to our center with VV cannulation. Our patients supported with mechanical ventilation 5.79±6.1 days before ECMO, and 45.66±40.28 days totally. ECMO treatment duration was median 17 (1-51) day. The complication related to ECMO support were intracranial hemorrhage (n=2), GI bleeding (n=5), massive hematuria (n=1), and alveolar hemorrhage (n=1). We made RBC (13.34±11.94 U), FFP (9.04±7.91), and PLT (2.69±4.23U) transfusion. Among 24 patients, 13 (54.1%) were successfully weaned off ECMO, and 8 (30%) patients survived. They stayed in intensive care unit 47.75±40.28 days, and ICU mortality rate was 66.7%. In conclusion, ECMO gives a life chance the patients in ARDS who has severe alveolar gas exchange failure and unresponsive to conventional mechanic ventilation support. The day immediately prior to initiating ECMO might play a key role in weaning ECMO for ARDS.

Key words: ECMO, ARDS, respiratory failure

P-027

Successful Control of an Outbreak with Carbapenem-Resistant Klebsiella Pneumoniae by Using Active Surveillance in a University Hospital Intensive Care Unit

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Introduction: Carbapenem-resistant Klebsiella pneumoniae (CRKP) is one of the most important nosocomial Gram-negative bacterial pathogens which is resistant to multiple different antimicrobial agents and related to high therapeutic failure rate with high mortality. Risk factors for acquisition of CRKP are severity of disease, prolonged hospital stay, poor functional status, invasive procedures, malignancy and antibiotic usage.

Material and Method: We conducted a prospective, observational study after detection of the outbreak. Active surveillance program started immediately to prevent further dissemination of infection. An intervention regarding hand hygiene compliance, contact isolation, cohorting, surface disinfection with UV irradiation implemented during period from 10 November 2013 to 20 July 2014. Over time the incidence of CRKP colonization and infection, mortality and site of infection was measured.

Results: Ninety four patients were screened in our study during the outbreak. Four hundred ninety rectal samples were studied. Thirty-three patients were identified during the observation period (n=17 colonized, n=16 infected). During the intervention period, CRKP colonization rate was 18.08%. Two different clonal types were detected; the predominant one comprised 13 single patient isolates (81.25%). Six cases of bacteremia (four of them central catheter related), 3 urinary tract infection, 7 lower respiratory tract infections were identified. Fatality rate was 80.12% (13/16) for infected, 58.82% (10/17) for colonized patients. Most patients received

Trimethoprim/Sulfamethoxazole (TMP-SMX) iv and tigecycline iv combination treatment. Thirteen of 16 patients had resistance to Colistin. However, 3 patients with resistance to TMP-SMX had sensitivity to Colistin. Four patients developed resistance to amikacin, 1 patient developed resistance to TMP-SMX treatment while receiving these agents for treatment.

Conclusion: Effective strategies for decreasing rates of nosocomial transmission of CRKP for clinical success are the use of active surveillance, contact precautions and control antibiotic usage. We observed that our approach was sustainable over time as supported with no spread although new CRKP colonized patients were admitted to the ICU.

Key words: Carbapenem-resistant Klebsiella pneumoniae, active surveillance, nosocomial infection

P-028

Early Tracheostomy Versus Late Tracheostomy in Ischemic Stroke Patients Requiring Prolonged Mechanical Ventilation

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Introduction: Patients with severe ischemic stroke may require tracheostomy in the course of their disease. This may necessary for patients who can not swallow, not feeding, prolonged insufficient airway protection and the risk of aspiration. The appropriate timing of tracheostomy in the critically ischemic stroke patients is poorly defined. The aim of this study is to see if early tracheostomy (seventh day) reduces duration of mechanical ventilation, intensive care stay, incidence of nosocomiale pneumonia and mortality in comparison with prolonged endotracheal intubation.

Material and Method: The study included only the patients who met the following criteria: ischemic stroke, baseline Glasgow coma scale (GCS) < 8 and GCS <8 within the seventh day without sedation. On this day (7th) randomization was done in two groups: early tracheotomy group (T group, n=15) and late tracheostomy group(LT group,n:17). Analysis of data was performed using SPSS package program. P<0.05 was considered significant. Results were reported as mean±SD.

Results: The two groups were comparable in terms of age, sex and Apache II and SAPS. Other results are shown in table 1 below.

Conclusion: In ischemic stroke patient, early tracheostomy (within 7th day) decreases total day on the ventilator and mechanical ventilatory time,decreases use of medications and intensive care stay, but not decreases pneumonia and mortality incidences.

Key words: Early tracheostomy, nosocomiale pneumonia, mortality

References

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	Group T	Group LT	p
Mechanically ventilated days	21.2±8.1	36.2±6.5	0.013
Pneumonia (%)	44	50	0.15
Mecanically ventilated days after pneumonia	11±5	16±4	0.014
Intensive care unit days	32.7±9.2	44.7±18.5	0.62
Deaths (%)	36	41	0.45

P-029

A New Control Method for Surface Cleaning in the ICU

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Introduction: Our efforts to decrease intensive care infections has increased our awareness of environmental cleaning and following our previous study comparing the efficacy of different surface disinfectants, we started questioning the effectiveness of cleaning and disinfection.

Material and Method: In our intensive care unit with 20 beds, 15 different high touch objects (HTOs) for each bed (total 280 HTO's/shift) have been marked during morning and evening shifts using ECOLAB's Fluorescent Marking Gel and indicate for remaining marks after cleaning using the ultraviolet light for two consecutive 6-day periods first without the knowledge of cleaning staff and then after informing the cleaning staff. Surfaces were marked in previously defined areas by the specialist physician or the assistant on duty everyday using the fluorescent gel. Cleaning was carried on according to usual methods by intensive care staff who had received in-service training. Following the completion of cleaning, control with the UV lamp was performed by the same person who had marked for easy and accurate monitoring.

Results: Results were evaluated using Pearson Chi Square Test&Mc Namer Test. The statistical differences in the cleaning results of the uninformed and informed period was determined. Significant improvements in intensive care unit cleaning can be achieved in most hospitals by using a structured approach that incorporates a simple, highly objective surface targeting method and repeated performance feedback to environmental services personnel. Appropriate surface cleaning and indicating can help prevent cross-contamination. Dazo fluorescent marking system consisting of a fluorescent gel and a UV lamp ensures objective monitoring of cleaning and is also a suitable method for monitoring cleaning of HTOs. The clinical and statistical significance between the cleaning during the uninformed and informed periods reveals the necessity of implementing such a monitoring system.

Conclusion: In order to indicate the effectiveness of in-service trainings, it's necessary to control cleaning under continuous audit with visible methods.

Key words: Surface cleaning, fluorescent marking gel, ICU

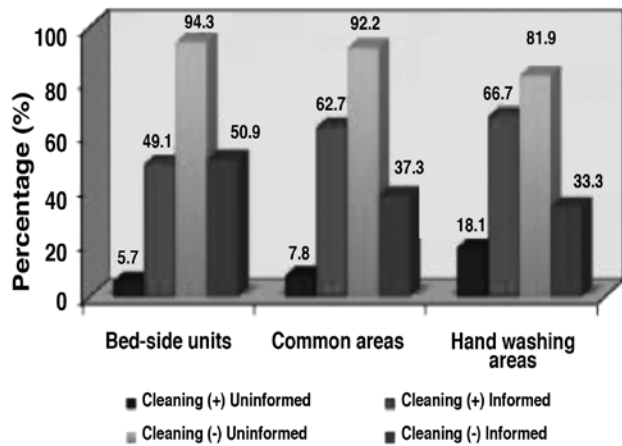


Figure 1. Cleaning rates between groups

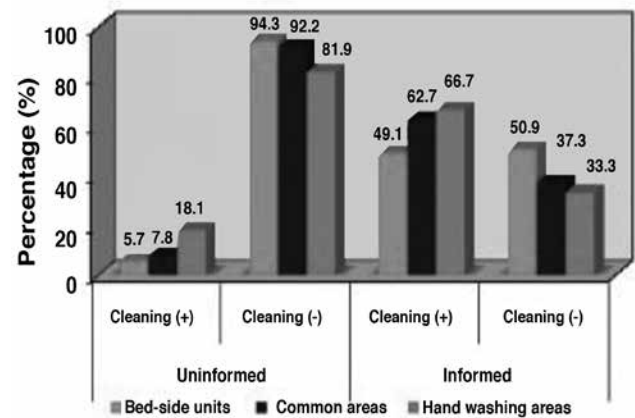


Figure 2. Rates of informed and uninformed cleaning areas

		areas cleaned (n=2268/day)			
		bed side units n (%)	common areas n (%)	hand washing areas n (%)	p
uninformed	Cleaning (+)	110 (5.7 %)	16 (7.8%)	26 (18.1 %)	0.001
	cleaning (-)	1810 (94.3%)	188 (92.2%)	118 (81.9%)	
informed	Cleaning (+)	942 (49.1%)	128 (62.7%)	96 (66.7%)	0.001
	Cleaning (-)	978 (50.9 %)	76 (37.3 %)	48 (33.3%)	

bed-side units= bed rails, ventilator controls, aspiratör circuits, oxygen outlets, iv poles, urinary catheter hangers, tray table. common area=blood gas system, computer keyboard, door handles, telephone hand washing areas=sink, soap dispenser

P-030

Sufficiency and Efficiency of Nutrition Support Unit Trainings

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Introduction: It has already known that sufficiency and accuracy of theoretical and practical knowledge of the teams who plan and give nutrition treatment, are important to reduce complications to a minimum level. In accordance with this, during training sessions we aimed to evaluate sufficiency and efficiency of trainings of nurses who give nutrition treatments.

Material and Method: It was planned to provide training to nurses who give nutrition treatments in 2014. This training included a pre-test with 20 multiple choice questions

and after training we repeated the test and evaluated the results. Test was formed as two sections; section one included 5 questions about training necessities and educational levels and section two was 15 questions and inspected knowledge levels about malnutrition diagnosis and effects, enteral-parenteral nutrition products and using methods.

Results: We excluded 16 of 56 nurses from study because of various reasons. Nurses who participated the study, have average 5.8 years of professional experience. 90% of the participants stated that they need training in the field and it was found that average number of correct answers was 9.87 (65.83%) in the pre-test and it was 11.55 (77%) in the actual test. There was 11.2% increase in average correct answers after training and this increase was found meaningful statistically. Blank answers were average 0.75 in pre-test and it decreased 3.2% to 0.27 in actual test.

Conclusion: It was reported that there is an inverse ratio between complications related to practice and quality and frequency of training which is provided to nurses who give nutrition treatments. In our study 90% of the participants stated that they need training about nutrition and training we provided, increased their level of knowledge, therefore we draw the conclusion that nutrition trainings should be provided more frequently in our hospital.

Key words: Nutrition, nurse, training

P-031

Survey of the Knowledge, Perception, and Attitude of Medical Students at the Adnan Menderes University Toward Organ Donation and Transplantation

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Introduction: Social consciousness about organ donation and transplantation is an important health problem worldwide. The medical staff and students must have enough knowledge about this subject. The aim of this study is to investigate the knowledge and thoughts of staff and students about this topic.

Material and Method: The study was conducted between 30 June 2014-1 March 2014 at the Adnan Menderes University Research and Training Hospital. Total of 415 medical staff and 320 students participated in the study. Organ donation and transplantation knowledge level survey was used for data collection. The survey had socio-demographic, knowledge and behaviour questions consistent with the literatures.

Results: The average age of the participants was 25.08 ± 6.82 years. 43.5% of all participants were medical students, 34.8% were nurses, 9.7% housekeeping staff, 7.6% doctors, and 4.4% were cleaning staff. 10.3% of the study participants had an organ donation card and 44.4% of participants accepted to donate their organs.

Conclusion: Health staff does not have a clear view and sufficient knowledge about organ donation. It revealed that educational, informative thought-provoking symposiums should be organized to provide comprehensive awareness of health workers. The desired goal in organ transplantation may be achieved by increasing the number of organ donors and it will be provided only with a good organization and teamwork

Key words: Organ donation, survey, transplantation

P-032

Effects of Positive Expiration-End Pressure (PEEP) on Arthroscopic Shoulder Surgery under General Anesthesia

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Introduction: Our study is a prospective, randomized and double-blind study on patients undergoing arthroscopic shoulder surgery in the beach chair position to evaluate the effects of PEEP on hemodynamic stability, providing a bloodless surgical field and surgical satisfaction.

Material and Method: Fifty patients with planned arthroscopic shoulder surgery were divided into two groups. While group 1 (n=25) had PEEP administered under general anesthesia, group 2 (n=25) had ZEEP (zero endexpiratory pressure) administered. The gender, ASA values, ages, heights and weights of the patients were recorded. During surgery intraarticular hemorrhage and surgical satisfaction were evaluated on a scale of 0-10 by the same surgeon who performed all operations. During surgery at the 5th, 30th, 60th and 90th minutes and at the end of surgery the heart rate, mean arterial pressure and positive inspiratory pressure values were recorded. At the end of the surgery the amount of bleeding and duration of the operation were recorded. The results were statistically evaluated.

Results: In group 1 the duration of operation and amount of bleeding were found to be significantly greater than in group 2 ($p < 0.05$). The surgical satisfaction score and clarity of the surgical field were found to be significantly lower in group 1 compared to group 2 ($p < 0.05$). MAP values in group 2 were significantly lower than in group 1. The SPO values in group 1 were significantly lower than in group 2.

The reduction in intraarticular hemorrhage allows the operation to be completed more quickly. Reducing the duration of operation and as a result the amount of time the patient spends in the beach chair position, may reduce the related complications that may occur.

Conclusion: Adding PEEP to the ventilation parameters of arthroscopic shoulder surgery in the beach chair position reduces the amount of hemorrhage in the surgical field and thus increases surgical satisfaction.

Key words: PEEP, ZEEP, arthroscopic shoulder surgery, surgical satisfaction

P-033

Noise Sources and Levels in Intensive Care Units

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Introduction: Noise has been an important problem for both patients and healthcare workers at hospitals. The study was aimed at determining noise sources and noise levels intensive care units.

Material and Method: Noise measurement was made using a Extech 407780 sound level meter. Measurements aimed at determining the unit's present level of noise were made over four weeks between 01 March 2012 and 01 April 2012.

Results: During the measurements made in intensive care units, the sources of the highest recorded noises, in order, were the voices coming from the nurses' station (84.1 dB-A) and perfusor alarm (83.2 dB-A). Additional sources of noise were the noise from the pulse oximeter alarms (81.1 dB-A), nebulizator (80.1 dB-A), monitor alarms (78.6 dB-A), ringing phones (77.4 dB-A), infusion pump alarms (76 dB-A) and ventilator alarms (75 dB-A).

Conclusion: The major sources of noise in intensive care units are the conversations, alarm sounds of medical devices and the sounds due to care activities.

Key words: Noise control, intensive care unit, intensive care environment

P-034

Hospitalization Effectiveness of Low Severity Grade ICU Patients

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Introduction: ICU admission criteria include as low priority grade, patients who don't need urgent support due to organ failure but rather continues vital signs monitor in case of deterioration. The aim of our retrospective observation study was to test the effectiveness of ICU management in low severity grade patients, in our both medical and surgical ICU served in our community hospital.

Material and Method: From October 2005 to August 2014 admitted to our ICU 655 patients, mean age 64.7 years, mean length of stay (LOS) 13.9 days, 87.48% ventilated, mean ventilation duration (V. Days): 12.02 days, mean APACHE II score on admission 21.1, predicted mortality 38.6%, actual mortality 31.29%, Standardized Mortality Ratio (Actual/predicted mortality, SMR) 0.81. From our database we looked for patients with APACHE II score below 10, witch defined as low severity grade ICU patients.

Results: Sum of low severity grade ICU patients: 43 (6.56% of total). Age: 49.6 years, LOS: 7.9 days, APACHE II score: 6.6, PV: 55.81% (4.18% of total ventilated patients), VD: 8.06 days (2.83% of total ventilation days), Predicted Mortality: 5.9%, Actual Mortality: 6.97% (1.46% of the total deaths), SMR: 1.18

Conclusion: According to our data, low severity grade ICU patients are minority and values of LOS, VD and actual mortality are lower than the total. On the other hand, SMR index recorded higher than 1 may because of the small number of these patients detected. Nevertheless, our data suggest that effectiveness of ICU management in low severity grade patients is slightly above the prediction might record as appropriate, assuming that we need to improve our early warning systems in order to recognize earlier the deterioration of low severity grade ICU patients and to appropriate support organs failure.

Key words: Hospitalization effectiveness of ICU patients, quality indicators, patient safety

P-035

Retrospective Analysis of Patients Undergoing Percutaneous Endoscopic Gastrostomy In Our Intensive Care Unit

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Introduction: Percutaneous endoscopic gastrostomy (PEG) is insertion of a tube into the stomach through the abdominal wall to ensure the nutrition of patients who can not be alimented orally. Applied for the first time in 1980 by Gauderer and Ponsky, it has been reported as an alternative to surgical gastrostomy. For the last two decades it has gained widespread use. Because it is a short time procedure well tolerated by patients, can be performed with superficial anesthesia and does not need operating room facilities and the relatively ease of implementation with low complication rates, it is the preferred method for long term enteral feeding. PEG should be considered for patients who needs nutritional support longer than 4 weeks. We evaluated the data of 12 intensive care unit patients who underwent bedside PEG gastric tube placement using the "pull" technique. Percutaneous endoscopic gastrostomy was completed and gastric tube was placed successfully in all patients. Tubes remained in stomach from 19 to 134 days (mean 56 days). Nine patients died because of the reasons unrelated to the PEG tube and three patients were discharged from the hospital while being fed via the PEG. No serious complications were seen other than nutritional intolerance in 5 patients that had been properly managed by appropriate maintenance. In this study, we aimed to retrospectively analyse and present 12 patients who had PEG placement for enteral feeding and followed in our general intensive care unit during the last year with respect to PEG-related complications and hospitalization indications.

Key words: Intensive care unit, percutaneous endoscopic gastrostomy

Table 1. Demographic datas, APACHE II scores

Mean Age (year) (min.-max)	64.7 (49-82)
Gender (Male/Female)	7/5
APACHE II scores (mean) (min.-max)	13.4 (9-21)

Table 2. Admission to the intensive care unit causes

Diagnosis	Number of Cases
Hypoxic encephalopathy	2
Cerebrovascular accident	7
Chronic Obstructive Pulmonary Disease	3

Table 3. Complications of after the PEG application

Complication	Number of cases
Implementation issues	0
Tube dislodged	1
Aspiration	0
Local ulceration, bleeding	0
Feeding intolerance	5

P-036

A Retrospective Analysis of Renal Transplant Recipients Treated in the Intensive Care Unit

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Introduction: Renal transplantation is accepted as the primary treatment for end stage renal failure. However, renal transplant recipients are prone to early complications associated with surgery as well as infectious complications caused by immunosuppressive treatments, and graft rejection, in which case they require treatment in the intensive care unit (ICU). We aimed to investigate the demographic properties, cause for ICU stay and treatment results of renal transplant recipients treated in the ICU.

Material and Method: Renal transplant recipients treated in the ICU between 2008 and 2014 were retrospectively analyzed as to their demographic properties and properties and outcomes of ICU stay.

Results: Thirty-six renal transplant recipients were treated in the ICU during the study period. The mean age of patients was 47.75 (± 15.65), 16 (44.4%) of them being female. Five (13.9%) patients were admitted for early postoperative follow-up, while other major causes for admission were 19 cases (52.8%) of septic shock and 10 cases (27.8%) of pneumonia. Mean time from hospital to ICU admission was 12.71 (± 16.14) days and 18 cases (50%) were diagnosed with graft rejection. The mean Acute Physiologic and Chronic Health Evaluation II score for all patients was 23.46 (± 9.10). Thirty-five (97.2%) patients required mechanical ventilation and 27 (75%) patients required inotropes/vasopressors. The mean length of stay in the ICU was 20.97 (± 41.32) days, with 25 (69.4%) cases resulting in death in the ICU. Thirty-three (88.9%) patients required renal replacement therapy while in the ICU.

Conclusion: The major cause for ICU admission in renal transplant recipients was septic shock. Mortality rate was high in renal transplant recipients who required ICU admission due to sepsis and its complications.

Key words: Intensive care unit, postoperative complications, renal transplantation

P-037

Investigation of the Incidence of Ventilator Associated Pneumonia in Intensive Care Patients

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Introduction: Ventilator associated pneumonia (VAP) is defined as the lower respiratory tract infections developed after 48-72 hours following the intubation. The aim of this study was to investigate the incidence of VAP related factors and mortality rates in critical care patients.

Material and Method: 220 patients were included into the study. Demographic data (age, gender, height, weight, body mass index, APACHE II and SOFA scores), systemic diseases (diabetes mellitus, hypertension, hyperlipidemia, myocardial infarction history) were all recorded. Fiberoptic bronchoscope was done during the the first 2 days of intensive care unit stay, and bronchoalveolar lavage was taken from all the patients. Ventilator associated pneumonia diagnosed according to the criteria of the Centers for Disease Control and Prevention (CDC) with of clinical pulmonary infection score (CPIS). ICU stay, duration of mechanical ventilation, mortality were all recorded.

Results: The overall VAP incidence was 51.36% (n=113). The clinical pulmonary infection score was found as 8.04 ± 1.03 in VAP group while 1.75 ± 1.88 in non VAP group ($p=0.001$). The age of VAP group was 58 ± 12.79 years while 51.37 ± 15.87 years in non-VAP group ($p=0.001$). In VAP group hypertension and diabetes mellitus are observed more frequently. Development of enteral nutrition in patients with ventilator associated pneumonia were significantly higher than those of parenterally fed patients (enteral: by 36.4% and 25.5% $p=0.006$; parenteral: 25% and 19,1%, $p=0.042$). The length of stay (12.38 ± 5.81 and 10.79 ± 5.91 days, $p=0.045$), duration of mechanical ventilation (9.67 ± 4.84 days and 6.7 ± 3.87 days, $p=0.001$) and mortality rates (24.5% and 15.5% $p=0.019$) were significantly higher in the group that developed VAP.

Conclusion: VAP; increases duration of intensive care unit stay, antibiotic use and mortality.

Key words: Ventilator associated with pneumonia, intensive care unit, mortality

P-038

Acute Intoxication Due To Bonzai

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Introduction: Bonzai is a cheap synthetic cannabinoid increasing in addiction in Turkish population. It is also known as "Jamaika" in Turkey and "Spice" or "K2" in Europe and the US. Acute intoxication of this substance may result in respiratory arrest. We aimed to retrospectively analyze the patients referred to our intensive care unit (ICU) who needed respiratory support due to respiratory arrest or deep confusion.

Material and Method: 11 patients who presented with acute respiratory failure and who gave medical history on bonzai consumption after extubation were included to the study. The study was carried out retrospectively; bonzai intoxication patients were analysed out of the patients who stayed in the third stage ICU after sedative use between 1 March 2014 and 1 March 2015.

Results: 10 of the patients were male, 1 patient is female. Mean age of the patients was 26 ± 5 (range: 19-39). Mean APACHE II score was respectively 10 (min: 6, max: 20). Mean ICU stay is 48 hours. 5 patients needed intubation. After treatment in ICU 4 of the patients were discharged to home, 4 of the patients were discharged to internal medicine department, 2 of the patients refused treatment and left the hospital, 1 patient was transferred to psychiatry hospital. None of the patients had end organ damage.

Conclusion: Although synthetic cannabinoids are illegal in Turkey, there is a bonzai epidemic in our country. Bonzai intoxication must be thought in patients admitted with acute respiratory failure even a bonzai consumption history is absent.

Key words: Intoxication, bonzai, respiratory failure, intensive care unit

P-039

The Bibliometric Analysis of Scientific Articles About Intensive Care Unit in Turkey and Worldwide

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Introduction: Evaluations about the scientific publications always arouse the interest of scientists. In the recent years, an increase was observed in the studies about the evaluation of scientific publications. In this study, we aimed to investigate the scientific publication performance of Turkey and other global countries, about intensive care unit by bibliometric analysis. Concurrently, we aimed to understand the position of our country about the scientific development, over against the other countries.

Material and Method: In Thomson Reuters Web of Science database, a screening was performed under the 'intensive care unit' subject heading, between the years of 2005-2014.

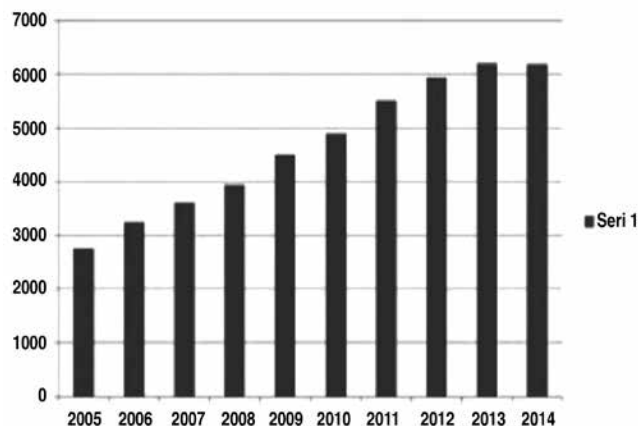


Figure 1. Number of scientific publications about "intensive care unit" subject by all countries, worldwide 2005-2014

Results: The number of publications were 46772 in the field of intensive care unit during the last ten years (Figure 1). According to the our study, the main contribution to intensive care unit publications comes from United States of America (Table 1). The number of annual publications from Turkey were duplicated in the last five years. Additionally, 'Turkish Journal of Pediatrics' was the most-preferred journal by the authors in accordance with other journals in Turkey (Table 2). And, "Critical Care Medicine" was the most-preferred journal by the foreign authors, worldwide (Table 2).

Conclusion: It is revealed that, along with the development of our country, there is an increase in the number of scientific publications. In order to increase the scientific achievement of Turkey, consistent and continuous scientific publication policies sponsored by the government are needed.

Key words: Intensive care unit, publication, bibliometrics

Table 1. The list of first twenty countries in order to the numbers of publications on the "intensive care unit" subject, 2005-2014

No	Countries	Number of Publish
1.	USA	17140
2.	England	3260
3.	Canada	2895
4.	France	2842
5.	Germany	2476
6.	Australia	2436
7.	Italy	2344
8.	Netherland	1931
9.	Spain	1674
10.	Brazil	1501
11.	Turkey	1452
12.	China	1246
13.	Belgium	1119
14.	Switzerland	959
15.	Taiwan	928
16.	Japan	876
17.	Greece	787
18.	Sweden	746
19.	India	694
20.	South Korea	646

Table 2. The list of most-preferred journals about "intensive care unit" subject in Turkey and worldwide (2005-2014)

No	World	Turkey
1.	Critical Care Medicine	Turkish Journal of Pediatrics
2.	Intensive Care Medicine	Turkish Journal of Medical Sciences
3.	Critical Care	Turkish Journal of Thoracic and Cardiovascular Surgery
4.	Journal of Critical Care	Intensive Care Medicine
5.	Pediatric Critical Care Medicine	Pediatrics International
6.	Infection Control And Hospital	Epidemiology Journal of Maternal Fetal Neonatal Medicine
7.	Journal of Hospital Infection	Saudi Medical Journal
8.	Journal of Trauma Injury Infection and Critical Care	Türkiye Klinikleri Tıp Bilimleri Dergisi
9.	Plos One	Journal of Hospital Infection
10.	American Journal of Infection Control	Journal of Critical Care

P-040

Correlation Between pRBC Transfusion and Actual Mortality in ICU Patients

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Introduction: Transfusion is not risk free, and is associated with allergic reactions, lung injury, infectious disease, circulatory overload and immunosuppression in recipients, while cost of blood screening and storage is high. On the other hand, patients who died into the ICU, mostly due to multiple organ failure, may have increased demand for pRBC transfusion.

Material and Method: The aim of our retrospective observation study was to test the hypothesis that a correlation exists between pRBC transfusion and actual mortality, in our both medical and surgical ICU served in community hospital.

Results: From 2005 to 2014 admitted to our ICU 698 patients. Mean age

(years) 63.82, mean APACHE II score on admission: 20.25, mean length of ICU stay (LOS, days): 13.45, mean duration of mechanical ventilation per patients ventilated (VD, days): 11.63. From our database we looked for the age and the following values and indexes according pRBC per year from 2005 to 2014 (mean values): pRBC cross matched (c-m) and transfused (tran): Total, per patient, per hospitalization days (HD), per patient under mechanical ventilation (pts V), per ventilation days (VD) and the ratio pRBC cross matched over transfused. Using linear correlation method, we looked for linear slope, correlation coefficient (r), and coefficient of determination (r²), and by linear regression method using ANOVA test we looked for p value, according actual mortality and pRBC transfusion (Table 1).

Conclusion: According to our data, there was no statistically significant correlation detected between actual mortality and pRBC transfusion and cross matched indexes, nor cross matched over transfused. Our data suggest that even though patients who died into the ICU, mostly due to multiple organ failure, continuously deteriorate their physical status till their death, these patients do not perform increased demand for pRBC transfusion during their ICU hospitalization.

Key words: pRBC, transfusion, actual mortality

Table 1. Correlation between actual mortality and pRBC transfusion and cross matched indexes

	Slope	r	r ²	S. E.	L. C.I	U. C.I.	p value
Total c-m	4.628	0.453	0.205	3.213	-2.78	12.03	0.1879
Total Trans	3.590	0.504	0.254	2.171	0.504	0.254	0.1368
c-m per Pt	-0.0112	-0.108	0.011	0.036	-0.108	0.011	0.7654
Trans per Pt	-0.003	-0.038	0.001	0.029	-0.072	0.063	0.9153
c-m per H.D.	-0.000	-0.093	0.008	0.001	-0.005	0.004	0.7979
Trans per H.D	-0.263	-0.001	2.504	0.001	-0.004	0.004	0.9965
c-m per Pt. V.	-0.008	-0.083	0.006	0.036	-0.092	0.075	0.8195
Trans per Pt.V	-0.000	0.006	4.64	0.031	-0.073	0.071	0.9851
c-m per V. D.	-0.001	-0.183	0.033	0.003	-0.009	0.005	0.6129
Trans per V.D.	-0.000	-0.097	0.009	0.002	-0.006	0.005	0.7879
c-m over Tran	-0.005	-0.125	0.015	0.014	-0.039	0.028	0.7309

P-041

Correlation Between pRBC Transfusion and Standardized Mortality Ratio in ICU Patients

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Introduction: Transfusion is not risk free, and is associated with allergic reactions, lung injury, infectious disease, circulatory overload and immunosuppression in recipients, while cost of blood screening and storage is high. On the other hand, low standardized mortality ratio (SMR=actual/predicted mortality rate) reflects the effectiveness of ICU hospitalization and may reflect also the effectiveness of pRBC transfusion policy performance.

Material and Method: The aim of our retrospective observation study was to test the hypothesis that a correlation exists between pRBC transfusion and SMR, in our both medical and surgical ICU served in community hospital.

Results: From 2005 to 2014 admitted to our ICU 698 patients. Mean age (years) 63.82, mean APACHE II score on admission: 20.25, mean length of ICU stay (LOS, days): 13.45, mean duration of mechanical ventilation per patients ventilated (VD, days): 11.63. From our database we looked for the age and the following values and indexes according pRBC per year from 2005 to 2014 (mean values): pRBC cross matched (c-m) and transfused (tran): Total, per patient, per hospitalization days (HD), per patient under mechanical ventilation (pts V), per ventilation days (VD) and the ratio pRBC cross matched over transfused. Using linear correlation method, we looked for linear slope, correlation coefficient (r), and coefficient of determination (r²), and by linear regression method using ANOVA test we looked for p value, according SMR and pRBC transfusion (Table 1).

Conclusion: According to our data, there was no statistically significant correlation detected between SMR and pRBC transfusion and cross matched indexes, nor cross matched over transfused. Our data suggest that whatever the severity of illness, even though when effectiveness of ICU hospitalization detected high and SMR low, these patients did not perform increase demand for pRBC transfusion during their ICU hospitalization.

Key words: pRBC, transfusion, SMR

Table 1. Correlation between SMR and pRBC transfusion and cross matched indexes

	Slope	r	r ²	S.E.	L. C.I.	U. C.I.	p value
Total c-m	-73.074	-0.161	0.026	157.84	-637.06	290.91	0.6557
Total trans	-19.345	-0.061	0.003	111.54	-276.09	237.4	0.8664
c-m per Pt	-1.624	-0.353	0.1248	1.521	-5.131	1.883	0.3167
Trans per Pt	-1.051	-0.279	0.077	1.278	-3.998	1.897	0.4349
c-m per H.D	0.0069	0.028	0.0007	0.088	-0.196	0.2105	0.9388
Trans per H.D	-0.0121	-0.0524	0.0027	0.0817	-0.2007	0.1765	0.8857
c-m per Pt V	-1.085	-0.2358	0.0556	1.578	-0.233	0.0556	0.5119
Trans per Pt V	-0.8115	-0.205	0.042	1.363	-3.95	2.333	0.5689
c-m per V.D	-0.111	-0.269	0.072	0.141	-0.438	0.214	0.4519
Trans per V.D	-0.078	-0.228	0.052	0.117	-0.228	0.052	0.5228
c-m over Tran	0.7887	0.1425	0.1811	0.593	-0.5767	2.156	0.2202

P-042

Examination Of Autonomic Nervous System Activity with Heart Rate Variability by Holter Monitorization in Patients Under Mechanical Ventilation in Intensive Care Unit

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Introduction: Continuous ECG monitoring is an effective tool for assessing the frequency and duration of autonomic nervous system activity. In this study we aimed to observe the autonomic nervous system activity changes in patients with invasive mechanical ventilation in the intensive care unit (ICU) by examining the parameters of heart rate variability (HRV).

Material and Method: After obtaining ethical approval, 100 patients older than 18 years and at least 24 hours followed in ICU, were divided into two groups. Patients with respiratory failure were intubated and received mechanical ventilation for at least 24 hours in group M and non-intubated ICU patients during hospitalization enrolled in group K. Patients were excluded if they had cardiac arrhythmias or coronary artery disease. ECGs of patients in both groups were recorded for 24-hour-period with 3-channel ambulatory Holter ECG recording devices (North East's DR200/HE, North East Monitoring, Inc.). So group M occurred from 41 patients and group K from 42 patients. The same type of mechanical ventilators were used in all patients. Patients undergoing mechanical ventilation, ventilated in a same mechanical ventilation mode (P-SIMV) and parameters (frequency: 14/minute, PEEP: 5 cmH₂O and tidal volume: 6-8 ml/kg).

Results: The groups were similar in terms of demographic characteristics and indications for admission to ICU. HRV variables which consisted of LF, HF, HF_n, LF_n, VLF, TP, the LF/HF ratio and Global sympathetic index, were compared and there was no significant difference between two groups. In addition, there was no statistically significant difference between two groups for the number of atrial arrhythmia, maximal, minimal and average heart rate, RR, QT and QTc intervals. Patients in group M have higher ventricular arrhythmia than in group K (59.53±107.46 vs. 54.95±185.14 and p=0.0083).

Conclusion: According to the results of our study, there was no change in the autonomic nervous system activity during mechanical ventilation treatment in hemodynamically stable patients without cardiac disease in ICU.

Key words: Autonomic nervous system, heart rate variability, holter, mechanical ventilation

P-043

Extracorporeal Lung Support in ARDS: A single-center experience

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Introduction: To present our experiences of extracorporeal lung support (ECLS) systems in ARDS refractory to conventional protective ventilation.

Material and Method: We evaluated patients who recieved ECLS during 2010-2014. Data are collected from files related to the cause, type of extracorporeal membrane oxygenation (ECMO), duration and cessation of ECMO treatment, related complications and other supportive modalities. Respiratory changes were screened over ventilation parameters and blood gas changes.

Results: A total of 13 patients (7 female, 6 male) with a median age of 30 years (15-64) recieved ECLS treatment, three of which was arteriovenous (AV) via a pumpless device (Interventional Lung Assist- ILA) and five patients needed extracorporeal support due to predominance of hypercapnia. The rest were VV ECMO. The cause of ARDS in five patients was polytrauma including thoracal injury and the rest was pneumonia four of which were related to pregnancy. The median duration of pre-ECMO ventilation was 5 days (range 1-25) and the median duration of ECMO treatment was 12.5 days (range 2-17). Mean length of stay in ICU was 37.5 days (range 4-74) and median duration of mechanical ventilation was 27,5 days (range 4-65). Overall survival rate was 61.5% (n=8), two patients out of three who were given ILA support died and three were dead under ECMO. Six patients developed complications related to treatment; hemorrhage in 4 cases, one disseminated intravascular coagulopathy, one intravascular hemolysis and unexpected occlusion in one case. Regarding the reasons of cessation of ECMO; two patients were decannulated because of catheter related infection and 5 ECMO were ceased due to occlusion, two were ended after weaning from ventilation and the two died on extracorporeal support.

Conclusion: The use of ECLS offers an alternative to rescue ARDS patients unresponsive to conventional ventilation strategies. It seems wise to prompt the early institution of ECLS in such cases.

Key words: ARDS, extracorporeal life support, ECMO

Table 1. Characteristics of patients supported by extracorporeal membrane oxygenation, including the respiratory and hemodynamic support throughout ECMO support

ECMO type: VV/AV (n)	10/3		
ECMO indication: hypoxemia / hypercarbia	8/5		
CRRT (n)	7		
Inotropic support (n)	7		
Complication (n)			
Bleeding from canulation sites	2		
Pulmonary bleeding	1		
GIS bleeding	1		
Catheter infection	2		
DIC	1		
Occlusion (within 7 days)	1		
Hemolysis	1		
None	4		
PreECMO LOS (day)- median (min-max)	5 (1-25)		
ECMO duration (day)- median (min-max)	12.5 (2-17)		
Mechanical ventilation (day)- median (min-max)	27.5 (4-65)		
Total LOS (d)- median (min-max)	37.5 (4-74)		
Mechanical ventilation	First day	Throughout support	Last day
Patient under MV (n)	13	13	11
PCV	7	5	3
PSV	4	5	8
PRVC	2	1	0
*PEEP (cmH ₂ O)	14,5 (10-19)	10 (8-18)	7 (5-11)
*Vt (ml/ideal kg)	7 (6-8.3)	3.9 (2.6-6.04)	5.2 (2.8-6.1)
*PaO ₂ /FiO ₂	95 (34-180)	159 (45-300)	165 (45-360)
*PaO ₂ (mmHg)	54 (29-80)	61 (34-123)	75 (34-130)
*PaCO ₂ (mmHg)	89,5 (55-102)	47,7 (37-61)	34 (28-61)
Dopamin (n)(mcg/kg/min)	1 (10)	1 (5-15)	0
Dobutamine (n)(mcg/kg/min)	1 (10-20)	2 (10-20)	0
Norepinephrine (n)(mcg/kg/min)	2 (0.1-1)	3 (0.1-0.8)	2 (0.1-1,5)
*median (min-max), ECMO: extracorporeal membrane oxygenation, VV: veno-venous, AV: arterio-venous, CRRT: continuous renal replacement therapy, LOS: length of stay in intensive care, MV: mechanical ventilation, PCV: pressure asist-controlled ventilation, PSV: pressure support ventilation, PRVC: pressure regulated volume-controlled ventilation, PEEP: positive end-expiratory pressure, Vt: tidal volume			

P-044

Analysis of the Compatibility of Estimated and Realised Mortality Rates According to the APACHE II Scoring System

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Introduction: APACHE II scoring is used for the assessment of the prognosis of the intensive care patients.

We planned to compare mortality risks calculated using the first 24 hours APACHE II scores with the real mortality rates occurred in our ICU.

The study was conducted in 21 beds-level three mix ICU. We retrospectively screened the estimated mortality risks and real mortality rates in the statistical data base system of the hospital from 01.01.2014 to 31.12.2014. First 24 hours APACHE scores and estimated mortality rates were calculated automatically on the related page of the computerised

system once the data of the patients were recorded. Actual mortality rates were also collected in the statistical department. The numbers of the patients entered in each percentage of mortality risk interval were compared to the actual numbers of death for each month. If there was any discrepancy, then 'root cause analysis' was performed.

1188 patients were admitted to ICU in the study period. Patients were categorised in ten intervals from 0-10% to 90-100%. 732 patients were discharged from the unit and 456 were died, revealing the overall mortality rate as 38.3% (Table 1).

The highest number of the admitted patients were in the interval of 81-90% of estimated mortality rate (n=196) followed by the interval of 71-80% (n=180). The number of the patients who had over 80% risk of death were 710 and the actual rate of death at this interval was found to be 56.75%.

The root cause analysis was performed for 9 patients; for 5 patients (0-10% risk of death), the scores were recorded automatically low during re-admission after an intervention like surgery, which is a problem related with the data recording system. In two patients APACHE II scores were found to be recorded mistakenly low and in 2 patients death were accepted as 'unexpected' according to the analysis.

Key words: APACHE II, death, analysis, calculation

Table 1. Calculated numbers of death according to the 24 hours APACHE II scores and Realised death rates of the patients; in the percentage interval of risk ratios

	0-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%
	ER-RR	ER-RR	ER-RR	ER-RR	ER-RR	ER-RR	ER-RR	ER-RR	ER-RR	ER-RR
Jan	1-0	2-0	10-0	14-1	12-2	11-4	12-3	22-17	22-20	4-4
Feb	2-1	12-1	8-2	10-1	6-3	10-1	12-5	11-7	15-13	7-7
Mar	2-2	17-0	11-0	10-1	9-1	9-3	6-5	9-6	19-17	6-4
Apr	3-0	11-0	7-1	7-2	7-2	8-2	7-4	9-5	12-10	10-7
May	5-0	9-0	4-0	8-0	11-0	11-1	15-8	24-13	14-12	2-2
Jun	2-1	5-0	12-1	20-1	8-0	7-1	9-3	15-10	16-13	7-7
Jul	2-0	6-0	19-4	14-3	5-3	8-2	4-2	8-4	14-12	3-3
Aug	2-0	8-0	13-0	15-3	10-2	19-4	8-3	13-7	13-12	2-2
Sep	2-0	14-0	13-2	7-1	6-2	18-4	18-4	22-14	22-18	5-3
Oct	2-0	3-1	7-0	7-0	8-1	14-2	19-6	20-14	13-12	2-2
Nov	2-2	4-0	7-0	11-1	12-0	11-0	10-1	15-6	21-14	5-5
Dec	2-2	10-0	11-1	10-2	4-0	16-3	13-6	12-9	15-11	6-4

ER: Estimated rate of death RR: Realised rate of death

P-045

Evaluation of the Pressure Ulcers After Using Barrier Cream in Critically Ill Patients

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Introduction: Pressure ulcers (PU) are hard to heal, so its important to prevent from occurring in the first place. Various topical agents have been used for this purpose; pressure ulcers are less likely to occur when skin is healthy and nourished. Our aim is to share our pressure ulcer datas in intensive care unit (ICU) after using a barrier cream (Cavilon Durable Barrier Cream®, 3M Health Care) which has the following active ingredients; dimethicone for protection, acrylate terpolymer for durability and adhesion, coconut oil and paraffin for moisturizing.

Material and Method: The cream was applied all patients without PU as a skin protector twice a day. Patients were observed by Norton scale acceptance to ICU and daily about PU area and grade. Pressure ulcers were classified according to the four grades of European pressure ulcer advisory panel.

Results: We observed that after using barrier cream three months ratio of PU was decreased from 6.6% to 4.5% (Table 1). Seventy five percent of the 17 PU were first grade and 25% were second. Eight patients were 10 risk score, 6 were 8 and 3 were 6. Mean duration of stay in ICU was 13 days of patients with PU. The ratio of PU didn't exceed 6% during a year.

Conclusion: Skin can be damaged by many factors and the prevention of skin sometimes a difficult problem to manage. These kind of topical agents can be useful in the management of dry skin and prevention of PU.

Key words: Barrier cream, pressure ulcer, intensive care unit

	Number of patients	Number of patients with PU	The ratio of the PU
Three months before topical agent	330	22	6.6%
Three months after topical agent	370	17	4.5%

P-046

Prognostic Scoring Systems Assessment in Patients With Intensive Care Unit

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Introduction: In this study we aimed to compare the effectiveness of different scoring systems for the evaluation of the prognosis of the patients hospitalized in the Intensive Care Unit.

Material and Method: The study was conducted on 110 cases over the age of 18 and hospitalized 24 hours or more lying in intensive care units. The patients were divided into 2 groups according to prognosis of patients; Group Died and Group Survived. Various scoring systems have been developed to predict the prognosis. In these systems, to determine the prognosis taking into consideration factors such as the type of disease, the patient's physiological reserve and response to treatment were examined. These scoring systems was determined as APACHE, SAPS, MPM and SOFA.

Results: Between the groups in age, intensive care unit length of stay, additional diseases, there is no a significant difference in terms of the SOFA score. Group Died patients with APACHE II, III, IV, MPM, SAPS II and LODS mean score was significantly higher than in Group Survived patients. There was not a significant relationship between length of ICU stay with APACHE III, APACHE IV, MPM, SOFA, SAPS II, and LODS scores although there was a significant correlation between length of stay intensive care unit with APACHE II score. APACHE III has the highest sensitivity to detect the prognostic mortality by rate of 81%. SAPS II has the highest sensitivity to detect at the sixth month prognostic mortality by rate of 76.2%.

Conclusion: Consequently; these scoring systems may show significant differences in performance when applied to different populations may be considered. Among the reasons for the implementation of this scoring system errors and unknown factors that may be considered when the effect on the results.

Key words: Intensive care, severity, and mortality

Scoring of systems	Group Died	Group Survived	p
APACHE II	21.60±8.8	16.21±8.1 16.21±8.1	0.002
APACHE III	65.95±24.9	43.74±19.9	0.001
APACHE IV	80.46±20.9	65.62±17.3	0.001
MPM	22.72±25.1	16.08±21.1	0.01
SOFA	7.38±2.9	6.43±3.6	0.01
SAPS II	34.71±14.1	24.91±11.2	0.001
LODS	6.19±2.9	4.28±2.3	0.001

P-047

Our Intensive Care Experience in Post Resuscitation Patients with Cardiopulmonary Arrest

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Introduction: In cardiopulmonary arrest patients after successful cardiopulmonary resuscitation (CPR), even though spontaneous circulation was returned, mortality and morbidity is high. Rate of discharge from hospital after cardiac arrest was 17.6% for in-hospital cardiopulmonary arrest; while 10.7% for non-hospital cardiopulmonary arrest. In this study, the aim was to evaluate neurological and vital status after successful cardiopulmonary resuscitation in patients admitted to the intensive care unite.

Material and Method: The patients admitted to Anesthesiology Intensive Care Unit from March 2013 to March 2015 were examined retrospectively. Patients with spontaneous circulation after CPR were included. Demographic characteristics, GCS, APACHE II, SOFA scores at admission, comorbid diseases, CPR duration, hypothermia application rate, mortality rate were assessed.

Results: 28 patients admitted to the intensive care unit after CPR and 11 were men (39.2%). In admission, mean APACHE II score was 26 and mean SOFA score was 7. 11 patients (39.3%) were out of hospital cardiac arrest; 17 (60.7%) in-hospital cardiac arrest. In 12 patients (42.8%) respiratory failure, 6 (21.4%) sepsis, 5 (17.8%) myocardial infarction, 2 (7.1%) postoperative cardiac arrest, 3 (10.7%) post-traumatic arrest developed. The average duration of CPR was 12.4 minutes, post CPR GCS was 5.6 and thirty day GCS was 6. 6 of the patients (21.4%) developed recurrent cardiopulmonary arrest within the first 24 hours. In 6 patients (2.4%) PEG and tracheostomy were performed in the same patients. 14 patients (50%) needed hemodialysis. The average length of stay in the ICU was 30.4 days; with mortality rate of 67.8%. 2 patients were discharged home (7.1%), 1 patient was transferred to the palliative care unit (3.5%) and 6 (21.3%) patients were discharged to services.

Conclusion: In our unit, post succesful resuscitation mortality and morbidity seemed to be high similar to the literature. To develop useful strategies in this field, National data should be collected.

Key words: Intensive Care, cardiopulmonary resuscitation, cardiopulmonary arrest, mortality

P-048

Microorganisms Causing Central Venous Catheter Associated Blood Stream Infection in Intensive Care Units and the Sensitivity of Antibiotics

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Introduction: The aim of our study was to determine the microorganisms that cause central venous catheter associated blood stream infection (CVCA-BSI) and the antibiotics sensitivity of *Acinetobacter* spp. which is the most common cause.

Material and Method: Central venous catheter was inserted into patients of our 16-bed intensive care unit according to CDC criterias. Blood cultures were sent to our microbiology laboratory and the proliferated agents were identified with classical and/or aouthomatized methods. Antibiotic sensitivity tests were done by the Kirby-Bauer method.

Results: *Acinetobacter* spp. strains were found to be the most common cause of CVCA-BSI in three years, and the other agents were *Candida* spp. and Coagulase Negative *Staphylococcus*. The most common agents were summarised on the table below:

Acinetobacter species were all found sensitive to colimisin, however all species resistant to imipenem, meropenem, piperacilline-tazobactam and ceftazidime. The antibiotic sensitivity of *acinetobacter* rates are on the table below:

Conclusion: Central venous catheter associated blood stream infections are important and severe conditions in intensive care units. It is essential to take the preventions and selecting empiric antimicrobial therapy. So that, observing the microbial flora of intensive care units and the antibiotic sensitivity of microorganisms are important for the treatment of multi-resistant agents.

Key words: Catheter associated blood stream infections, central venous catheter, *acinetobacter*

Table 1. The most common agents of catheter associated blood stream infection

Microorganism	CA-BSI	%
<i>Acinetobacter</i> spp.	26	31.3
<i>Candida</i> spp.	17	20.5
CNS	11	13.4
<i>Klebsiella</i> spp.	9	10.8
<i>S. aureus</i>	6	7.2
<i>Pseudomonas</i> spp.	5	6.0
<i>Enterococcus</i> spp.	4	4.8
<i>Enterobacter</i> spp.	3	3.6
<i>E. coli</i>	2	2.4
TOTAL	83	100

CNS: Coagulase Negative *Staphylococcus*

P-049

The Effect of Nutrition Support Team Activities

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Introduction: Nutritional support is a key component of treatment strategies and it gained importance in recent years. The establishments of nutrition support teams in hospitals are increasing and their training programmes provide guidance to specialists and deliver appropriate nutritional care to all patients. The nutrition support team has been actively working in our hospital since the year 2011. In this study, we aimed to explore the effects of nutrition support team activities which

were started in the year 2011, on prognosis of patients with malnutrition. **Material and Method:** The data of patients with NRS 2002 score ≥ 3 , and hospitalized for ≥ 48 hours were included in this retrospective analysis. The length of hospital stay, and mortality rates in 2011, 2012, 2013 and 2014 were compared.

Results: The ratio of patients with NRS 2002 score ≥ 3 in 2011, 2012, 2013 and 2014 were 8.7%, 8.7%, 7.2% and 6.3%, respectively. The ratio of patients with NRS 2002 score ≥ 3 in 2011 and 2012 were significantly higher than the ratios in 2013 and 2014 ($p < 0.05$). The mortality in 2011 (31.4%) was significantly higher than the mortality of the year 2012, 2013 and 2014 (23.6%, 22.1%, and 24.1%, respectively) ($p < 0.05$). There was no difference between mortality of 2012, 2013 and 2014.

There was significant difference between mean length of hospital stay among years. Mean length of hospital stay in 2011 (11.9 ± 12.1 days) was significantly lower than 2012 and 2013 (13.7 ± 13.4 days and 14.7 ± 13.8 days, respectively). The mean length of hospital stay in 2014 was 13.3 ± 12.1 days and significantly lower than the 2013 ($p < 0.05$).

Conclusion: Hospital stay duration was increased but mortality was declined after 2011. We concluded that nutrition support team activities has positive impact on efficacy of treatment in patients with malnutrition.

Key words: Nutrition support team, mortality

P-050

Correlation Between Incidence of VAP and use of Sedative Agents in ICU Patients

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Introduction: Inappropriate or too heavy sedation may prolong the weaning time from mechanical ventilation and increase the risk for developing late Ventilator Associated Pneumonia (VAP).

Purpose: The aim of our observation retrospective study was to test the hypothesis that a correlation exists between the incidence of VAP and the use of sedative and neuromuscular blockage agents in our both medical and surgical ICU served in community hospital.

Material and Method: From 2008 to 2012 admitted to our ICU 384 patients. From our database we looked for incidence of VAP (% ventilation days) as well as the use of the following agents as items per ventilation day per ventilated patient: Midazolam (amp 50 mg), Propofol (vial 2% 50 ml), Cisatracurium (amp 5ml/10mg) per year from 2008 to 2012. Using linear correlation method, we looked for linear slope, correlation coefficient (r), and coefficient of determination (r^2), and by linear regression method using ANOVA test we looked for p value, according incidence of VAP and use of Midazolam, Propofol and Cisatracurium (Table 1, 2).

Conclusion: According to our data, there was no statistically significant correlation detected between incidence of VAP and use of neither Midazolam nor Propofol. On the other hand, there was statistical significant, strong positive linear correlation found between incidence of VAP and use of Cisatracurium. Our data suggest that use of sedatives without neuromuscular blockage agents did not affect the incidence of VAP.

Key words: VAP, sedatives, patient safety

Table 1. Incidence of VAP and use of sedatives and neuromuscular blockage agents per year

	2008	2009	2010	2011	2012
Incidence of VAP	5.54	9.91	8.58	6.06	9.37
Use of Midazolam	0.39	0.97	0.35	0.12	0.22
Use of Propofol	3.04	4.16	2.83	1.55	2.74
Use of Cisatracurium	0.04	0.12	0.06	0.03	0.06

Table 2. Correlation between incidence of VAP and use of

	Slope	St. Error	r	r ²	L. CI	U. CI	p value
Midazolam	0.088	0.081	0.530	0.281	-0.172	0.349	0.3581
Propofol	0.2818	0.2173	0.5994	0.3592	-0.409	0.973	0.2857
Cisatracurium	0.017	0.006	0.8268	0.6836	0.000	0.034	0.0424

P-051

Evaluating Pneumonia Risk Factors at ICU Treated Blunt Trauma Patients

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The whole worldwide trauma is the most common cause of death across the population aged 1-44 years old. Our aim is to reduce the morbidity and mortality due to pneumonia by finding out the risk factors of pneumonia in these patients.

In our study, all trauma patients who stayed at hospital longer than 24 hours admitted to Izmir Training and Research Hospital Anesthesiology and Reanimation intensive care unit from January 2009 through October. Pneumonia is defined according to the CDC criteria. Potential risk factors

was identified and data was recorded to SPSS 21.0.

We collected 130 patient's data, in our country we have no 112 record system so we couldn't reach patients pre-hospital data. Pneumonia occurred %32,3 of our patient. We found sedative drug use, entubation, nasogastric tube insertion as risk factors for pneumonia. There was no significance between GCS, blood transfusion, co-morbidity, ISS, AIS, entubation location and pneumonia.

ESPEN 2006 guideline recommended that gastrostomy insertion which patients have nasogastric tube feeding more than 30 days. In many studies showed that either nasogastric tube usage or aspiration increases the risk of pneumonia. There is no clear information about; PEG is preventing from aspiration. In this study we found out nasogastric tube insertion as a risk factor. Sedation can facilitate regurgitation and aspiration and have immunosuppressive effects. Sedation increases the risk of pneumonia. Intubation allows positive pressure ventilation and may help avoid atelectasia but can facilitate orofaringeal aspiration and direct tracheal implantation. In this study we found out intubation as a risk factor. As a result patients who will not feed orally for a long time and have a high risk of aspiration, it is better to implementing PEGJ for more oral hygiene, less lower esophagus sphincter dysfunction and less risk of pneumonia.

Key words: Pneumonia, trauma, intensive care unit

Table 1. The relationship between pneumonia and risk factors

	All Patients	Proportion	Without pneumonia	Proportion	With Pneumonia	Proportion	p level
Intubated patients	85	65.38%	48	36.9%	37	28.5%	.000
Spontaneous breathing	40	30.77%	25	19.2%	15	11.5%	.399
Inotropic support	33	25.38%	24	18.5%	9	6.9%	.474
30 days mortality	36	27.69%	26	20.0%	10	7.7%	.494
sedatised	69	53.08%	37	28.5%	32	24.6%	.000
GCS<8	56	43.08%	35	26.9%	21	16.2%	.271
Mechanically ventilated days	7,58	±11.546	3,88	±5.771	±15,33	16.053	.000
Blood transfusion (Unit)	1,67	±2.140	1,68	±2.236	±1,64	1.948	.923
Length of hospital stay	23,22	±22.394	17,33	±16.335	±35,57	27.946	.000
Length of icu stay	17,69	±20.788	10,91	±13.748	31,90	±25.553	.000
Diabetics	6	4.62%	3	2.3%	3	2.3%	0.387
COPS	3	2.31%	1	0.8%	2	1.5%	0.243
Nasogastric tube insertion	73	56.15%	43	33.1%	30	23.1%	.015

P-052

Tracheal Gas Insufflation as an Alternative Rescue Therapy in Severe Acute Respiratory Failure with Hypercapnia

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Introduction: Tracheal gase insufflation (TGI) is an adjunct ventilator technique that delivers fresh gas into the trachea at varying flow rates (2-10 L/min) to improve carbon dioxide (CO₂) elimination. TGI reduces anatomic dead space, washes CO₂ from airway and increases CO₂ elimination efficiency. Also TGI can improve oxygenation.

Purpose: We wanted to share our experiences about using TGI method in hypercapnic patients with acute respiratory distress syndrome (ARDS). Our aim is to share the experience of this technique is a rescue

therapy to improve hypercapnia before extracorporeal carbon dioxide removal devices.

Material and Method: Patients who have ARDS and hypercapnia that causes acidosis were evaluated. In hypercapnic patients with respiratory acidosis, aspiration, bronchodilator therapy, and prone position were applied, when these interventions failed, TGI was used as a rescue therapy to reduce PaCO₂ levels. Seven patients were incorporated into this preliminary study. The patients' demographic data's, the causes of admission to ICU, SOFA scores at that time, APACHE II at admission, PaO₂ and PaCO₂ changes in hours, PaO₂/FiO₂ ratio, use of vasopressor, whether to perform other rescue therapies and mortalities were recorded.

Results: We observed decreasing level of PaCO₂ in hours, see in Table 1.

Conclusion: TGI enhances gas exchange by promoting removal of CO₂ from the anatomic dead space and decreases PaCO₂, effectively. Although it has some limitations, such as promoting auto-PEEP, loss of humidification in airway, it may provide an acute reduction in CO₂ levels for short time rescue therapy in hypercapnic ARDS patients.

Key words: Tracheal gas insufflation, Hypercapnia, Gas exchange, Acute respiratory distress syndrome

Table 1. PaCO₂ drop-off levels over time

	1. Patient	2. Patient	3. Patient	4. Patient	5. Patient	6. Patient	7. Patient
Initial CO ₂	87.6	86.3	80.2	124.1	115.6	96.4	89.2
Mean CO ₂	67.4±9.3	78.25±15.9	71.5±11.8	86.6±30.6	66.7±20.6	50.2±20.7	71.3±6.4
Final CO ₂	66.3	50.1	62.1	52.8	53.4	39.7	75.3
M. time drop-off CO ₂ (h)	25.3±17.9	25.5±16.8	50.6±33.7	31.4±24	9.8±11.3	9±16.9	15.6±10.8

P-053

Procalcitonin and Serum Reactive Protein Change as a Prognostic Factor in Severe Sepsis and Septic Shock Patients

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Introduction: The evaluate the prognostic value of procalcitonin (PCT) and serum reactive protein (CRP) change in critically ill patients in severe sepsis and septic shock patients.

Material and Method: This was a retrospective study in 2014 between January- December. PCT, and CRP were measured at admission, and every 48 h.

Results: A total 186 patients were admitted to ICU, and 30 patients with severe sepsis/septic shock included in this study. 16 patients were in severe sepsis, and 14 were in septic shock. The patients ages were between 37-83 year. The results were summarized in the table.

Conclusion: In severe sepsis and septic shock patients fall in procalcitonin level is associated with good outcome.

Key words: CRP, PCT, procalcitonin

Literature

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Table 1. Results

	Survivor	Non Survivor	p
Age (year)	61.35±11.80	60.84±11.45	>0.05
Procalcitonin (ng/mL)- initial	6.02±9.24	7.00±10.17	>0.05
CRP (mg/L)-initial	169.66±121.64	191.70±120.06	<0.05
Procalcitonin-last	1.02±0.98	9.82±23.95	<0.05
CRP-last	27.6±125.86	171.6±131.95	<0.05
APACHE II	23.96±5.38	25.07±4.68	>0.05

P-054

Retrospective Analysis of Brain Death Cases in Adiyaman University Research and Educational Hospital

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Introduction: The aim of this study is to determine demographic and clinical properties of brain death cases in Adiyaman University Research and Educational Hospital.

Material and Method: The cases in which brain-death diagnosis is made from year 2008 to 2014 were analyzed retrospectively. Age, sex, cause of brain death, blood group, donation agreement, causes agreement and refusal of donation, cardiac arrest, vasopressin treatment, laboratory test results, arterial blood gas analyzes before and after the apnea test, intensive care unit follow-up durations of all cases were determined. Also potential donors and recipients were analyzed.

Results: In total, brain death diagnosis was made in 57 cases, 34 (59.6%) of them were men and 23 (40.4%) of them were women. The most common causes were traumatic subarachnoid and intracerebral hematoma. Most of the cases were ARh + blood group (n=18, 31.5%) and 4.7 times more brain death was determined in Rh (+) patients when compared to Rh (-) patients. Rate of cardiac arrest was 12.3% (n=7). Vasopressor therapy administration rate was 21.1% (n=12), duration was 1.3±0.8 days. Follow-up period was 2.7±3.2 days. 5 patients were considered to be organ donors. The most common reason for admission was the effect of coordinator in family interview (60%, n=3). In total, 4 livers, 5 kidneys and 1 heart transplant were performed to 10 patients.

Conclusion: Due to problems in organ donation all the patients with Glasgow coma scale under 7 must be considered as a potential donor and treatment must be started when they were accepted to intensive care unit. Education of the employees in intensive care unit about brain death recognition and donor care is important. Also the interview with family must be held with an experienced coordinator to increase the agreement of donation.

Key words: Brain death, apnea test, organ transplantation, intensive care

P-055

Amantadine Sulfate Treatment in ICU Patients with Traumatic Brain Injury

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Introduction: Traumatic brain injury (TBI) is a complex condition with a broad spectrum of symptoms and is a major cause of death and disability in young people. The goals of treatment are to resuscitate and support the critically ill patient, minimize secondary brain injury and complications. Currently, there is no treatment that has been proven to speed up or improve recovery from the vegetative or minimally conscious state. We retrospectively analyzed the effects of amantadine sulfate (AS), which is a Glutamate NMDA receptor antagonist, after traumatic brain injury.

Material and Method: We evaluated the treatment of patients after severe TBI (Severe TBI: GSC<8) on the one year outcome. The traumatic head injury patients treated with only standard therapy (Group 1, N: 12) and standard therapy plus AS (Group 2, N: 14) were compared. AS treatment was arranged as intravenous infusions of 400 mg AS per day for two weeks and then received 400 mg AS orally per day for next two weeks in group 2 patients. We measured the Glasgow Coma Scale (GCS), Coma Recovery Scale-Revised (CRS-R) and APACHE score on admission to the ICU and GCS, CRS-R on day of discharge from the ICU.

Results: There was no significant difference on day of admission GCS, CRS-R and APACHE score between both groups (p>0.05). GCS and CRS-R on day of discharge in group 2 were higher than group 1 and its statistically significantly (p<0.05). Mortality rate in group 2 was lower than the group 1 (p<0.05).

Conclusion: AS infusions have been used because of their centrally activating effect. At doses of 400 mg/day, AS demonstrated safely and rapidly improve cognition and reduce agitation in patients with TBI. Additional multicenter, randomized, prospective controlled studies will better define the role of AS in TBI for early recovery and duration of therapy.

Key words: Amantadine sulfate, intensive care unit, traumatic brain injury

P-056

Ventilator-Associated Pneumonia and Causative Microorganisms in Intensive Care Unit: A 2-Year Retrospective Analysis

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Introduction: Ventilator-associated pneumonia (VAP) is the most common nosocomial infection in the intensive care unit (ICU). It caused prolonged hospital stay and increased mortality. In this study, we aimed to investigate the rate of VAP, causative microorganisms and their antibiotic susceptibilities.

Material and Method: This retrospective study included patients that admitted in 12-bed ICU between January 2013 and December 2014. Centers for Disease Control and Prevention criterias were used in detecting VAP. The rate of VAP, VAP ratio and ventilator utilisation ratio (VUR) were calculated according to guidelines of Turkish National

Infection Surveillance Control Group. Endotracheal aspiration samples were collected and cultivated. The identification of the isolates were performed by using VITEK-2 automated system. Antibiotic susceptibilities were determined by the disc diffusion method according to The Clinical and Laboratory Standards Institute criteria.

Results: From a total of 359 patients, who were required invasive ventilation for longer than 48 hours and hospitalised in the ICU, VAP was determined in 16 cases. VUR was 65%, VAP ratio was 4.5% and the rate of VAP was 3.3 per 1000 ventilator days. Seventeen microorganisms were isolated from endotracheal aspiration samples, including Acinetobacter baumannii (n=6), Pseudomonas aeruginosa (n=4), methicillin-resistant Staphylococcus aureus (n=4), Klebsiella pneumoniae, Enterobacter cloacae and Serratia marcescens. The most sensitive antibiotics for these microorganisms were listed in Table 1.

Conclusion: The rates of VAP were reported 1.1 and 16.5 in National Healthcare Safety Network and International Nosocomial Infection Control Consortium reports, respectively. Intermittent analysing the causative microorganisms of VAP and antibiotic susceptibilities is important in terms of scheduling appropriate empirical antibiotic treatment and detection of correct infection control strategies. As a consequence, the rate of VAP could be decreased by using correct infection control strategies and appropriate empirical antibiotic therapy for gram-negative microorganisms.

Key words: Ventilator-associated pneumonia, microorganism, antibiotic susceptibility

Table 1. The most sensitive antibiotics for causative microorganisms

Causative microorganism	Antibiotic
Acinetobacter baumannii	Colistin
Pseudomonas aeruginosa	Amikacin, Carbapenems
Methicillin-resistant Staphylococcus aureus	Linezolid, Teicoplanin, Vancomycin, Trimethoprim sulfamethoxazole
Klebsiella and Enterobacteriaceae species	Carbapenems, Gentamicin, Trimethoprim sulfamethoxazole

P-057

Effects of a Supportive Nutrition Product on Postoperative Cognitive Functions Which was Used in Ten Oral and Maxillofacial Surgery Patients to Support Oral Intake

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Introduction: Consciousness, cautiousness, learning, memory, perception, orientation, intelligence, taking action, emotions, imagining, solving problems, making decisions, speaking, reading, writing, calculating are cognitive brain functions. Purpose of evaluating these functions postoperatively is determining mental differences which emerge and to evaluate recovery level. Iliac bone grafts are primary choice in our clinic to reconstruct defects in the maxillofacial region. They provide osteogenic cells and do not induce immune reactions. We present the effect of arginine, glutamine, beta-hydroxy-beta-methylbutyrate, artificial flavors (Abound®) which support wound healing and configurate non-fat body mass, on postoperative cognitive functions.

Material and Method: 10 patients over 60 years-old admitted to our clinic for iliac graft autotransplantation. Nasotracheal intubation was made with ASA risk group I-II for general anesthesia; preoperative cognitive functions were evaluated with mini mental state examination (MMSE). Preoperative age, height, systemic diseases, used medication, intraoperative heart rate, mean artery pressure, SPO₂, urine and bleeding quantity, postoperative heart rate, mean artery pressure, SPO₂, side effects and treatment procedure was recorded. Patients had iliac graft autotransplantation in the jaw region thus had edema which led to restricted oral intake. Supportive nutrition product (Abound®) was used postoperatively twice a day for five days. Cognitive functions were evaluated by anesthesiologist with MMSE postoperative 1st and 7th days.

Results: In all patients a successful wound healing was achieved at day 5 and patients were discharged at day 7. When preoperative and postoperative MMSE values were compared over time, no statistically significant differences were observed.

Conclusion: We emphasize the importance of supportive nutrition products which support wound healing and configurate non-fat body mass for immobilized geriatric patients with restricted oral intake because of iliac graft autotransplantation. These products shorten discharge time and prevent postoperative cognitive function changes. We want to highlight use of these products on non-ICU patients, larger series should be researched.

Key words: Cognitive functions, nutrition product

P-058

Bedside PTC-ERCP Application in ICU: Case Report

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Introduction: Cholangitis is characterized with infection and inflammation of the biliary tract. The obstruction of biliary canals may result in bacteremia, septic shock and even death. Treatment is surgery or endoscopic biliary drainage. In this study, we presented our experience in a case with septic shock and multiorgan failure (MOF) resulted from cholangitis, whom applied esophagogastroduodenoscopy, Percutaneous Transhepatic cholangiography (PTC) and Endoscopic Retrograde Cholangio pancreatography (ERCP) in our intensive care unit (ICU).

Case: 41 year-old male patient with a history of myocarditis and cholecystectomy after cholangitis attack was admitted to our emergency department with abdominal pain. Clinical findings and diagnostic scans revealed acute cholangitis and ERCP was planned. However, the patient was transferred to ICU because of deterioration

of his conscious and failure of respiration during ERCP procedure. On admission, he was tachypneic (sPO₂ 84%), tachycardic (Heart Rate 110/min), hypotensive (TA80/50 mmHg) and his Glasgow Coma Score was 14. Chest XR revealed pulmonary hilar congestion and edema. Arterial blood gas (ABG) measurements showed hypercarbia and hypoxia. Echocardiography was done and EF was measured as 50%. Intravenous broad spectrum antibiotics and continuous positive airway pressure (CPAP) with non-invasive mechanical ventilation (NIMV) started. As the general condition of patient continued to deteriorate, a second ERCP was planned, but the transfer back to gastroenterology unit was not possible. Bedside PTC was done on seventh hour of his admission under scopy, and biliary drainage was succeeded partially. The patient was anuric and continuous venovenous hemodiafiltration was started. New ABG measurements and chest CX suggested adult respiratory distress syndrome (ARDS) as well. As there was no improvement in clinics of the patient, bedside ERCP was planned in ICU conditions. 21 hour after his admission, ERCP procedure was done and sphincterotomy and drainage were succeeded (Figure 1). There was no complication. Seventh day after admission, the patient was well and extubated. Creatinine levels came to the normal and hemodiafiltration was ended (Table 1). Endoscopy was repeated on fourteenth day as the patient experienced a hematemesis and candidal esophagitis was diagnosed, and antifungal medications were added (Figure 2). Enteral nutrition was started then, and PTC drain was removed on day 22. Patient was well and transferred back to gastroenterology clinic.

Conclusion: Endoscopy, PTC and ERCP are important diagnostic and treatment tools and all needs special equipments. In critical patients, these tools can be successfully used in ICUs with multidisciplinary approach.

Key words: Acute cholangitis, bed side ERCP, ICU, Candidial Esophagitis

Table 1. Laboratory values

	Before ICU			ICU	After PTC	After ERCP	5 th day	7 th day	Discharge
	Admistance	12 th hour	24 th hour						
T Blb	1	4.6	5	6	-	4.8	4.4	2.6	1.59
D Blb	0.3	3.2	4	4.5	-	3.4	2.7	1	0.86
INR	1.31	-	-	2.1	-	1.51	-	-	1.26
SGPT	126	540	401	939	901	654	172	49	24
SGO	184	443	242	91.3	883	395	30	30	25
LDH	393	656	343	-	-	470	700	394	270
GGT	691	787	-	-	-	-	-	224	88
Amylase	83	52	-	-	-	-	437	361	76
Lipase	71	34	-	160	-	-	1134	>500	153
Creatinine	0.77	1.29	2.34	3.25	2.85	2.27	2.47	2.94	3.61
BUN	27	29	43	-	-	63	135	134	126
WBC (cells/ mL)	13.700	-	-	-	19.800	32.300	43.200	24.800	8.730
Plt (cells/mL)	304	-	-	-	81.900	133.000	98.400	183.000	169.000

T.blb= total bilirubin, D= direct, SGPT= serum glutamic-pyruvic transaminase (units per liter of serum) SGOT= serum glutamic oxaloacetic transaminase (units per liter of serum), LDH= Lactate Dehydrogenase, GGT= Gamma-glutamyl transferase, BUN= Blood urea nitrogen (mg/dL), WBC= white blood cell



Figure 1. Figure 1 was presenting bedside-ERCP procedure; ERCP monitor, mobile C -arm X-ray, patient on the patient-stretcher, while CVVHDF continuing

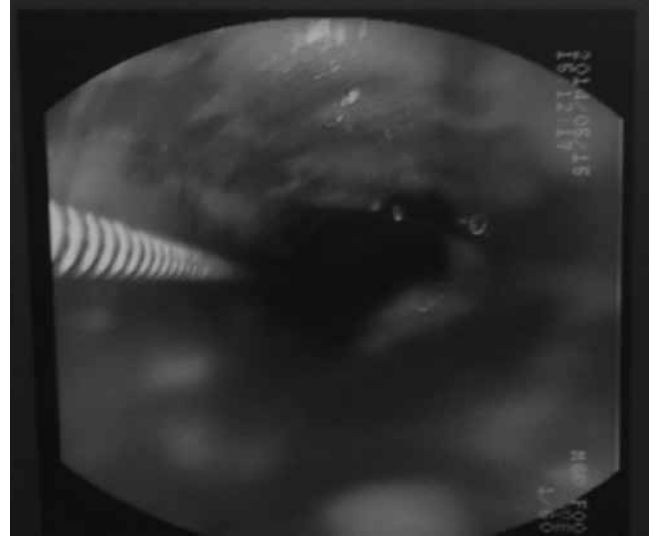


Figure 2. Candidal esophagitis was seen in endoscopy

P-059

Severe Subcutaneous Emphysema Developing After Cough in an Chronic Obstructive Pulmonary Disease Patient

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Case: A 53-year-old male patient with 10 years in the medical history of congestive heart failure and 5 years chronic obstructive pulmonary disease, began treatment with the diagnosis of lower respiratory tract infection. The number and severity of cough have increased. Following the patients breathing and respiratory condition got worse, swelling at his face, especially bilateral around the eye and the upper body began to occur. In the first examination in the emergency department, his consciousness confused, does not cooperate, NIBP: 161/109 mmHg, HR: 103 beats / min, in sinus rhythm, GCS: 6-7, painful stimuli flexor to respond, bilateral eyelids commonly has been found to be swollen. Widespread crepitation presents beginning from his face, his neck, shoulders and chest. Listening to breathing sounds revealed out bilateral diffuse coarse and crackles. Patchy parenchymal infiltrates in both lungs, with air images of both soft tissue plan compatible with subcutaneous emphysema was more pronounced on the left side of the hemithorax and cervical region were observed in patient's chest radiograph. He was transferred to the intensive care unit and mechanical ventilation was initiated. To treat subcutaneous emphysema 1 G needles were placed bilaterally at the chest region of the patient. At 16th of hospitalization there was remission at the level of confusion, consciousness developed and his cooperation was increased.

Neurological recovery and gaining spontaneous respiration patient was extubated at 20th day.

Conclusion: Developing lower respiratory tract infection in chronic obstructive pulmonary disease can progress rapidly disrupt the general condition of the patient. Due to increasing number of recurrent and severe cough subcutaneous emphysema developed. Developing chronic diseases of the respiratory tract due to the underlying long-term inflammatory processes on the airlines to make more precise and growing airlines in the infective process, alveoli, can be affected lung parenchyma and pleura quickly.

Key words: Subcutaneous emphysema, cough, intensive care



Figure 1.



Figure 2.



Figure 4.



Figure 3.

P-060

Patients with Difficult Ventilation and after Tracheal Intubations Cause of Rupture of Hydatid Cysts

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Hydatid cyst is one of the health problems that could not be eradicated yet in our country. Hydatid disease is a parasitic infection. It's a parasitosis caused by *Echinococcus granulosus* (99%) and *Echinococcus multilocularis* (1%). Incidence 2-6/100 000 and it is seen in liver and lung. It's commonly associated with hepatic hydatid cyst. The patient was operated for the right lung hydatid cyst surgery. Were the routine monitored. After induction drugs performed patients were intubated with a double-lumen tube 37 F right. After the tube was connected to a mechanical ventilator patients confirmed the location. Before surgery increased pressure mechanical ventilation and inadequate tidal volume was observed. Immediately taken breathing manually. The weather was an intense resistance path. Peripheral oxygen saturation dropped up to 72%. Listen to not get left lung sounds. Immediately lungs was aspirated. However, no significant mai aspiration. The left lung was achieved by chest radiography is taken completely off. Repeat aspiration was performed. Mai abundantly clear was aspirated. Peripheral oxygen saturation to 92% off. PA chest radiograms was renewed. Surgery patients were awakened to do. Surgery delayed taken to the intensive care unit.

Key words: Hydatid cyst, rupture, anesthesia

P-061

The Management of Crush Syndrome in Critically Ill Patients: Ten Cases

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Introduction: Crush trauma to the extremities can be life threatening. Crush syndrome, the systemic manifestation of the breakdown of muscle cells with release of contents into the circulation, leads to metabolic derangement. This study summarized our experience on management of 10 crush injury patients in a intensive care unit (ICU).

Material and Method: We retrospectively analyzed the clinical data of 10 crush injury patients treated in ICU. Medical records were reviewed and data related to patient characteristics (age, gender), APACHE II score, presence of sepsis, presence of complications, interventions in ICU, and laboratory findings (parameters of arterial blood gases, alanine aminotransferase, lactate dehydrogenises, creatine kinase, creatinine, blood urea nitrogen, and urine protein) were collected. Mortality rates were documented for each individual. We observed closely watched for changes in crush injury symptoms, urine output, and the dangerous complications of crush injury.

Results: Of 10 patients (10 male), the mean age was 45.5 ± 8.7 years. APACHE II score was 28. Acute renal failure developed in one patient and multiple organ dysfunction syndromes (MODS) in one patient. Renal replacement therapy performed in three patients. Three patients (30%) underwent amputation and two patients (20 %) died which cause of death was MODS in one and acute renal failure in one.

Conclusion: Early and aggressive resuscitation, prompt treatment and close monitoring of the severe complications are of great importance in saving patients' life in the ICU of crush syndrome.

Key words: Crush syndrome, critical illness, renal replacement therapy

P-062

Ventilation Applications, APACHE II, SOFA Scores of the Patients with

Chronic Obstructive Pulmonary Disease who Have Been Hospitalized in the Intensive Care Clinics in the Last 5 Years and Their Retrospective Investigation in Terms of Mortality

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Introduction: In this study, we aim to examine the patients with COPD who have been treated in our intensive care clinics for the last 5 years retrospectively in terms of the ventilation applications, laboratory analyses, acute physiology and chronic health evaluation II (APACHE II) scores, sequential organ failure assessment (SOFA) scores and mortality.

Material and Method: Demographic data, APACHE II, SOFA, Glasgow coma scores, duration of hospitalization, echocardiography results belonging the patients were recorded. The ones who underwent tracheotomy were also recorded. Of the patients, data related to the pressure parameters in the invasive or non-invasive mechanic ventilation which were applied to them while being hospitalised in our intensive care clinics-positive end-expiratory pressure (PEEP), peak inspiratory pressure (PIP) and plateau pressure values-were recorded. The patients' biochemical parameters such as arterial blood gas, C reactive protein, leucocytes, haemoglobin and aspartate aminotransferase (AST), alanine aminotransferase (ALT), Creatinine, Na, K, Ca, Mg that were examined during their being hospitalised and discharged (the latest recorded discharge or exitus value) were recorded and assessed.

Results: When the GKS, APACHE II and SOFA score values of the patients were compared, a significant difference between them was detected ($p < 0.001$). When the EF and PAB values of the patients were compared, it was found that there was a statistically significant difference between them ($p < 0.05$). When the patients' data related to the mechanical ventilation (PEEP, PIP, Plateau pressure), duration of hospitalisation and gender distribution were compared, it was detected that there were no statistically significant difference between the surviving and dead patient groups ($p > 0.05$). A statistically significant difference was detected between the PaCO₂, HCO₃, WBC, Hb, Cr, Na, Ca, Mg values of the patients who survived and died at the time of their hospitalization ($p < 0.05$).

Conclusion: Scoring systems are helpful in determining the mortality of patients. Even though the mortality risk is higher, the mechanical ventilation support applied to the patients with COPD proves highly beneficial for the gas Exchange functions.

Key words: COPD, intensive care, mechanic ventilation, scoring systems

P-063

A Retrospective Analysis of Postoperative Geriatric Patients with Hip Fracture; the Reasons for Admission to ICU

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Introduction: Geriatric patients with hip fracture experience high rates of mortality and morbidity after indicated surgical treatment. The purpose of this study was to analyze the epidemiology, complications and reasons for admission to ICU of the postoperative geriatric patients with hip fracture.

Material and Method: We reviewed all patients aged 60 years or older with hip fracture who underwent operation during a three year period. We investigated the patient characteristics, anesthetic technique, operation time, perioperative complications, reason for admission to critical care, respiratory and cardiovascular support and patient outcome.

Results: The median age of the patients was 78.9 ± 8.39 (min 60- max 100). 116 of the patients were female, 76 of the patients were male. 13 of the patients received general anesthesia and 179 of the patients received spino-epidural anesthesia. Hypotension was observed in 86 of the patients. Bradycardia was observed in 22 and respiratory depression was observed in 2 of the patients during the perioperative period. 108 of the patients were admitted to the intensive care unit. 22 of the patients required transfusion, 3 received cardiovascular support, 2 received respiratory support in the ICU. 78.1% of the patients stayed only one day, 16.8% of the patients stayed two days, 6.5% of the patients stayed 3-5 days and one patient (0.9%) died in the ICU. Operation time was found longer in the patients who admitted to ICU compared with the patients who admitted to the service. The mean age and ASA scores were found higher in the ICU group. Perioperative hypotension was found higher in the ICU group.

Conclusion: The reasons for admission to ICU were influenced from multiple factors in our study. Perioperative complications, aged > 72 , ASA > 3 scores, longer operation time affected administration of the patients to ICU.

Key words: Geriatric patients, hip fracture, critical care

P-064

The Effective Factors on Survival in Near-Hanging

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Introduction: Neck hanging is one of the most lethal suicide methods. The morbidity and mortality due to hanging is usually associated with neck's structure injury attached to a fall from height, venous obstruction and cerebral hypoxia time. Mortality is usually caused by respiratory failure in patients who recovered from hanging. In this study, we aimed to investigate effective factors on mortality in cases of neck hanging.

Material and Method: Socio-demographic data of 43 out of 2006-2013 patients brought to our hospital because of neck hanging were analyzed retrospectively. The first arrival time of clinical signs of the patient, laboratory findings and complications due to hanging were recorded. The effects of these findings on mortality are examined.

Results: 35% of the 43 patients were included in the study were female gender. The mean age of the patients was 21.4 ± 6.8 minutes. The estimated time was found to be 25 ± 12 (minimum-maximum 3-60) minutes. 26 patients (68.4%) were lost their life. The Glasgow coma score of the majority of patients who died was less than 7. Among the most common complications associated with hanging, laryngeal edema (60%) was observed. Among the most common complications during the intensive care, pulmonary infection (18.5%) was developed.

Conclusion: The most important factor in terms of effectiveness over mortality for hanging were observed to be time increment of hanging and low Glasgow coma score. We recommended that the cases of near hanging should be aggressively resuscitated and treated regardless of their bad initial findings.

Key words: Near hanging, intensive care unit, Glasgow of coma score

Demographic Features	Survived n=17	Died n=26	p
Gender			
Male	10	18	0.48
Female	7	8	
Age			
<18 years	20.7±7.6	21.8±4.9	0.77
≥18 years	4	3	
	12	24	
Airway management			
Intubated	12	26	0.003
Non intubated	5	0	
Body weight*	65.1±13.5	66.7±7.3	0.8
Hanging time			
<10 min	8	0	0.001
10-20 min	9	2	
>20 min	0	24	

P-065

The Effective Factors on Survival in Electrical Shock

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Introduction: Electricity, which is very widely used in our daily lives, it is widely, but not proportional to the increase in use, the number of fatal accidents is still high. The majority of these accidents occur in homes and workplaces. However, with high morbidity and mortality potentially devastating multi-system injury, Electric shock injuries usually are rare. It is aimed to investigate health care provider, monitoring, and demographic characteristics of patients with electrical burn injuries treated in the intensive care unit, intensive care scores, complications, and organ failure.

Material and Method: In this study treated in ICU have been subjected to electric shock analyzed 80 patients. cases of demographic data, exposure to electric current type, complications, concomitant falls and fall-related pathologies were recorded. Analysis biochemical values and ECG rhythm changes have been saved.

Results: With the type of the current study was to compare the sex ratio was similar in men and women at low current and high current male ratio was found to be dramatically higher. Looking at the crime scene accident investigation at 42 patients (52.5%) of household-low current, 38 patients (47.5%) were identified as industrial high-current. The remaining patients with high electric current exposure were followed up the most burn intensive care and then the surgical intensive care units. The current type of patients in intensive care lies a significant correlation was found. 29 patients (36.2%) of all patients were followed in intensive care unit by the MV (mechanical ventilation)-linked form. Causes of death in comparison with ECG findings found no significant relationship.

Conclusion: Electricity; indispensable to our daily life is a kind of energy. To guard against electrical injuries occupational groups, children, young people and adults, educational programs should be made to shed light on the etiology of this type of accidents, new strategies must be determined.

Key words: Intensive care unit, electrical shock, type of current

Demographic features	Low current	High current	p
Gender (M/F)	30/12	35/3	0.01
Age (mean ± SD)	13±12	23±12	0.0001
GCS			
3-7	6	12	0.1
7-10	16	15	
>10	20	11	
Length of stay in ICU (day)	10±11	27±37	0.006
Mechanical ventilation time (day)	3±6	15±9	0,08

P-066

Catheter-Associated Urinary Tract Infections in an Intensive Care Unit of a Teaching Hospital in İstanbul (2010-2014)

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Introduction: Healthcare-acquired infections increase morbidity, mortality, length of hospital stay, and cost. Catheter associated-urinary infections (CAUTI) are one of them. Therefore, unit-specific CAUTI rates and CAUTI causing organisms should be determined to initiate early and effective empiric antimicrobial therapy. The aim of the study was to determine the rate of hospital acquired CAUTIs and the change of profiles of the causative microorganisms in our unit.

Material and Method: CAUTI was diagnosed by using the clinical criteria of the Centers for Disease Control and Prevention. Isolated strains was identified and antibiotic resistance of species was determined by the disk diffusion method according to the Clinical and Laboratory Standart Institute criteria. Fisher exact test was used for the statistical analysis.

Results: Between January 2010 and December 2014, a total of 5490 patients hospitalized for 37.053 patient days in ICU and acquired 166 urinary infection (3.1 per 100 patients, and 4.5 per 1,000 patient days). The most frequently isolated microorganisms were *Candida* spp, *Enterococcus* spp. and *Enterobacteriaceae* spp. The incidence densities of infections decreased from 1.9 per 1,000 device-days ($p < 0.05$) for catheter-associated urinary tract infection (CAUTI) during the study period. A significant increase in the proportion of *Candida* spp. isolated from CAUTI (from 42.5 % to 65.1%, $p < 0.05$), and a significant decrease in the proportion of *Escherichia coli* isolated from CAUTI (from 17.0% to 5.0%, $p < 0.05$) were found.

Conclusion: In conclusion, CAUTI rates are decreasing in our ICU. An increasing trend of infections caused by *Candida* spp. and a decrease in the proportion of *E.coli* isolates is the profound findings of this study.

Key words: Intensive care units, CAUTI, causative microorganism

P-067

Invasive Device Related Infection in Our Anesthesia Intensive Care Unit

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Introduction: Infections associated with health care, is also an indicator for the quality of health care given in developing countries. "National Nosocomial Infection Surveillance (NNIS)" being used for this purpose; Use of invasive devices associated nosocomial infection rates is reported to be a more valuable method compared to the general infection rates. In this study, we aimed to evaluate invasive device associated infection rates in GATA Haydarpaşa Training Hospital intensive care units between 01.01.2013-31.12.2014.

Material and Method: Ventilator associated pneumonia (VAP), Central Venous Catheter Related Bloodstream Infections (LVMI-NE) AND Catheter Associated Urinary Tract Infection rates (KI-U), and device utilization rates were evaluated in patients in intensive care units. Infection Control Committee data obtained under study) diagnostic criteria have been defined according to Centers for Disease Control and Prevention (CDC. Tool use ratio=instrument day/patient day; Associated with tool use hospital infection rate=(number of hospital infections associated with the use of tools/appliances days) was calculated using the formula $\times 1000$. Hospital infection Incidence Density=Number of Hospital Infection $\times 1000$ /patient day is calculated using the formula.

Results: In Anesthesia Intensive care unit 292 patients were evaluated with 1989 patient days. Infection incidence density was found to be 12.1. CVC-KD 9, the infection rate 3.33; 1801 day use, use rate of 0.91; KI-UTI infections number 8, the infection rate of 4.07; use day in 1965, device rate of 0.99; 8 Number of VAP infection, the infection rate of 5.80; 1380 day use, use rate was found to be 0.69.

Key words: Invasive device related infection, ventilator related pneumonia, urinary tract infection

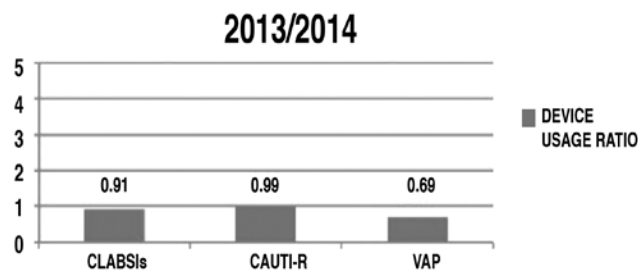


Figure 1. Device usage ratio

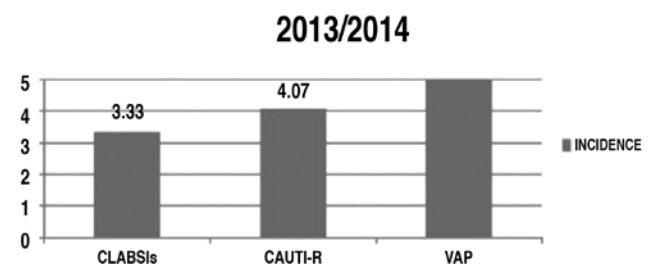


Figure 2. Incidence

P-068

Evaluation of Nosocomial Infections in Our Anesthesia Intensive Care Unit

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Introduction: We aimed to determine factors of nosocomial infections in GATA Haydarpaşa Training Hospital intensive care units.

Material and Method: Between January 2013-December 2014 hospitalized patients in Anesthesiology Intensive Care Unit, 292 patients treated in 1989 patient days, the results in terms of monitoring nosocomial infections were evaluated.

Results: The incidence density of infection was found to be 12.1 The most common nosocomial infection incidence densities and percentages as follows; 18.1% of bloodstream infections (BSI), 24.3%pneumonia, 24.3 urinary tract infection (UTI).

When infections evaluated, microorganisms isolated were; Acinetobacter baumannii with a rate of 22%, enterococci with 10%, and P. aeruginosa and Klebsiella pneumonia with the rate 8%.

Conclusion: Hospital infections and remains a priority as a major problem in our country and all over the world. When nosocomial infections and factors considered; in pathogenic microorganisms had resistance to multiple antibiotics and has a limited antimicrobial treatment options. Hospital flora of each center should be identified to control infections and microorganisms is very important for appropriate antimicrobial policies.

Key words: Nosocomial infections, Hospital flora, antimicrobial treatment options

Table 1. Anesthesia Intensive Care Unit Infection Incidence density and percentage

Infection	Percentage	Incidence density
BSI	18.1	3.33
UTI	24.3	4.07
VAP	24.3	5.80

Table 2. Anesthesia Intensive Care Unit Distribution of Most Frequent Microorganisms

Microorganisms	Number	%100
Acinetobacter baumannii	11	22
Enterococcus spp	5	10
Pseudomonas aeruginosa	4	8
Enterococcus faecium	3	6
Klebsiella pneumoniae	4	8

Table 3. Distribution of the most frequent microorganisms

	BSI	Pneumoniae	UTI
Microorganisms	%	%	%
Acinetobacter baumannii	14.2	42.8	
Koagülaz negatif stafilokok	14.2		
P. aeruginosa	14.2	28.5	12.5
E. coli			
K. pneumonia	14.2		12.5
Candia spp	42		
Enterococcus spp			62.5

P-069

Integrated Pulmonary Index in ICU

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Introduction: Intergrated Pulmonary Index (IPI) uses end tidal carbon dioxide (ETCO₂) respiratory rate (RR), pulse rate (PR) and peripheral oxygen saturation (SPO₂) to provide an inclusive assessment of a patient's respiratory status. IPI is displayed on a scale from 1 to 10, 8-10 indicating a normal respiratory status. In this study we aimed to research the correlation between IPI and clinical status in ICU patients.

Material and Method: 21 patients were included in this study. IPI, ETCO₂, RR, PR and SPO₂ values and arterial blood gas analysis were recorded at the same time. Correlation between IPI and clinical status of the patients were analysed by McNemar Test.

Results: Properties of the patient were showed in Table 1. There was correlation between IPI and clinical status (Table 2). 8-10 0 (0%), 17 (81%), McNemar Test (Kappa:1.000; p=0.001; p<0.01).

Discussion: IPI values are considered normal between 8-10, values between 7-5 require attention and under 5 resembles bad respiratory condition. Our patient's IPI values were correlated with their arterial blood gas sampling analysis and clinical condition. There are some spontaneously ventilating patients who require close observation besides the patients who are mechanically ventilated in ICU.

Conclusion: The patient of ICU patient who breaths spontanous but may require mechanical ventilation. If IPI were used in these patients, it would be additional parameter for making a decision about mechanical ventilation.

Key words: Integrated pulmonary index, capnography, ICU

References

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Case	Diagnosis	Ventilation	IPI	SPO ₂	ETCO ₂	RR	PR	pH	pCO ₂	pO ₂
1	Postoperative	Spontaneous	9	97	32	19	77	7.52	38.1	73.6
2	Pneumonia	MV	6*	99	23	20	98	7.63	22.4	170
3	Heart Failure	MV	8	100	40	18	79	7.5	43.5	117
4	Pneumonia	Spontaneous	6*	100	22	19	77	7.56	28	115
5	Pneumonia	Spontaneous	8	100	48	31	93	7.32	53.8	90.3
6	Pneumonia	MV	8	100	28	13	93	7.58	25.5	151
7	CVT	MV	10	100	38	14	87	7.39	42	120
8	Liver Cirrhosis	Spontaneous	8	97	27	13	122	7.45	30.4	85.2
9	Postoperative	MV	9	100	32	23	127	7.47	35.8	168
10	Postoperative	Spontaneous	8	100	26	18	98	7.39	36.9	96
11	Pneumonia	MV	7*	99	35	15	90	7.5	33.9	263
12	Postoperative	Spontaneous	8	95	32	28	87	7.5	38.9	67.3
13	Septic	MV	10	98	35	26	110	7.29	44.9	98.2
14	Pneumonia	Spontaneous	8	98	32	28	102	7.52	34.5	79.1
15	Heart Failure	Spontaneous	9	96	32	22	84	7.49	45.5	85.6
16	Pneumonia	MV	9	99	36	15	80	7.59	43.6	70.7
17	Carsinom	Spontaneous	8	95	41	30	110	7.3	57.7	69
18	Polytrauma	Spontaneous	9	100	32	22	127	7.45	38.3	203
19	Lenfoma	Spontaneous	5*	97	22	37	86	7.35	24.3	89.3
20	Trauma	MV	8	100	37	28	66	7.45	42.2	112
21	Postoperative	MV	8	99	34	18	82	7.32	37.6	127

MV: Mechanical Ventilation, CVT: Cerebrovasculer thrombosis

IPI	Positive	Negative	n (%)	p
	n (%)	n (%)		
5-7	4 (19%)	0 (0%)	4 (19%)	
8-10	0 (0%)	17 (81%)	17 (81%)	
	4 (19%)	17 (81%)	21 (100%)	1.000

McNemar Test (Kappa:1.000; p=0.001; p<0.01)

P-070

Tigecycline May Worsen Renal Function More in Patients with Healthy Kidneys

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Introduction: Tigecycline use increased dramatically in ICUs due to the emergence of multidrug-resistant (MDR) bacteria among patients. One fifth of TGC is eliminated by the kidneys. We aimed to investigate safety of TGC in terms of kidney function.

Material and Method: We conducted a retrospective study of prospectively collected data in the ICU of a university hospital. Data from all patients treated with a standard regimen of TGC for a microbiologically documented infection were analyzed. The safety profile was investigated by recording and analyzing blood urea, creatinine, and potassium levels at the admission to the ICU, start of TGC therapy, end of TGC therapy, and two weeks after cessation of TGC therapy.

Results: Over the study period, 44 patients (24 males, 20 females) received TGC at 50 mg every 12 hours. Mean age was 74 years (28-94 [62-81]). Carbapenem-resistant *Acinetobacter baumannii*, *Klebsiella pneumoniae*, and ESBL-producing *Enterobacteriaceae* were the main isolated pathogens. None of the patients required discontinuation of TGC, or dose reduction, or hemodialysis. During the TGC therapy, blood urea, creatinine, and potassium levels increased in all patients ($p < 0.05$). However this effect was worse in patients with normal blood urea and creatinine levels at the admission to the ICU. At the end of TGC therapy, the blood urea and creatinine levels was as high as the patients, who had high blood urea and creatinine levels at the admission to the ICU ($p > 0.05$).

Conclusion: TGC caused a worsening of kidney function in all patients. Patients with better kidney function at the admission to the ICU were affected more. We conclude that TGC should be used cautiously in patients with healthy kidneys, since these patients may be affected more by TGC.

Key words: Tigecycline, renal insufficiency, *acinetobacter baumannii*, *klebsiella pneumoniae*, *enterobacter*

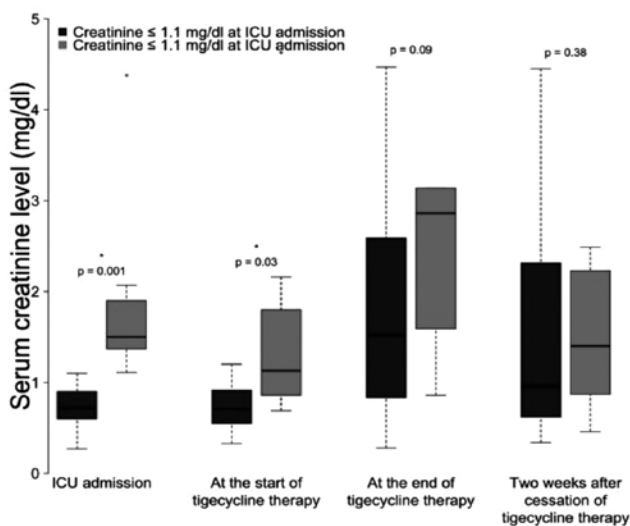


Figure 1. Blood creatinine levels at several stages of the ICU stay

P-071

Scientific Publications about Sepsis in 2014

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Introduction: Evaluation of the clinical trial has attracted attention all the time. In this study we aimed to analyse the scientific publication performance of Turkey and the world clinical trials in the topic of sepsis in 2014.

Material and Method: Science Citation Index Expanded (SCI-E) publications of sepsis written in English in 2014 searched using Web of Science TM Core Collection database on the Thomson Reuters Web of Science.

Results: The number of clinical trials were 5318 in the topic of sepsis in 2014. United States of America, Germany, People's Republic of China, England and France respectively provided the largest contribution on the world literature in the topic of sepsis. In this ranking Turkey was 14th with 134 publication (Figure 1). First five research areas were general internal medicine, surgery, immunology, pediatrics and infectious diseases. Most cited 5 article is shown at Table 1.

Conclusion: This analyse shows us country specific distribution of articles about sepsis and most cited five articles in 2014. Most important determinations of this distribution are emphasis on scientific research and advanced economic levels.

Key words: Analyse, publication, sepsis

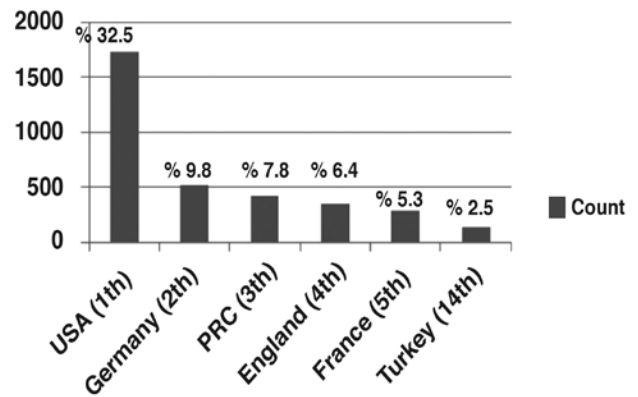


Figure 1. The distribution of publications in the topic of sepsis by country in 2014

Table 1. The most cited five articles about sepsis in 2014		
No	The Name of Journals	Number of Citation
1.	A Randomized Trial of Protocol-Based Care for Early Septic Shock By: Yealy, Donald M.; Kellum, John A.; Huang, David T.; et al. Group Author(s): Process Investigators New England Journal Of Medicine Volume: 370 Issue: 18 Pages: 1683-1693 Published 2014	41
2.	Subcutaneous Golimumab Maintains Clinical Response in Patients With Moderate-to-Severe Ulcerative Colitis By: Sandborn, William J.; Feagan, Brian G.; Marano, Colleen; et al. Group Author(s): PURSUIT-Maintenance Study Group Gastroenterology Volume: 146 Issue: 1 Pages: 96-+Published:2014	39
3.	Mortality Related to Severe Sepsis and Septic Shock Among Critically Ill Patients in Australia and New Zealand, 2000-2012 By: Kaukonen, Kirsi-Maija; Bailey, Michael; Suzuki, Satoshi; et al. Jama-Journal Of The American Medical Association Volume: 311 Issue: 13 Pages: 1308-1316 Published: 2014	25
4.	Albumin Replacement in Patients with Severe Sepsis or Septic Shock By: Caironi, Pietro; Tognoni, Gianni; Masson, Serge; et al. Group Author(s): ALBIOS Study Investigators New England Journal Of Medicine Volume: 370 Issue: 15 Pages: 1412-1421 Published: 2014	27
5.	Docetaxel plus nintedanib versus docetaxel plus placebo in patients with previously treated non-small-cell lung cancer (LUME-Lung 1): a phase 3, double-blind, randomised controlled trial By: Reck, Martin; Kaiser, Rolf; Mellemegaard, Anders; et al. Group Author(s): LUME-Lung 1 Study Group Lancet Oncology Volume: 15 Issue: 2 Pages: 143-155 Published: 2014	20

P-072

Factors Affecting the Mortality of Patients Hospitalized with Nontraumatic Reasons in General Intensive Care Unit of A State Hospital

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Introduction: The aim of this study is to determine the mortality rate and factors affecting the mortality of these patients in general intensive care unit (GICU) of a state hospital.

Material and Method: Data of patients that were hospitalized between January 2012 and March 2013 in GICU of Konya Numune Hospital were retrospectively analyzed. Demographic characteristics and clinical data of patients were recorded. Patients were divided into two groups as survivors and dead. Factors that may affect mortality of patients were examined.

Results: Total 930 patients were included in the study Median age of patients was 73 [63-80], 357 (38.4%) of them died and 573 (61.6%) of them survived, 457 (49.1%) of patients were male. Median Glasgow coma scale (GCS) and median APACHE II score of total group were 13 [8-15] and 17 [13-21] respectively. Median duration of hospitalization was 4 [2-12] days. The number of patients that were treated with invasive mechanical ventilation (IMV) was 380 (40.9%). The number of patients that were treated with ES, FFP, platelets and albumin supplementation were 286 (30.8%), 354 (38.1%), 14 (1.5%), 56 (6%) respectively. Logistic regression analysis revealed that the advanced age, transfer of patients from level II ICU to level III, mechanical ventilation and renal replacement therapies were factors increasing the ICU mortality. The high GCS, admission from emergency service to level II ICU were factors reducing the ICU mortality.

Conclusion: Longer the duration of hospitalisation and increased number and diversity of interventions were related with increased mortality. Mortality rate of patients in state hospital ICUs can be reduced if the risk factors of patients were identified appropriately.

Key words: Intensive care unit, mortality, morbidity, state hospital

P-073

Invasive Device-Associated Nosocomial Infections Between 2012 and 2014 in a Turkish Intensive Care Unit

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Introduction: In this study, we aimed to report the invasive device-associated nosocomial infections (IDAI) in intensive care unit (ICU) of our hospital between 2012 and 2014.

Material and Method: All IDAI in our sixteen bed ICU were retrospectively analysed. The same infectious disease specialist diagnosed according to CDC criteria. IDAI rates were calculated by dividing number of IDAI by patient days multiplied with 1000 [(IDAI/patient days)x1000].

Results: IDAI in our ICU between 2012 and 2014 occurred as the following table pointed out.

Conclusion: Nosocomial infections in ICU patients are the most important issues affecting mortality and morbidity. Many factors as invasive procedures in ICUs, increased catabolism, endotracheal intubation, mechanical ventilation, stress ulcer prophylaxis and tracheal aspiration increase the probability of hospital associated infections. There is an urgent need for implementing medically approved infection control measures and creating opportunities to give a safe, evidence based health care with multidisciplinary approaches. To reach the desired results these infection control measures should be evidence based and easy to apply in the daily praxis. Close follow up of compliance with these measures and feedback as needed would be an important guide to struggle with hospital infections

Table 1. Distribution of invasive device-associated infection rates and utilization ratios according to years

	n	Patient days	MV days	MV rate	VAP rate	Urinary catheter days	Urinary catheter rate	CA-UTI	Central venous catheter days	Central venous catheter rate	CA=BSI
2012	874	5298	3885	0.73	12.1	5063	0.95	2.4	3946	0.74	5.06
2013	833	5137	3565	0.69	10.3	4954	0.96	2.0	3930	0.77	6.4
2014	941	3738	3738	0.66	6.2	5424	0.95	0.52	3655	0.64	9.8

MV: Mechanical Ventilator, VAP: Ventilator Associated Pneumonia, CA-UTI: Catheter-associated urinary tract infection, CA=BSI: Catheter associated blood stream infection

P-074

Treatment Cost of Central Venous Catheter Associated Blood Stream Infections in Intensive Care Unit

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Introduction: We aimed to determine the cost of drug therapy of central venous catheter associated blood stream infections (CVCABSI) in intensive care unit in 2014.

Material and Method: The onset days and mean cost of antibiotherapy of CVCABSI diagnosed according to CDC criteria were calculated.

Results: In 2014, 33 patients were diagnosed as CVCABSI 36 episodes. 13 of them were male (39.4%). Mean onset of infections were 17.9 days. 17 (51.5%) patients have died. Mean cost of antibiotherapy of CVCABSI was calculated as 649.32 Euro per patient. That was only the cost of antibiotherapy. It does not include laboratory procedures used for diagnosis and determination of adverse effects due to treatment, labour costs and other costs of patient care.

Conclusion: Infections in intensive care unit are important issues because of both causing morbidity and mortality and increasing treatment costs. Effective prevention policy of infections in intensive care units can decrease morbidity and mortality rate and treatment costs.

Key words: Central venous catheter, intensive care unit, blood stream infections

P-075

Comparison of Different Analyzing Methods for the Measurement of Electrolytes in Intensive Care Unit Patients

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Introduction: Variations of electrolyte values are very important in critically ill patients. It is serious to obtain the correct measurement values for performing the optimum treatment modality. Nevertheless, the measurement of electrolytes by using central laboratory auto-analyzers (AA) may take quite a while and this may delay and compromise the treatment. Arterial Blood Gas Analyzers (ABG) are readily available for point of care use in critical care. They are meant to produce accurate and rapid results and electrolyte levels can also be measured by these analyzers. The aim of our study was to investigate whether electrolyte levels measured by using ABG and AA were equivalent.

Material and Method: After approval by local ethics committee, an observational prospective study was conducted in 100 patients admitted to Intensive Care Unit. Samples for both AA and ABG analyzers were collected simultaneously from invasive arterial catheters of patients. Electrolyte levels were measured by using two methods.

Results: The mean age of participants were 67±16 years. The mean sodium concentration by using AA was 137.8±5.4 and 136.1±6.3 by using ABG analyser. The mean potassium levels of AA and ABG analyzers were 3.8±0.7 and 3.4±0.7, respectively. In Spearman's correlation analysis, the results of AA and ABG analyzers for sodium (p=0.001, r=0.561) and potassium (p=0.001, r=0.812) levels was found correlated.

Conclusion: In our study, there was no significant difference between sodium and potassium levels measured by using two above mentioned methods. Under these circumstances; in rapid treatment decisions of critically ill patients point of care arterial blood gas analyzer results for potassium and sodium may safely be used.

Key words: Arterial blood gas, sodium, potassium

P-076

Evaluation of the Cases with Synthetic Cannabinoid Intoxications

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Introduction: Bonzai is a kind of synthetic cannabinoid (SC) which is known as 'Spice' and commonly used in Europe because of its pleasurable effects. It is 100 times more toxic on brain than natural cannabinoids and its side effects vary in patients due to its ingredients change continuously (1).

Material and Method: In this study we aimed to present our patients followed in our intensive care unit (ICU) with literatural findings.

8 patients followed in our ICU in a 6 months period due to bonzai usage were studied. Age, gender, hemodynamic parameters, Glasgow Coma Scale (GCS), APACHE II, mechanical ventilation (MV) demand, ICU follow up time were recorded.

Results: All our patients were male. Mean age was 21,75 (17-38). MV demand in our patients was 3 (37,5%). Mean MV follow up time was 7,3 hours (6-10). Mean GCS was 6,5(3-9). Mean ICU follow up time 1,375 days (1-2) and mean APACHE II was 11(6-18). Common symptoms observed in our patients were agitation (35,2%), hallucination (38,6%), tachycardia (80,1%). Epileptic seizure was observed in 2 of our patients whom were hospitalised in ICU due to low GCS or respiratory failure. From medical history of the patients we learned that 1 patient used bonzai for suicide. All of the patients were excluded from ICU without any problem.

Conclusion: SC usage is forbidden in many countries including our country because of its side effects. Active and inactive ingredients of SC can cause various side effects. As a result, in patients with agitation, tachycardia, anger, visual defects, epileptic seizure, syncope and respiratory failure substance abuse should be kept in mind.

Key words: Synthetic cannabinoid, intensive care unit, intoxication

References

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P-077

Critical Illness Polyneuropathy and Myopathy in Our Intensive Care

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Introduction: A major complication in patients with long intensive care unit(ICU) stay is development of critical patient related generalized neuromuscular weakness, referred to as critical illness polyneuropathy(CIP) and critical illness myopathy(CIM). We aimed to analyze retrospectively the patients who were diagnosed with CIP, CIM or both by EMG and neurological examination.

Material and Method: 10 patients who had prolonged ventilation (more than 7 days) and diagnosed with CIP or CIM or both included in the study. The study was carried out between 1 January 2014 and 1 March 2015. 7 patients were diagnosed by EMG whereas the remaining 3 patients were diagnosed by neurologic assessment by a consultant neurologist 2 of which died before EMG and 1 was transferred to an other hospital before EMG.

Results: 6 patients were male and 4 patients were female. Mean age of the patients was 54.1 ± 13 years. 5 patients presented with multiorgan failure, 4 patients were in septic shock and 1 of the patients was with acute corrosive substance intoxication. Mean APACHE II score was respectively 27 (min:16, max:32). Mean days on ventilator was 17 (min:6, max:57). 4 of the patients had to have a tracheostomy procedure. 5 of the patients had to be reintubated because of respiratory failure. 5 patients died in the intensive care unit while 4 of them were discharged to an other department and 1 of the patients discharged to an other hospital.

Conclusion: In the case of prolonged ventilation and weaning failure after the clinical physiopathological state improved CIP, CIM or both must be remembered, neurological assesment and clinical tests must be applied.

Key words: Critical illness polyneuropathy, critical illness myopathy, intensive care unit

P-078

The Obstetric Patients Assessment in Critical Care Unit

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Introduction: The purpose of this study was to evaluate the obstetric cases taken to intensive care unit and investigate prognostic factors on mortality of obstetric patients admitted to the intensive care.

Material and Method: 78 patients who treated in the intensive care unit were included in this study. All data that provide information about prognosis such as demographic data, hospitalization indications, duration of mechanical ventilation, length of stay in intensive care, complications, laboratory, Glasgow Coma Scale, APACHE II and SOFA scores were recorded.

Results: In our study, 63 of 78 patients were discharged from the ICU, 13 patients died and the mortality rate was calculated as 16.6%. No statistically significant difference was found between living and dying patients when comparing maternal age, gestational age, the number of pregnancies and births. Reasons of hospitalization of patients being treated at the intensive care unit were revealed as obstetric hemorrhage (51.3%), HELLP syndrome (37.2%) and eclampsia (11.5%) respectively. When complications were analysed for 78 patients, in 47 patients (60.3%) a lung injury; in 12 patients (15.4%), acute renal failure; in 9 patients (11.5%), neurological complications (intracranial hemorrhage, cerebral edema, PRESS); in 3 patients (3.8%), sepsis; in 3 patients (3.8%) ARDS; and in 3 patients (3.8%), DIC was observed. In our 2 patients who neurological complications (intracranial hemorrhage) developed and have HELLP syndrome and died, subcapsular liver hematomas was revealed. When APACHE II, SOFA and GCS values were compared, the results of dying patients were worse compared to the living patients' results in terms of statistical significance ($p < 0.001$).

Conclusion: Both in developed and developing countries, the most important cause of maternal mortality are hemorrhage and hypertensive diseases of pregnancy. We believe that maternal mortality can be reduced by preoperative and postoperative close monitoring in obstetric patients, especially patients have high risk.

Key words: Obstetric disease, intensive care unit

Demographic features	Group Died n=13	Group Living n=65	p
Maternal age	30.92±6.5	29.48±6.0	0.4
Gestational week	33.15±5.8	34.31±3.3	0.3
The number of pregnancies	4.69±4.0	4.69±3.18	1
Parity	4.00±3.7	3.80±2.6	0.8
Medical history	1 (7.7)	3 (4.6)	0.1
Eclampsia	2 (15.4)	7 (11.1)	0.1
HELLP syndrome	8 (61.6)	21 (33.3)	0.08
Obstetric hemorrhage	3 (23.1)	37 (58.7)	0.07

P-079

Effects of Enteral, Parenteral or Combined Nutritional Support on Prognosis: A Tertiary Intensive Care Unit Analysis

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Introduction: Appropriate nutritional support is crucial to management of patients in intensive care units. This study sought to conduct a comparative analysis of enteral, parenteral and combined nutritional support on prognosis of patients in intensive care units.

Material and Method: From January 2012 to December 2014, total of 1725 patients aged ≥ 18 years, receiving nutritional support were included in this retrospective analysis. The patients' demographic data, the ways of nutritional support, length of hospitalization and mortality rates were analyzed and compared among the groups: total enteral, total parenteral and combined nutrition group.

Results: There was no difference between mean ages of patients in each group. In each year, mean length of hospitalization in enteral group ($n=119$) was significantly longer than parenteral ($n=486$) and combined nutrition groups ($n=120$) ($p < 0.05$). Mean length of hospitalization in 2012 was 13.3 ± 17.5 days in enteral group, 7.7 ± 6.2 days in parenteral and 7.8 ± 4.9 days in combined group ($p=0.009$). In 2013, in enteral, parenteral and combined groups, it was 12.5 ± 13.8 , 9.4 ± 10.5 and 8.1 ± 7.6 days, respectively ($p=0.001$). In 2014, 11.4 ± 11.7 , 8.1 ± 8.4 and 9.1 ± 11.4 days in enteral, parenteral and combined groups, respectively ($p=0.001$). In 2012, mortality of enteral, parenteral and combined nutrition groups were 47.3%, 40.6% and 36.7%, respectively, which is not significant between groups. In 2013 and 2014, mortality of combined nutrition group (20.0% and 16.0%, respectively) were significantly lower than mortality of enteral (46.1% and 47.9%, respectively) and parenteral groups (52.3% and 51.0%, respectively) ($p < 0.05$).

Conclusion: The enteral nutrition support use was higher in our hospital and this is the same as in other centers. For patients receiving nutritional support in intensive care unit, combined nutritional support is more efficient than total enteral or parenteral nutrition support and have better prognosis.

Key Words: Enteral, parenteral, combined, nutritional

	Turkish Patients n=29	Syrian Patients n=41
Age (Mean)	57.62	35.43
Community-Acquired	9 (31.9%)	23 (56.1%)
Nasocomial	20 (69%)	18 (43.9%)
Wound	7 (24.1%)	29 (70.7%)
Sputum	21 (72.4%)	10 (24.4%)
Blood	1 (3.4%)	2 (4.9%)
Internal Illnesses	23 (79.1%)	11 (26.8%)
Surgical Procedures	7 (20.9%)	30 (73.2%)

P-080

Characteristics of Acinetobacter Infections in the Intensive Care Unit in Turkish and Syrian Nationals

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Introduction: Acinetobacter baumannii can survive prolonged periods in suitable environmental conditions and easily spread to patients with weak immune systems. Major risk factors for infections are mechanical ventilation, invasive procedures, and the use of broad-spectrum antibiotics. The infection can be nosocomial or community-acquired, changing due to several factors. The aim of this study was to determine acinetobacter infection characteristics in intensive care units under war conditions.

Material and Method: The records of 70 patients with acinetobacter baumannii infection in an intensive care unit between January 2013 and December 2013 were evaluated retrospectively.

Results: Of the 70 patients, 41 (58.6%) were Syrian and 29 (41.4%) were Turkish. The mean age was 35.43 ± 15.88 in Syrian patients and 57.62 ± 20.90 in Turkish patients. Thirty (73.2%) Syrian patients were treated with surgical procedures, while 23 (79.1%) Turkish patients were determined to have internal illness. Acinetobacter infection was identified in 23 (56.1%) Syrian patients before coming to the ICU; samples were detected at a wound rate of 29 (70.7%). The infection was identified as nosocomial in 20 (69%) Turkish patients; samples were detected at a sputum rate of 21 (72.4%). Multidrug-resistance was observed in all the patients. The highest rates of resistance (64%) were detected against penicillin and the lowest with colistin (0%). There was no significant difference for duration of ventilation, invasive procedures, and reintubation.

Conclusion: Our data showed a clear risk for acinetobacter baumannii as a community-acquired infection near war areas, and it affects not only nosocomial infection rates, but also microorganism behavior and antimicrobial resistance, which are dynamic issues that differ relative to locality. It appears that acinetobacter will become a serious community health problem in the near future unless efficient and appropriate precautions are taken.

Key words: Acinetobacter baumannii, intensive care unit, war conditions,

P-081

Postoperative Intensive Care for Craniosynostosis

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Introduction: Craniosynostosis is a condition in which one or more of the fibrous sutures in an infant skull prematurely fuses by ossification. It is one of the major surgical treatments in the pediatric population. In this study, we aimed to evaluate postoperative intensive care after craniosynostosis operations.

Material and Method: Data of all patients, who were operated in our hospital's neurosurgery clinic in the years 2009-2013, were studied retrospectively and 23 patients, who underwent an operation because of craniosynostosis, were included in this study. Demographics, transfusion requirements, operation duration and intensive care admission were recorded.

Results: Mean \pm SD age of all patients was 19 ± 16.26 months, 13 were female and 10 were male. Weight was 10.74 ± 5.79 . 73,9% of the patients underwent single-multiple-suture correction, operation duration was 154.13 ± 17.49 minutes. Orotracheally intubated 2 patients and totally all patients were transported to the ICU postoperatively. Average ICU stay was 2.3 ± 1.2 days. Transfused were totally 152.63 ± 61.18 mL red blood cells and 125 ± 57.74 mL fresh frozen plasma. Preoperative and postoperative hemoglobin values ($10.2 \pm 1.06/9.91 \pm 2.42$) showed no difference ($p=0.583$). None of the patients died.

Conclusion: Craniosynostosis operations consider increased attention of the anesthesiologist, because of the very young patient population. However perioperative metabolic changes continue also in the postoperative period. That's why these infants should be admitted to the ICU at least in the early postoperative period.

Key words: Craniosynostosis, postoperative, intensive care unit

P-082

A Retrospective Analysis of Patients with Acute Respiratory Distress Syndrome in Intensive Care Unit

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Introduction: ARDS is a serious restrictive syndrome, which leads to significant morbidity and mortality in intensive care.

Material and Method: In this study, we aimed to compare of general characteristics, effects of etiologic and prognostic factors (mechanical ventilation applications, laboratory values, rates of mortality and multiorgan dysfunction, APACHE II, LIS, GCS, SOFA score, arterial blood gas values, PaO₂/FiO₂ ratio values) of patients with ARDS who diagnosed at Dicle University Clinic of Anesthesiology Intensive Care Unit between January 2009 and January 2013 on mortality and compare of patients who died and survived.

Results: 61 patients with ARDS in our study male and 39 were female. When etiological factors of patients with ARDS investigated, 37 patients with pneumonia, 14 patients with, 19 patients with sepsis, 9 patients with pulmonary contusion, 6 patients with extrapulmonary infection, 5 patients with intoxication, 4 patients with multiple blood transfusions, 4 patients with Firearms weapon injuries, 2 patients with acute pancreatitis were found in 44 of patients died. APACHE II, SOFA, LIS scores were significantly higher in patients who died, GCS were significantly lower. PO₂/FIO₂ and PCO₂ of blood gas values were significant. Duration of mechanical ventilation and length of stay in intensive care unit were significantly higher in patients who died. Organ failure and mortality was significantly higher in the presence of septic shock. Respiratory failure in patients with cardiac disease and diabetes mortality in patients with renal failure were significantly higher than the other comorbid conditions.

Conclusion: ARDS is a common cause of significant morbidity and mortality in intensive care units. Early diagnosis and intensive care support, lung-protective mechanical ventilation and permissive hypercapnia strategy improve survival.

Key words: ARDS, intensive care unit, sofa, LIS, Apache II

P-083

Comparing Two Different Weaning Protocols in Cardiac Patients

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Introduction: The interaction of heart and lung is important to provide adequate tissueoxygenation. We compared two different weaning method and factors that affect successfulweaning in patients who had heart failure.

Material and Method: After Ethics Committee approval, sixty patients who had heart failure, ejectionfraction lower than 50%, and had diastolic dysfunction were enrolled to study. Patients wereweaned according to E.Wesley (1) criteria and divided into two groups, randomly. Group Iwas weaned to bilevel positive airway pressure (BiPAP) or, Group II with T-piece after 30 minutes when they have met the criteria. Heart rate, blood pressure, blood gas analyses (BGA), fluid balance, ischemic myocardial findings and reentubation requirement wererecorded. These parameters were recorded before extubation, immediately after extubation, 2 hours, 24 and 48 hours after extubation. Reentubation in 48h in both groups and BiPA Requirement for T-piece group were defined as extubation failure.

Results: There were no differences between groups in terms of demographic characteristics,heart rate, blood pressure, BGA, fluid balance, arrhythmias and myocardial ischemia. Reentubation requirement was significantly lower in Group I within 48 hours (Group I: 11,8%, Group II: 40 %, p=0.001). In both groups reentubation requirement was mostly within 24 hours. In Group I, when comparing successful and unsuccessful individuals, heart rate wassignificantly lower during weaning time in successful individuals (p=0.048).

Conclusion: We compared two different weaning method in the patients with heart failure. The success rate of BiPAP group was found better than the T-piece group. First 24 hours ıstıme to be considered the most important period with regard to successful extubation. Heartrate may be a predictor of weaning.

Key words: Cardiac patient, weaning, BiPAP

Reference

1. Am.j.respir 1999.e.wesley criteria.

P-084

A Retrospective Analysis of Intoxicated Patients in Our Intensive Care Unit

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Introduction: In our study, we aimed to define the demographic characteristics, cause and prognosis of intoxicated patients in intensive care unit retrospectively.

Material and Method: 333 intoxicated patients who were admitted to our intensive care unit between 2006-2015 were analyzed retrospectively. The patients were evaluated for age, gender, drug or substance that causes intoxication, time of application, intensive care unit hospitalization time, respiratory support and mortality rates.

Results: The median age of patients was 24 (min 12, max 88). 104 (31.2%) of the patients were male, 229 (68.8%) of the cases were female. The distribution of causes of intoxication were analgesics-antiinflammatory drugs 28.4%, antidepressant: 24%, antipsychotics: 6.3%, antiepileptic: 4.5% alcohol and ethyl alcohol: 3.4%, colchicine: 1.8%, carbon monoxide: 1.8%, mushrooms: 1.5%, pesticides: 1.3%, Organophosphates: 0.9% and unclassified 15.9%. 81 (24.3%) of the patients were admitted to emergency service in the morning and 252 (75.7%) of them admitted at night. 210 (63.1%) of the cases were single, 123 (36.9%) of the cases were married. 88 (26.4%) of the patients had chronic disease. 57 patients (17.1%) were under psychiatric treatment. 305 (91.6%) were suicides. Medical treatment were administered to 316 patients (95.2%), 14 patients (4.2%) required mechanical ventilation, 5 patients (1.5%) required hemodialysis, 13 patients (3.9%) required cardiovascular support. 311 (93.4%) of the patients were discharged from the intensive care unit, 5 (1.5%) of the patients died.

Conclusion: We found that young and female patients consisted the high risk group for acute intoxication. Also medical pills were found the most cause of the suicide attempts.

Key words: Intensive care, intoxication, mortality

P-085

Prospective Analysis of Trauma Patients via Trauma Scores in the Intensive Care Unit

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Introduction: Trauma is one of the common causes for mortality and morbidity worldwide. In order to assess trauma objectively, some kinds of scoring systems are used (GCS, RTS, ISS, TRISS, APACHE II, SOFA, SAPS II). In this study, we aim to determine the efficacy of trauma scores on mortality, morbidity and prognosis.

Material and Method: 193 trauma patients were involved in this study. Patients age, sex, etiology of trauma, duration of stay in ICU and mechanical ventilation requirement, mortality rate, data of scoring systems were analyzed.

Results: Average age was 43.2. General mortality rate was 27.5%; however over age 60 mortality rate was 59.0%. 79.2% of deads were male. Other results are shown in the tables.

Conclusion: We determined that increase at the scores of APACHE-II, TRISS, SAPS-II, SOFA and decrease at the scores of GCS and RTS were correlated with higher mortality rate and longer duration of stay of mechanical ventilation as shown as previous studies. Our study showed that scoring systems were effective to predict the prognose of trauma patients. We suggest that the scoring systems used for trauma patients are effective to predict the prognose and to improve their treatment.

Key words: Scoring systems, intensive care unit

	n/%		n/%
Age		Gender	
0-45	110/57.0	Male	147/76.2
46-60	44/22.8	Female	46/23.8
>60	39/20.2		
Etiology of trauma		Variety of trauma	
Motor vehicle accidents (vehicle occupants)	80/41.5	Multitrauma	113/58.5
Motor vehicle accidents (pedestrians)	57/29.5	Cranial	51/26.4
Fall down injuries	49/25.4	Thoracic	20/10.4
Assault	4/2.1	Extremity	6/3.1
Work accidents	3/1.6	Abdominal	3/1.6

Table 2. Duration of stay in ICU for age groups (day) (median/minimum/maximum)

Age group	Duration of stay in ICU (day) (median/minimum/maximum)
0-45	9/1-175
46-60	7/2-172
>60	15/2-240

Table 3. Scores of patients (Average ± SD)

Scoring Systems	Total (n=193)	Survived (n=140)	Dead (n=53)	p*
APACHE II	14.0±7.6	11.9±6.5	19.7±7.3	<0.001
GCS	10.0±3.8	10.8±3.5	7.8±3.6	<0.001
RTS	6.5±1.4	6.7±1.4	5.9±1.2	<0.001
TRISS	34.7±34.6	28.0±32.7	52.3±33.4	<0.001
ISS	39.0±21.0	37.6±20.9	42.8±21.0	0.07
SAPS II	32.0±14.2	28.0±12.5	42.8±13.0	<0.001
SOFA	4.9±3.3	4.1±2.7	7.1±3.6	<0.001

*p: For survived and dead groups

P-086

The Poisoning Followed-up in Our Anesthesia Intensive Care Unit: The Last Three-Years' Data

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Introduction: After intensive care and treatment, the mortality and morbidity of the poisoning cases which 5-14% of patients admitted to the intensive care unit are resulted with successful outcomes. In this study, to reveal the related statement of poisoning cases in our region was aimed for the same purpose by examined the patients treated in our Intensive Care Unit.

Material and Method: After the confirmation of Local Ethics Committee, 48 of a total 51 patients accepted and treated and followed up in

Yüzüncü Yıl University Medical Faculty Anesthesia Intensive Care Unit among in January 2011 and December 2014 between 18-65 years of age were included in the study. A patient under the age of eighteen and sixty-five over the age of two patients were excluded from the study. Results were statistically evaluated and analyzed the correlation analysis.

Results: 28 women and 20 men of 48 patients were included in the study. The average age of the female patients included in the study was 24.3 and the average age of male patients was 29. 19 of the cases who suicidal poison were women and 10 were men. Only one patient of our cases died.

Conclusion: In our country, although different percentages of them, it had been demonstrated that the most of the cases of the poisoning were women. Because of to be found similar results in this study too, it can indicated that the problems related to gender discrimination extends from the past to the present day came in the past have still continued. In conclusion; in the light of the knowement of poisoning cases which most of them are women and most of them are suicidal, We think that the task seriously about this subject especially socially should be fulfillment.

Key words: Intox, ICU, retrospective

P-087

Our Experiences of the Percutaneous Dilatational Tracheostomy at Bedside in Critically Ill Patients

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Tracheostomy is frequently performed procedure in the intensive care unit (ICU) to prevent the patients from the complications of prolonged tracheal intubation. Two different techniques can be available for critically ill patients: Surgical and percutaneous. The purpose of this report was to present our experiences about percutaneous dilatational tracheostomy.
Cases: The fifteen patients (8 women, 7 men) underwent Percutaneous

Tracheostomy using Griggs method in ICU from January 2014 to February 2015 were evaluated and the procedures which were performed at the bedside by the specialist trainee year 4 in anesthesia under guidance of the specialist in anesthesia were included. The age of the patients were between 28 and 86 and the average age was 61.33 (SD: 17.20). The laryngeal intubation duration before the percutaneous tracheostomy was at least 5 days, at most 23 days and the mean duration was 11.8 days (SD: 5.11). All tracheostomies took average 6.84 minutes (SD: 3.08 Range: 3.3-13.25 min). The most frequently observed intraoperative complication was minor hemorrhage that required no transfusion and controlled by compression. One fetal complication occurred in the 7th day after percutaneous tracheostomy; acute subcutaneous emphysema developed and the tracheal cannula displaced and the patient died.

Conclusion: Percutaneous tracheostomy is accepted as a safe and rapid procedure that can be performed at bedside in the intensive care unit. However it is approved that morbidity and mortality rates of the percutaneous technique is fewer than the surgical technique, the possibility of fetal complications should be considered.

Key words: Tracheostomy, intensive care units, subcutaneous emphysema

Table 1. The patients' demographic data						
	Age	Gender	Laryngeal intubation duration (day)	Intraoperative complication	Postoperative complication	Procedure duration (min)
1	86	Male	23	-	-	8.25
2	47	Male	8	Minor hemorrhage	-	7
3	81	Female	12	-	-	6.45
4	76	Female	8	Minor hemorrhage	-	4.25
5	79	Female	18	-	-	3.30
6	40	Female	12	Difficult dilation	Minor hemorrhage	12.25
7	28	Male	15	-	-	5.45
8	49	Male	7	-	-	4.42
9	55	Female	11	-	-	4.38
10	59	Female	10	-	-	13.25
11	74	Female	18	-	-	6.45
12	64	Male	6	Minor hemorrhage	-	11.25
13	56	Female	5	-	Subcutaneous emphysema	5.25
14	48	Male	9	-	-	6.10
15	78	Male	15	-	-	4.30

P-088

Ventilator-Associated Pneumonia in an Intensive Care Unit of a Teaching Hospital in İstanbul (2010-2014)

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Introduction: Ventilator-associated pneumonia (VAP), a form of hospital-acquired pneumonia, is a serious infection with a high mortality rate. Therefore, early diagnosis, and appropriate antibiotic treatment are necessary. The aim of the study was to determine the rate of VAP and the change of profiles causative microorganisms in an intensive care unit (ICU) of a teaching hospital.

Material and Method: An active, targeted prospective surveillance

was performed by infectious disease specialists and infection control nurses in the unit. VAP was diagnosed by using the clinical criteria of the Centers for Disease Control and Prevention. Isolated strains was identified and antibiotic resistance of species was determined by the disk diffusion method according to the Clinical and Laboratory Standart Institute criteria. Fisher exact test was used for the statistical analysis.

Results: Between January 2010 and December 2014, a total of 5490 patients hospitalized for 37.053 patient days in ICU and 610 VAP (25.1 per 1.000 patient days). The most frequently isolated microorganisms were *Acinetobacter baumannii*, *Pseudomonas aeruginosa* and *Enterobacteriaceae* spp. The incidence densities of infections decreased from 31.5% to 10.1% per 1.000 device-days ($p < 0.05$) for VAP during the study period. It was found that a significant increase in the proportion of *Klebsiella* spp. isolated from VAP (from 6.0% to 30.7%, $p < 0.05$), and a decrease in the proportion of *Staphylococcus aureus* isolated from VAP (from 7.8% to 2.5.0%, $p < 0.05$).

Conclusion: VAP rates are decreasing in our ICU. An increasing trend of infections caused by *Klebsiella* spp. and a decrease in the proportion of *S.aureus* isolates are the remarkable findings of this study

Key words: Intensive care units, VAP, *Klebsiella* spp.

P-089

Piperacillin/Tazobactam Induced Tinnitus and Reverseble Hearing Loss During Treatment of a Complicated Urinary Tract Infection

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Introduction: Complicated genitourinary tract infection occurs in patients with functional or structural abnormalities of the genitourinary tract. Morbidity and infection outcomes in individuals with complicated urinary infection are principally determined by the underlying abnormality rather than the infection. There is a wide spectrum of potential infective agents, and isolated bacteria tend to be more resistant to antimicrobial therapy. *Pseudomonas aeruginosa* is one of the most important microorganisms that can be problematic for some patients.

Material and Method: Here in, we present a 67 year old male patient who developed reversible hearing loss and tinnitus on the 10th day of PTZ treatment for complicated urinary tract infection.

Results: A 67 year old male patient admitted to urology ward. He had 10-year history of diabetes and using insulin for 5 years. He had also hypertension, lymphoma with renal involvement and chronic renal failure. He was planned for transurethral prostate resection (TUR-P). Postoperatively he re-admitted to hospital with recurrent urinary tract infection hemodynamic instability and altered mental status. He was transferred to ICU and his antibiotherapy was initiated with PTZ. 10th day of PTZ treatment he complained with tinnitus. In audiometric diagnosis bilateral hearing loss with high frequency (4000 Hz 70 dB, 8000 Hz 80 dB) determined. PTZ treatment stopped. Betahistin HCl and B vitamin complex were given. After 14 days later control audiometric diagnosis was within normal limits. Piperacillin/tazobactam (PTZ) is one of the most frequently utilized antibiotics that targets *Paeruginosa* and generally well tolerated. However, serious adverse effects can occur such as hypersensitivity reactions, neurotoxicity, hepatotoxicity, bleeding disorders and rarely neutropenia, hemolytic anemia, ototoxicity, tinnitus vertigo and deafness.

Conclusion: Antibiotics used in ICU unfortunately may causes many side effects. We should always beware of side effects of commonly used antibiotics.

Key words: Piperacillin/tazobactam, tinnitus, reverseble hearing loss

P-090

Mortality Analysis of Trauma Patients in General Intensive Care Unit of a State Hospital

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Introduction: The aim of this study is to determine the mortality rate and factors affecting the mortality of trauma patients in general intensive care unit (GICU) of a state hospital.

Material and Method: Data of trauma patients that were hospitalized between January 2012 and March 2013 in GICU of Konya Numune Hospital were retrospectively analyzed. Demographic characteristics and clinical data of patients were recorded. Patients were divided into two groups as survivors and dead. Factors that may affect mortality of patients were examined.

Results: Total 108 trauma patients were included to the study. The mortality rate of overall group was 19.4%. Median age of the patients was 44.5 years and 75.9% of them were male. Median Glasgow coma scale (GCS) of dead group was lower (5 [3-8] vs 15 [13-15], $p < 0.0001$), median APACHE II score was higher (20 [15-26] vs 10 [8-13], $p < 0.0001$) and median duration of ICU stay was longer (27 [5-62.5] vs 2 [1-5], $p < 0.0001$) than survived group. The most common etiology of trauma patients was traffic accidents (47.2%) and 52.7% of patients had head trauma. The rate of erythrocyte suspension, fresh frozen plasma, trombocyte suspension and albumin were 38.9%, 27.8%, 0.9% and 8.3% respectively in all group. The number of patients invasive mechanically ventilated was 27.8% and median length ofstay of these patients were 5 [1.75-33.5] days. The rate of operated patients was 42.6%. The rate of tracheostomy, renal replacement therapy, bronchoscopy and percutaneous endoscopic gastrostomy enforcements were higher in the death group.

The advanced age ($p = 0.016$, OR: 1.054; 95% CI: 1.010-1100) and low GCS ($p < 0.001$, OR: 0.583; 95% CI: 0.456-0.745) were found to be independent risk factors the ICU mortality of trauma patients in logistic regression analysis.

Conclusion: We believe that the determination of these risk factors affecting the mortality of trauma patients in our ICU may help to management of trauma patients in other ICUs in our country.

Key words: Intensive care unit, mortality, trauma

P-091

Evaluation of Geriatric Patients in Intensive Care Units

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Introduction: All over the world, elderly population is increasing in parallel with improving life conditions. In our country, while elderly (≥ 65 y) population ratio in 2013 was 7.7%, according to population projections it is estimated to increase to 10.2% in 2023. In addition, elderly population exhibits 3-times faster growth in comparison to other age groups. As a result, the patient profile changes and the number of elderly patients and their bed occupancy increases causing an inability to meet the needs of the rest of the population for intensive care.

Purpose: Bed occupancy and mortality rates of increasing geriatric patient population in the intensive care unit in the last 3 years have been analyzed.

Material and Method: Intensive care data has been collected for the years 2012-2014 retrospectively.

Results: For general, ≥ 65 y and ≥ 85 y patient groups in 2012-2014, number of patients, length of stay (LOS) and mortalities are shown in the table. LOS of the geriatric patient group is significantly high based on the number of patients. The mortality rate of the over 85 age group is almost twice as much as the general mortality.

Conclusion: Though old age is not considered as a disease, elevated number of diseases and complications increases the mortality of this

group. As seen in this study, LOS of geriatric patients is significantly higher than other patients and is in agreement with the study of Grace. This result can be explained with longer stay of geriatric patients due to many factors and even not being discharged until termination. The priorities for the care of this patient group are still unclear. On one hand, palliative care methods are being discussed and on the other hand, futile medical care duration is argued; and unfortunately, this situation is currently unresolved due to many legal and social reasons apart from medical justifications.

Key words: Geriatri, mortality, ICU

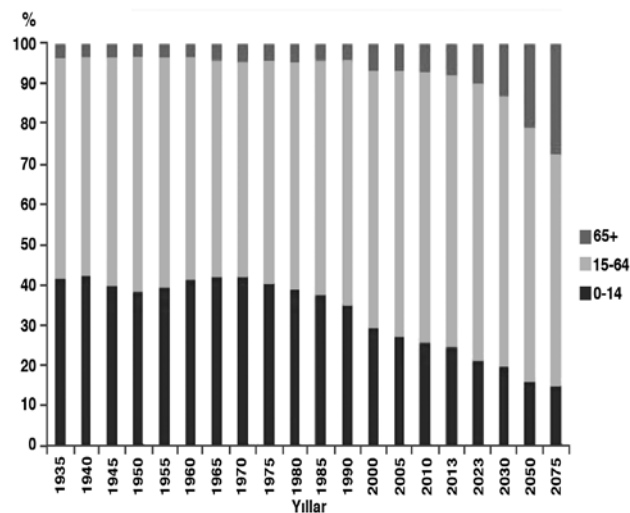


Figure 1. Population ratio by age group, 1935-2075

Table 1. Number of days of hospitalization and mortalities

	Total number of hospitalized patients	≥ 65 y total patient number (%)	≥ 85 y total patient number	Total LOS	≥ 65 y LOS	≥ 85 y LOS	General mortality (%)	≥ 65 y mortality (%)	≥ 85 y mortality (%)
2012	865	550 (63.5%)	129 (14.9%)	5593	5136 (91.8%)	1324 (23.67%)	39.99%	48%	60.46%
2013	682	395 (57.9%)	107 (15.68%)	5881	4480 (76.10%)	949 (16.1%)	39%	48.35%	56.07%
2014	752	442 (58.7%)	127 (16.88%)	6462	4818 (74.5%)	1523 (23.5%)	28.32%	48.19%	56.69%

P-092

The Prognostic Value of Cerebral Oxygen Saturation Measurement for Assessing Prognosis after Cardiopulmonary Resuscitation

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Introduction: Despite new improvements on resuscitation methods, brain damage is very often after resuscitation. The aim of this retrospective study was to assess the prognostic value of cerebral oxygen saturation measurement (rS02) for assessing prognosis on patients after cardiopulmonary resuscitation.

Material and Method: We analyzed 25 post CPR patients (12 female, 13 male). The patients cooling to a target temperature of 32-34°C. The Glasgow Coma Scale (GCS), Corneal reflexes (CR), Pupillary reflexes (PR), arterial base excess (BE) and rS02 measurements were on admission. The rewarming GCS, CR, PR, BE and rS02 measurements were made after the patient was reached to 36°C.

Results: In survivors the baseline rS02 value was 67.5 (46-70) and the percent difference between baseline and rewarming rS02 value was 0.03 (0.014-0.435). In non-survivors the baseline rS02 value was 30 (25-65) and the percent difference between baseline and rewarming rS02 value was 0.031 (-0.08-20). Although statistically significant difference was detected between groups on baseline rS02 values, no statistically difference was detected on percent changes between baseline and rewarming values of rS02. The percent changes between baseline and rewarming GCS was found as -1 (-1(-1)) in survivors and 0 (0-1) in non-survivors. Statistically significant difference was detected between groups ($p=0.004$). The percent changes between baseline and rewarming BE for survivors was 1(1-1) while 0 (-1-0) for non-survivors. Statistically significant difference was detected ($p=0.006$). No statistically difference was detected between GCS, CR, PR, BE and rS02 to determine the prognosis.

Conclusion: Despite higher values of rS02 on survivors than non-survivors, we found no statistically significant difference between groups on baseline and the rewarming rS02 values. Also no difference was detected between other tests. Since the measurement is simple, and not affected by hypotension and hypothermia the rS02 may be a useful predictor for determining the prognosis after CPR.

Key words: Cardiopulmonary resuscitation, cerebral oxygen saturation, prognosis

P-093

The Management of Pregnancy Induced Hypertension

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Introduction: Pregnancy Induced Hypertension (preeclampsia, eclampsia, HELLP syndrome) is one of the major causes of maternal morbidity and mortality. The incidence of these diseases are %7-10 in this study, we were reviewed the patients treating in intensive care in 2014.

Material and Method: We performed a retrospective study of previously normotensive women who developed gestational hypertension or preeclampsia, eclampsia and / or HELLP syndrome in 2014 in the Dicle University Faculty of Medicine. We evaluated demographic characteristics of the patients including gestational age, mode of delivery, anesthesia, intensive care unit stay, and complications, mortality and morbidity.

Results: In this study all of 8 patients followed in the intensive care unit were delivered by cesarean section. The mean gestational age of the patients was 31 ±5 weeks. Length stays in the intensive care unit of patients is 4.5 days. Maternal morbidities were as following; acute renal failure in one case (12.5%), disseminated intravascular coagulation (DIC) in one case (12.5%), pulmonary edema in three cases (37.5%), acute respiratory distress syndrome (ARDS) in two patients (25%). Maternal mortality was observed in one case due to (12.5%) DIC.

Conclusion: While the main treatment of pregnancy induced hypertension is delivery, the main purpose is to prevent the possible complication to be developed such as acute tubular and cortical necrosis, intracerebral hemorrhage, retinal detachment, subcapsular liver hematoma, liver rupture, lung edema, heart failure and disseminated intravascular coagulation.

Key words: Preeclampsia, eclampsia, HELLP

P-094

Evaluation of Prolonged Intensive Care Unit Stay

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Introduction: Tertiary intensive care unit in Şişli Hamidiye Etfal Education and Research Hospital has a 16-bed capacity. Either internal medicine or surgical intensive care unit (ICU) patients are accepted to our Adult

Intensive Care Unit. We conducted this retrospective study to evaluate prolonged ICU stay in our critically ill patients.

Material and Method: All patients data accepted to our ICU in the year 2014 were studied retrospectively and data of patients, which had a longer ICU stay than 6 months were recorded. Patients demographical data, diagnoses, ICU stay and discharge conditions were recorded.

Results: Totally data of 980 patients were studied. 748 patients were discharged. 16 patients were eligible for this study.

7 patients died, 5 patients were discharged home with a home ventilator.

Conclusion: It should be kept in mind, that ICU bed capacity is deficient in Turkey and improvement in the ICU treatment modalities is increasing life span, which causes prolonged occupation of ICU beds. That's why home care services are important for critical care bed management.

Key words: Intensive care unit stay, prolonged

DIAGNOSE	Age at discharge (years)	Gender	ICU STAY	DISCHARGE CONDITION
Posterior Fossa Tumor	7	M	6 years	Referral to pediatric ICU
Pneumonia	82	F	1 year	Exitus
Pneumonia	84	M	1 year	Discharge with home ventilator
Subdural Hematoma	89	M	1 year	Discharge with home ventilator
Chronic Obstructive Pulmonary Disease	78	M	1 year	Exitus
Pneumonia	80	F	1 year	Discharge with home ventilator
Subdural Hematoma	36	M	6 months	Exitus
AIDS	28	M	6 months	Exitus
Chronic Obstructive Pulmonary Disease	82	F	2 years	Discharge with home ventilator
Polytrauma	22	M	6 months	Exitus
Epilepsy	54	F	25 years	Exitus
Pneumonia	60	M	6 months	Exitus
Cerebrovascular disease	76	F	6 months	Discharge with home ventilator
Motor vehicle accident	29	M	3 years	Referral to secondary ICU
Motor vehicle accident	27	M	2 years	Referral to secondary ICU
Motor vehicle accident	26	F	1,5 years	Referral to secondary ICU

P-095

The Factors of Effect on Survival in Trauma Patients

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Introduction: In our study, we aimed to investigate the prognostic factors that can affect mortality of patients with multiple trauma.

Material and Method: The study conducted; between November 2007-December 2011 the diagnosis of multiple trauma intensive care unit, follow-up and treatment of 106 patients in the 18 years and over were included. For this purpose, from the patients' files age, gender, etiology of trauma, trauma affects the region, duration of mechanical ventilation, length of hospital stay, complications, presence of blood transfusion, laboratory, and radiological findings, such as GCS, APACHE II and SOFA scores data that all providing information about prognosis were analyzed by examining.

Results: Of the 106 patients included in the study 64.1% (n=74) were male and 35.9% (n=32) were female. Analysis of 106 patients

exposed to trauma in the etiology of trauma, 44.3% (n=47) a motor vehicle accident, 24.5% (n=26) vehicle traffic accidents, 27.3% (n=29) and % fall from a height and 3.7 percent (n=4) were the other (work accident, being beaten) were recorded as. A significant difference was found between survival and the presence or absence of operation. There was no significant difference between blood transfusion and survival. APACHE II and SOFA scores observed inverse relationship between the GCS. There was no significant difference on mortality with whether or not blood transfusions However, it seen negative correlation between the lower hematocrit level and mechanical ventilation.

Conclusion: With transferring of multiple trauma patients to the intensive care unit at the earliest time, maintaining diagnosis and treatment, to determine the prognostic factors, which may be effective at mortality in these patients and to act accordingly, is of great importance in developing countries, such as Turkey.

Key words: Trauma, intensive care unit

Etiology	Survived	Died	Total
Motor vehicle accident	37 (79%)	10 (21%)	47
Vehicle traffic accidents	16 (62%)	10 (38%)	26
Fall from a height	23 (78%)	6 (22%)	29
The other (work accident, being beaten)	4 (100%)	0	4
Total	80	26	106

P-096

Assessment of Ambient Noise Levels in the Intensive Care Unit

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Introduction: The World Health Organization (WHO) recommends that noise levels in the hospital environment should not exceed 35 decibels (dB) during the night and 40 (dB) during the day.

Material and Method: We planned a survey in our ICU to find the major sources of the noise, to achieve the suggestions of the ICU staff to prevent the unnecessary noises in the unit, to measure the noise levels during the shifts, to provide trainings and to make an awareness about the problem.

Results: The study was conducted in 21 bed-level three mixt ICU. Thirty six ICU staff were asked to fill in a questionnaire (pre-test). The noise levels were recorded every hour during the day and night shifts for ten consecutive days. The calibrated sound level meter providing a direct reading of sound over the ranges of 30-130 dB with an accuracy of less than ± 1 dB (IEC 651 TYPE II) was used for noise recordings. Trainings were organised about the deleterious effects of excessive sound, the alarm managements, the staff behaviors. A post- test was done asking the similar questions and a second period of noise recordings was performed. The results were summarised in Table 1, 2 and Figure 1.

Researchers showed that noise levels in ICUs ranged from 59-83 dB can stimulate the cardiovascular and endocrine systems and disrupt sleep as result of noise induced stress modulation as well as the development of 'ICU delirium'. For the staff, studies have shown that prolonged exposure to excessive noise levels has a deleterious effect on the performance of cognitive tasks and altruistic behavior.

Conclusion: After our study we observed a reduction in mean noise recordings but the levels were still higher than the ideal limits which means that this should be a continiuous training subject in ICUs.

Key words: Noise, ICU, silence

Table 1. Personal perception of the noise in ICU

	Pre-training (Mean \pm SD)	Post-training (Mean \pm SD)
Noise level (0-10)	6.28 \pm 2.09	4.10 \pm 2.88

Staff were asked to assess the noise level using the scale between 1 to 10

Table 2. Sources of the noise in the unit according to the staff

Source	No (%)
Ventilators	31 (86.1)
Monitors	28 (77.8)
Staff loudness	24 (66.7)
Telephone	23 (63.9)
IV pumps	16 (44.4)
Patients	13 (36.1)
Others	22 (38.9)

Staff were asked about the sources of noise in the unit

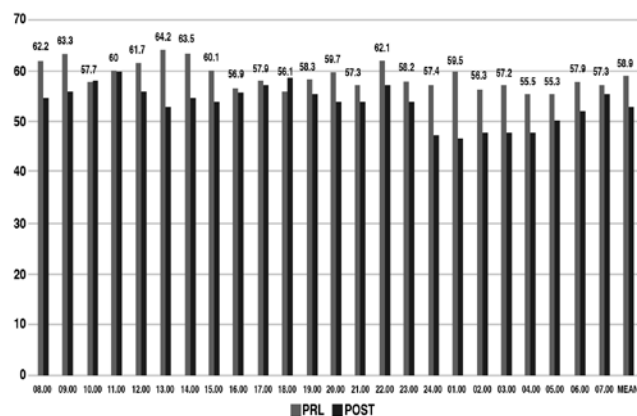


Figure 1. Pre and post training noise measurements in ICU. The highest levels recorded were around the noon and the lowest were after midnight, showing the importance of human derived source of noise

P-097

HIV Positive Patients in the Intensive Care Unit

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Introduction: Worldwide 2 million people are HIV positive and in Turkey near to 7000 people are infected with HIV. Since the quality of tertiary intensive care unit (ICU) service has been improved in Turkey, the admission of end-stage critically ill patients to the ICU has also increased. HIV positive patients are not rare to come across. In this study we aimed to present our critically ill HIV positive patients.

Material and Method: All patients admitted to the intensive care unit in our hospital for a one year period were evaluated and screened for HIV positive serology. Age, gender, complaint at admission, diagnosis, infections, antibiotics and discharging condition were recorded.

Results: In our tertiary ICU with 16 bed capacity 203 patients were admitted to the ICU, mortality was 17%. Totally 3 patients were HIV positive.

Conclusion: In the last years the number of HIV positive patients admitted to the ICU has increased related to the increase in the number of HIV positive people world-wide. Atypical infections and tuberculosis is usually accompanying HIV. HIV positive patients admitted to the ICU should be screened for atypical infections and also it should be kept in mind that HIV screening for all ICU patients might be necessary.

Key words: HIV, ICU, infections

	1 st patient	2 nd patient	3 rd patient
Age	46	30	22
Gender	Male	Female	Male
Turkish	Yes	No	Yes
CD/ HIV RNA account	96/455357	12/	
Complaint at admission	Unconsciousness, headache, night sweating, GKS 3	Respiratory distress, GKS 3	Unconsciousness, GKS 7
Diagnosis	Tuberculosis menegitis, sepsis	Pneumonia, pleuresia	Infective
Infections	HIV, tuberculosis	HIV, tuberculosis	HIV, HCV
Infection treatment	Truvada, Kaletra, Flucanazole, sulfamethoxazole and trimethoprim and trimethoprim, isoniazid, rifambutol, etambutol, pirazinamid	Truvada, Kaletra, sulfamethoxazole and trimethoprim, isoniazid, rifambutol, etambutol, pirazinamid	Truvada, Kaletra, sulfamethoxazole and trimethoprim, penicillin, gentamycin
ICU stay	7 days	4 days	83 days
Condition at discharge	Exitus	Exitus	Exitus

P-098

Retrospective Study of Treated Poisoning Our Intensive Care Units

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Introduction: Poisoning cases is a common and serious health problem that requires a portion of intensive care treatment. In our study, poisoning treated in the intensive care unit of the examined cases retrospectively to determine the profile of poisoning cases in our province, the updating of epidemiological studies and toxicity data are intended to contribute to our country.

Material and Method: 174 patients in the intensive care unit due to poisoning from 01.01.2012-31.12.2013 date (116 women, 58 men; average age, 23±8 ranges 13-53) were treated and followed. Demographic characteristics, causes and ways of poisoning, type of toxic substances received were evaluated according to length of stay and outcome.

Results: 2733 patients admitted to the intensive care unit were 174 poisoning cases. Poisoning way; suicide by drug overdose (n=162, 93.1%), and accidental poisoning (n=12, 6.9%), respectively. 119 patients (66.5%) single drug intake, thirty-three patients (18.4%), multiple drug intake, sixteen patients (8.9%) were caused by poisoning by organic phosphates. Suicide in order to be among the most common causes antidepressant medication (n= 87.5%) was drugs. This thirty-two patients (18.4%) followed by analgesics and anti-inflammatory drugs. A total of 152 patients taking the drug, 22 patients were poisoned by other means. The median length of patient stay was 2 days (range 1-20 days). 99 patients (56.9%) recovered and were discharged. 72 patients (41.4%) were admitted to intensive care after inpatient. Patients were followed up by asking poisoning suicidal psychiatric consultation. 1 patient was followed up for 20 days in intensive care due to alcohol poisoning but was died. 2 patients (1.1%) were referred to a center forward.

Conclusion: The majority of patients to commit suicide medication were found to be young, female patients. The use of suicide is not subject to control for commonly prescribed antidepressants are remarkable.

Key words: Intoxication, intensive care, medications, antidepressant

Sex	Female	Male	Total
	n=116	n=58	n=174
	66.7%	33.3%	
Age	22±7	26±9	
Suicidal	110	52	162
Accident	6	6	12
Drug use	102	50	152
Other	14	8	22

P-099

Obstetric Hemorrhage in Intensive Care Unit

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Introduction: Nowadays the maternal obstetric hemorrhage remains a cause of morbidity and mortality. Pregnancy-associated hemorrhagic shock that could cause serious bleeding, ruptured ectopic pregnancy, the placenta detachment, placenta previa, placenta accreta, uterine rupture, atony or inversion is as a result of the birth of the placenta or lacerations originate from rest. In this study, we present massive obstetrical hemorrhagic cases followed our reanimation unit throughout the year 2014.

Material and Method: Demographic data of the patients that is, diagnosis, gestational age, blood products used in the intensive care unit length of stay, mortality rates were evaluated.

Results: in this study all of 10 patients followed in the intensive care unit. The means age of the patients was 34.3 years old. The mean gestational age of the patients was 34±4 weeks. Length of stay in the intensive care unit of patients is 5 days. All patients are used red blood cell (avg. 2.66) and fresh frozen plasma (avg. 2.88). Additionally three patients took fibrinogen, and one patient is used 11 units platelet and 3 units apheresis platelets. Maternal mortality was observed in one case due to (12.5%) DIC.

Conclusion: It should be noted that appropriate approach and correct blood and blood products transfusion done timely in intensive care unit may be life-saving at obstetric hemorrhage patients

Key words: Obstetric hemorrhage, intensive care unit

P-100

Treatment of Severe Methanol Intoxication: Case Report

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Introduction: Methanol intoxication comes out with severe metabolic and neurological dysfunctions. In this case report, a successful treatment of severe methanol intoxication with hemodialysis (HD) and intravenous (iv) ethanol infusion was described.

Case: A 58 years old male patient admitted to hospital with a history of drinking three bottles of spirit. He didn't have further problems except alcoholism. Arterial blood gas analyze showed high anion and osmolar gap, metabolic acidosis with pH: 7.00 and anion gap 40 mEq/L. He also had nausea, vomiting and dizziness. Intravenous sodium bicarbonate 1 mEq-kg-1 was administered. Ethanol infusion and HD was initiated. Pyridoxine and folic acid 50 mg-kg-1 six times per day and thiamine 100 mg were administered. Ethanol infusion was adjusted according to blood ethanol concentrations. Due to technical limitations, test for methanol blood concentration couldn't been performed. Dextrose 5% infusion was administered and blood glucose levels was followed. The pH were 7.10, 7.19, 7.30 and 7.35 during the HD and ethanol infusion for the first three hours respectively. Ethanol therapy was terminated due to arterial blood gas analyzes and clinical condition of the patient. On the 72th hour of admittance the patient was totally recovered and no further problems observed in neurological examinations and the patient discharged.

Conclusion: Methanol intoxication has dramatic outcomes like putaminal necrosis and blindness. Increased anion gap and serum osmolar gap metabolic acidosis may occur. Conventional HD and iv ethanol infusion to prevent formation of toxic methanol metabolites: formaldehyde and formic acid is recommended in the guidelines and literature for the management of the intoxication. Also, fomepizol is another antidote, but there is no evidence that it's superior to ethanol. Conventional HD and specific antidote therapy must be considered immediately for methanol intoxication to avoid neurological sequelae.

Key words: Methanol intoxication, ethanol, hemodialysis, fomepizol

P-101

Massive Blood Replacement in Peroperative and Postoperative Management of a Late Diagnosed Placenta Accreta Case

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Introduction: Placenta accreta is a highly mortal complication of pregnancy. The need of peripartum hysterectomy and massive transfusion postpartum hemorrhage are the most significant maternal outcomes (1,2).

Purpose: A 33-year-old woman was scheduled for cesarean section (c-section) under general anesthesia with the complaint of vaginal bleeding due to placenta previa at the 36 weeks of her pregnancy. A healthy baby was born. The bladder was invaded by the placenta. Continious bleeding necessitated the high subtotal hysterectomy. Urologists repaired bladder The massive hemorrhage, up to 11.000 ml, was replaced with 24 units of red cells, 22 units of fresh frozen plasma, 3 units of complete bloods, and 2 units of fibrinogen consantration intraoperatively. Disseminated intravascular coagulation (DIC) was ocured with the signs of hemorrhage at her upper extremities as she was transferred to intensive care unit (ICU). She suffered hypovolaemic shock requiring massive transfusion of blood products with 35 units of red cells, 27 units of fresh frozen plasma, 53 units of platelet pools and 2 units of fibrinogen consantration. Inotropic support was stopped at the sixth hour, she was extubated at the ninth hour after transfer to the ICU. Her DIC parameters at laboratory tests was normalized at the 40th hour. Gauzeus compress removed after two days with re-laparotomy. She was discharged at the 5th day from the ICU. Her bladder repaired at the 90th day. The mother and baby were discharged well from the hospital at 95th day after the c-section.

Conclusion: This case presentation is one of the rare cases which survived after 170 units of massive transfussion. Placenta accreta followed by hysterectomy with such uncontrolled bleeding has high risk of mortality for both foetus and the mother. Early diagnosis and massive transfussion treatment is needed both in the operation room and ICU in such cases.

Key words: Massive transfussion, disseminated intravascular coagulation, placenta accreta

P-102

Anticholinergic Syndrome after Datura Stramonium Intake for Hemorrhoid Treatment

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Introduction: Datura stramonium (DS) is a hallucinogenic plant that grows in both urban and rural areas in Turkey. It inhibits both peripheral and central muscarinic neuronal transmission due to its contents of atropine, scopolamine and hyoscyamine and causes anticholinergic syndrome¹. We presented a 51 year old female intoxication of Datura Stramonium as an alternative medicine.

Case: 51 year old female patient presented with clouding of consciousness, agitation, visual hallucination, paraphasia to the emergency department and admitted to intensive care unit. She had no prior history of convulsions, infection or trauma. No familial psychiatric and/or epileptic disease. In the first evaluation, Glasgow coma score was 14, and vital signs were normal. She was confused and agitated, and demonstrated aggression and visual hallucinations. No findings relative to anticholinergic toxicity except bilateral mydriatic pupils and flushing were detected in the systemic examination. Serum glucose level, blood count, biochemical parameters, and blood gas analyses were normal. No intracranial pathologic findings were detected on computed cranial tomography. Electrocardiography and electroencephalography were normal. In detail history from relatives, symptoms were begun after 30 minutes of consumption seeds of Datura stramonium. Agitation was treated with 5 mg diazepam intravenously. Hydration and monitorisation for 24 hours were performed. After 36 hour admission to intensive care unit discharged in good health.

Conclusion: Clinical findings caused by DS are similar to those of atropine poisoning and include tachycardia, hyperthermia, flushing, dry skin, dilated pupils and blurred vision, disorientation, delirium, visual hallucinations, and in severe cases, seizures, decreased bowel sounds and urinary retention². Treatment is supportive, but antidotal therapy can be used rarely³. DS grows in every region of our country. It must be remembered that in cases admitting to intensive care unit with the symptom of visual hallucination, signs of anticholinergic toxicity should be evaluated, and hallucinogenic plants must be questioned.

Key words: Datura stramonium, Anticholinergic syndrome, hallucinogens

P-103

Diffuse Alveolar Hemorrhage in a Wegener Granulomatosis Patient

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Wegener granulomatosis(WG) is an idiopathic, rare systemic vasculitis which is seen on small and intermediate sized vessels. Classically WG affects lower and upper respiratory systems and the kidney (1).

In this report there is a 60 years old female patient who has been getting hemodialysis therapy 3 times a week for chronic renal failure due to WG for 1 year and HT for 10 years. She admitted to emergency department with dyspnea and bloody sputum for 3 days. On first examination she was conscious, there was no loss of cooperation and orientation. Under nasal O₂ therapy (2L/min) SpO₂: 80%, HR: 104/min, TA: 130/70 mmHg, f: 40/min, Htc: 22.1%, WBC: 11900/mm³, creatine: 5.5 g/dl were determined. She was hospitalized as atypical pneumonia. On the fourth day of hospitalization diffuse infiltration was shown on thorax CT (Figure1) examination and on laboratory examination Htc: 17%, WBC: 16100/mm³ were evaluated. Then she was taken to the intensive care unit (ICU). She was intubated and mechanical ventilation (MV) was started. We observed the hemorrhagic secretions from the endotracheal tube. In arterial blood examination; pH: 7,38, PaO₂: 58 mmHg, PaCO₂: 35 mmHg were found. Jugular catheterization for hemodialysis (HD) was performed and mv and HD therapies were begun. Intravenous corticosteroid and cytotoxic therapy were added to the medication. On follow up at ICU plasmapheresis (PLEX) with TDP was lasted for four days. Despite to agresive therapy, the patient was lost on 10th day of admittion due to secondary infections and sepsis.

It is unclear at what severity of renal failure PLEX is beneficial, the optimal PLEX dosing and type and dosing of concomitant medications (2).

Due to bloody sputum and dyspnea early hospitalisation at intensive care unit may be needed in WG patients. But it should be noted that this situation is very mortal although aggressive therapy is performed.

1. Balkan Med J 2011;28:463-65

2. Curr. Opin Rheumatol. 2011 Jan;23(1):12-7.

Key words: Wegener granulomatosis, intensive care, plasmapheresis

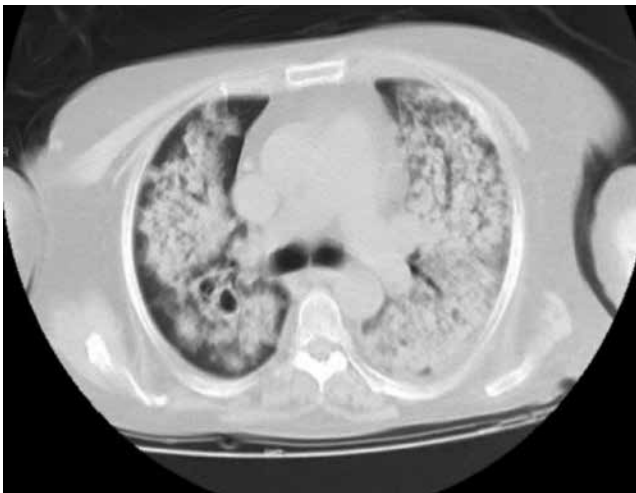


Figure 1. Torax CT

P-104

Deep Neck Infection Presented with Multiple Organ Failure-Case Report

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Introduction: Infection in the potential spaces and facial planes of the neck sometimes with formation of abscess is diagnosed as deep neck infection. With recent advancements in antibiotic treatment and improvements in diagnostic techniques, the mortality rate has decreased significantly. In this case report we presented a 34 year old man diagnosed as deep neck infection with multiple organ failure.

Case: A 34 year old man was admitted to otorhinolaryngology department with a diagnose of peritonsillar infection. Penicillin G and ornidasol treatment was performed to the patient. On the 3th day of hospitalization, the patient underwent urgent tracheostomy because of his severe dyspnea. Hours after tracheostomy the patient complained of general weakness, tachycardia and hypotension. He was admitted to ICU with the diagnosis of sepsis. The neck CT showed deep neck infection involving right submandibular region and right parapharyngeal space. The antibiotic treatment with meropenem, clindamycine and daptomycine was performed empirically. On the second day of admission, arterial blood analysis showed severe hypoxemia with FiO₂: 0.6. Noradrenalin infusion was started to the patient for hypotension. Laboratory findings included the following: Hb: 8.2 gr/dl, platelet: 39 000/mL creatinin: 4.49 mg/dl, ALT: 159 U/L, AST: 346U/L. Hemodynamic parameters of the patient remained unstable. Hypotension, tachycardia and acidosis led to cardiac arrest and death.

Conclusion: Old age, systemic diseases, odontogenic infection were described as the most important predisposing factors in deep neck infections. Moreover infections of the peritonsillar, submandibular, masticatory and parotid space can spread into the parapharyngeal space. The bacteriologic pattern of infection is usually polymicrobial and may result in life threatening complications such as upper airway obstruction, ARDS, septic shock, DIC and mediastinitis. As a result; quick suspicion and diagnosis of the deep neck infection, ensuring an airway and administration of appropriate empirical antibiotics is very essential in this life threatening surgical emergency.

Key words: Deep neck infection, multiple organ failure, case report

P-105

Peroperative and Postoperative Management at Acute Pancreatitis in Pregnancy: a Case Report

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Introduction: Acute pancreatitis during pregnancy is rare but may cause fatal results both for the foetus and the mother (1). Hypertriglyceridaemia (HTG) is responsible for most of the cases (2,3).

Purpose: A 34-year-old patient had refused treatment for HTG on the 25th week of her pregnancy. The foetus died in the 33rd week of pregnancy. The patient had two children with cesarean section twice under normal condition. She had severe abdominal pain and vomiting and was taken to an emergency caesarean operation under general anesthesia. Aspirated likid was approximately 500 cc with milky appearance. Cord blood sample was also white. The drainage was maintained from the Douglas drain during 5 days postoperatively. She was treated dextrose-insulin and hipernatremic kristalloids intravenously peroperatively in according to the value of sodium in very low level preoperatively (Na=120 mEq/dl).

Upon admission to the intensive care unit postoperatively, the patient's hemodynamic parameters were unstable and had severe metabolic acidosis. There are three modalities of the treatment of HTG (2), but unfortunately there is limited at about the treatment of acute pancreatitis during pregnancy. We preferred therapeutic plasma exchange (TPE) method and TG level was decreased within the first 24 hours. The patient was discharged from the intensive care unit at the end of 4 days and was discharged from the hospital after 30 days.

Conclusion: We think more datas are needed to achieve a guideline for acute pancreatitis during pregnancy to help clinic and to improve successful modalities.

Key words: Acute pancreatitis, plasma exchange, pregnancy

P-106

Use of Hypnosis for Analgesia and Anxiety in a Patient with Thoracic Vertebral Fractures

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Introduction: In intensive care unit (ICU) patients, analgesia and sedation reduce stress and oxygen consumption, ensure compliance with mechanical ventilation, and ensure stabilization of vital signs and early recovery of physical and respiratory functions. Hypnosis relieves pain and anxiety in conscious patients with severe pain staying in the ICU. This case report aims to present the use of hypnosis to achieve analgesia and reduce anxiety in a patient with multiple thoracic vertebral fractures during the preoperative period in intensive care unit.

Case: A 25-year-old male patient who had a vehicle exterior traffic accident was examined in the emergency unit. He was conscious, cooperative, oriented, paraplegic and hypotensive, and his SpO₂ was 93%. He had posterior dislocation at T3 and T4 levels and multiple vertebral fractures. A chest tube was inserted to the right hemithorax due to hemothorax. The patient who was given 4 L/min oxygen with a mask was administered inotropic agents and taken to the ICU. When his vital signs become stabile, he was asked permission for the use of hypnosis and administered 3 hypnosis session to achieve adaptation and to reduce analgesia and anxiety. In the ICU, suggestions about feelings of comfort, relax and pain relief were made using imagination and self-hypnosis was taught to the patient. The intensity of pain was evaluated by a visual analogue scale during the follow-ups and there was no need to use any analgesic drug in the ICU. The patient applied self-hypnosis during his stay in hospital. On the seventh day of his stay in the ICU, he was transferred to the neurosurgical service with a complete satisfaction.

Conclusion: Hypnosis used successfully in many areas of medicine is a method administered to reduce anxiety and pain in conscious trauma patients with stable vital signs staying in the intensive care unit.

Key words: Hypnosis, analgesia, intensive care unit

P-107

Pediatric Intoxication Case Due to Cyclopentolate Eye Drop

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Introduction: Cyclopentolate is a frequently used topical mydriatic and cycloplegic drug for diagnosis and preoperative evaluation of patients by ophthalmologists. It has serious adverse effects associated with application of intensive concentration more than 0.5%. We aimed to report a delirium case due to high dose cyclopentolate use for ophthalmologic exam.

Case: Cyclopentolate drop has been used in a 6 years old male patient without co-existing disease, for exam at ophthalmology clinic. However, it has been dropped 3 times as 3 drops with 15 minutes intervals on his two eyes. Following application nonsensical speech, mydriasis and mouth dryness appeared and he was evaluated as anticholinergic syndrome in emergency department. Thus, he was admitted to the intensive care unit (ICU) to treat with physostigmine. On admission dilated pupils and negative pupillary light reflex were found. There was no other neurologic sign. Physical examination of respiratory, cardiovascular and gastrointestinal systems and vital signs were normal. Increase at speech rate and motor activity, distractibility and visual hallucinations were present. However, no agitation was observed and laboratory analysis was normal. The patient was oxygenated with face mask. Improvement was seen at speech and behavioral functions after 3 hours. And the patient, at whom remission was observed after 5 hours, was discharged with normal physical and psychological exam signs.

Conclusion: There are two adverse effects of cyclopentolate as ocular and systemic (hypertension, hallucination, aggressive behaviour). And also, it may lead to respiratory distress in severe cases. Eye drops of cyclopentolate may be absorbed at high amounts from the conjunctiva similar to parenteral use. Therefore, we concluded that cyclopentolate might be applied by physicians at low concentrations and low doses for prevention of intoxication, because of the serious systemical adverse effects.

Key words: Cyclopentolate, intoxication, pediatric intoxication

P-108

Invasive Pulmonary Aspergillosis in the Intensive Care Unit: A Case Report

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Introduction: Invasive pulmonary aspergillosis (IPA) is an infection rarely seen in intensive care units (ICU). We aimed to discuss the case of IPA found in a patient followed up in our ICU due to chronic obstructive pulmonary disease (COPD).

Case: A 58-year old patient diagnosed with COPD has been admitted to our ICU due to respiratory failure. There was not any other disease except from COPD. In his radiological imaging there were diffuse bilateral infiltrates in the chest X-ray and diffuse infiltration in the thorax tomography. *Aspergillus* spp was isolated in the bronchoalveolar lavage sample from patient and caspofungin was added to the treatment. On the 12th day of treatment, it was observed that the results of the control radiological imaging became normal and there was no isolation in the control cultures.

Results: Although there are not comprehensive studies, it should be kept in mind that IPA may develop in the patients who is using long-term steroid, is admitted to the ICUs due to COPD exacerbations without any other disease.

Conclusion: In recent years, fungal infections have been determined at an increasing rate in the patients who are not immunosuppressed and hospitalized in ICU. In the IPA cases, it has been shown that such underlying causes as diabet, malnutrition, the use of steroid, uremia, cirrhosis and COPD may create risk. Our patient did not have other disease except from COPD and there was a story of prolonged using of steroid. The steroids is quite frequently used in the ICUs. In the patients with chronic pulmonary diseases, even if it is low dose and short-term, the treatment of steroid is accepted as a risk factor in terms of IPA. Because signs and symptoms are atypical in this group of patients, it is rather difficult to diagnose IPA in the short term. The isolation of *aspergillus* in the our patient's tracheal aspirate taken earlier enabled us to start the treatment early.

Key words: Aspergillosis, ICU, steroid

P-109

Neuroleptic Malignant Syndrome Associated with Lithium and Olanzapine Use

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Introduction: NMS (Neuroleptic malignant syndrome), neuroleptic medications' rare and potentially fatal complication, is characterized by hyperthermia, muscle rigidity, an elevated creatine kinase (CK) level and autonomic instability. It should be noted that lithium usage near neuroleptic drugs, is a predisposing factor for NMS.

Case: We report a case involving a 69-year-old woman with schizoaffective disorder. Her medications included lithium 300 mg, alprazolam 0.5 mg, olanzapine 5 mg daily. Two days before her hospital admission, her psychiatrist increased the dose of lithium and olanzapine twofold. When she was taken into the hospital by her family, the patient had diaphoresis, tremulousness, agitation and some cognitive impairment. Her temperature was elevated (38.3 °C), her blood pressure was low (88/60 mmHg) but heart rate was normal (80 bpm). In emergency service haloperidol was administered for her agitation but the symptoms worsened. In her laboratory findings; white blood cells, creatinine, CK, lactate dehydrogenase, aspartate aminotransferase, alanine aminotransferase were elevated, blood lithium level was slightly elevated (1.7 mmol/L). Because of her increased cognitive impairment she was transferred to the intensive care unit (ICU) with preliminary diagnosis of lithium intoxication or drug overdose. In the ICU, respiratory arrest occurred secondary to muscle rigidity and the patient was intubated for respiratory support. Secondary to the history we suspect of NMS in the ICU, withdrew the neuroleptic drugs and started treatment with dantrolene and bromocriptine. 24 hours after the initiation of therapy patient consciousness was improved, she was extubated and bromocriptine was continued alone during following days. All laboratory findings were normalized in a few days and the patient was transferred to the psychiatry ward 6 days after the ICU admission.

Conclusion: Treatment of NMS is mainly supportive and includes withdrawal of the neuroleptic drugs. Dantrolene and bromocriptine are the main drugs used for MNS treatment. Because of the widespread prescription of neuroleptics, all physicians should be able to recognize and appropriately manage NMS.

Key words: Neuroleptic malignant syndrome, lithium, olanzapine

P-110

An Adult Case Biotinidase Deficiency with Respiratory Failure in Intensive Care Unit

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Introduction: Biotinidase deficiency (BD) is a rare, inherited autosomal recessive disorder, but treatable within childhood. Biotinidase provides the recovery cycle of biotin. Although BD is a childhood disorder, there are adult case series, which are asymptomatic and diagnosed through family screening.

Purpose: We present a patient with pneumonia and respiratory acidosis. She has neuromuscular weakness, hearing loss, alopecia that could not previously been able to be associated with any systemic disorders, finally, diagnosed as BD.

Case: A thirty years old woman was admitted to the emergency department with respiratory failure existing for a few days and progressively weakened over the previous six months. The patient was admitted to the ICU with marked respiratory acidosis, alterations in consciousness. She was intubated because of hypercapnia and ventilated with pressure controlled ventilation. She had fever and purulent tracheal secretion. Tracheal, urine and blood cultures were taken and empiric antibiotic therapy was started. She had also polyneuropathy with axonal degeneration, gait difficulty, alopecia that had been present since birth, and progressive vision and hearing loss. Tests were performed tests for hyperventilation, excessive sweating, and tachycardia, such as thyroid function test, respiratory function test, and rhythm holter. The patient's sister died aged thirty years with similar progressive neurologic and respiratory failure. We considered that the patient might have a metabolic syndrome; therefore we consulted with department of genetic and metabolic disorders. Homocysteine level and organic acid level in the urine, ammonia and creatine kinase in serum were normal range. Measured biotinidase enzyme activity was 1.47% (normal range: 8-10) and 0.13 (normal range 6.9-9.45) mU/ml, respectively. As a result, the patient was diagnosed as BD.

Conclusion: The prevalence of BD in Turkey is 1/14 800, which is 8 times higher than the world average. Patients should be evaluated holistically with medical, family history and clinical findings.

Key words: Biotinidase enzyme deficiency, respiratory acidosis, hereditary disorders

P-111

Cerebral Malaria Treated with Artemisinin in the Intensive Care Unit: A Case Report

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Introduction: Malaria is a parasitic disease characterized by intermittent fever, anaemia and splenomegaly that is starting to be encountered in intensive care units (ICU) worldwide, owing to increasing globalisation. More than two-thirds of cases come from the African continent. Severe malaria caused by *Plasmodium falciparum*, is characterised by cerebral malaria, acute renal failure, hypoglycaemia, severe anaemia, splenomegaly and alveolar oedema. Herein we present the case of a patient treated in the ICU for cerebral malaria.

Case: A 25-year old male patient presented to the emergency department with complaints of fever and chills for three days. His medical history revealed a 14-month stay in Tanzania. Staining of blood smears revealed characteristic gametocytes in accordance with *P. falciparum* infection (see figures). The day after admission, he had an epileptic seizure after which his Glasgow Coma Scale was 6, so he was intubated and transferred to the ICU. A computerized tomography scan revealed findings of cerebral oedema. Intravenous mannitol was administered for 6 days. Midazolam was preferred for sedation owing to presence of seizures. Intravenous artemisinin was continued for 10 days. Due to refractory fevers, anti-malarial treatment was switched to quinine and doxycycline on the 14th day and on the 16th day the fevers ceased. The patient was treated in the ICU for 19 days. He remained on ventilator therapy for 18 days and developed ventilator associated pneumonia. He had a peak of hepatic enzymes on day 4 of ICU stay. High serum urea and creatinine levels during ICU stay normalized without intervention.

Conclusion: The case demonstrates importance of informing travellers about prophylaxis. It emphasizes that cerebral malaria should be suspected in cases of seizures accompanying malaria, and treatment should be initiated in the ICU. Lastly, resistance of *P. falciparum* to artemisinin should be in mind when a response to therapy is lacking.

Key words: Artemisinin, cerebral malaria, intensive care unit

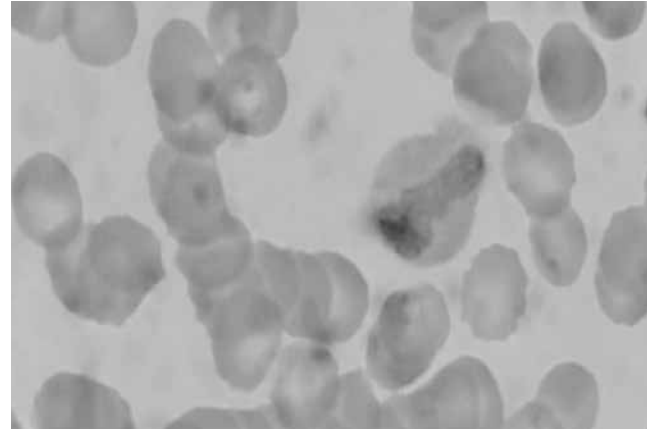


Figure 1. Gametocyte of *P. falciparum* in a thin blood smear

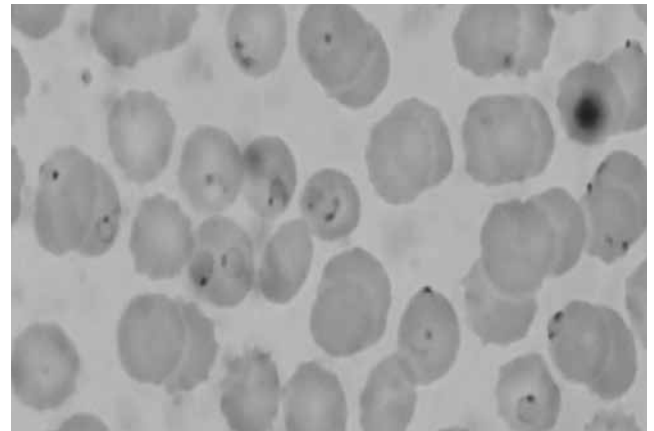


Figure 2a. Ring-form trophozoites of *P. falciparum* in a thin blood smear

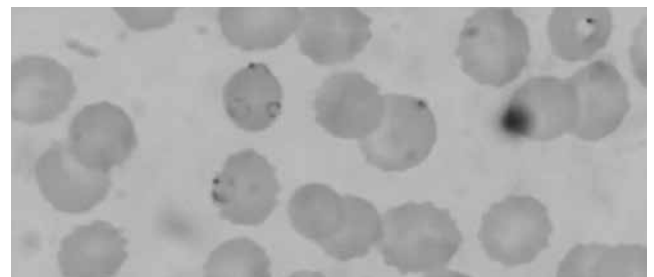


Figure 2b. Ring-form trophozoites of *P. falciparum* in a thin blood smear

P-112

Mounier-Kuhn Syndrome Mimicking Bronchial Asthma

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Introduction: Mounier-Kuhn syndrome (MKS), is a rare clinical and radiologic condition characterized by absence or marked atrophy of the elastic fibres and smooth muscle within the wall of the trachea and main bronchi. It's frequently seen in the third and fourth decade and can be diagnosed by radiologic measurements of trachea greater than 30 mm and left/right main bronchi greater than 23/24 mm (1,2). We report a case with MKS who was treated for asthma attack mistakenly.

Case: A 23 year old woman presented to emergency department with coughing and shortness of breath. Asthma protocol was applied but clinical situation getting worse. Respiratory arrest was consisted and after endotracheal intubation she was transferred to intensive care unit. It was learned that she had been treated for asthma for 2 years. Computed tomography demonstrated that trachea diameter was 38 mm for anteroposterior and 37 mm for transvers side. Fiberoptic bronchoscopic was also performed and both trachea and left/right main bronchi were found grater than normal. MKS was diagnosed after excluding other clinical conditions. Unfortunately, hypoxic-ischemic encephalopathy was determined by magnetic resonance imaging, and daily weaning trials were failed so tracheostomy was performed.

Conclusion: Expiratory collapse may occur with MKS, because of dilation in trachea and main bronchi. It could be life-threatening in severe cases and at this point we wanted to create awareness for MKS.

Key words: Mounier-kuhn syndrome, asthma, respiratory arrest

P-113

Forgotten Intraoral Mikulic Pads: An Uncommon Reason for Negative Pressure Pulmonary Edema

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Introduction: The aim of this case report is to present Negative Pressure Pulmonary Edema (NPPE) that occurred as a result of a Mikulic pad being placed into the oral cavity during an operation and left there after the surgery was completed, which is an uncommon reason for upper airway obstruction following general anesthesia (GA).

Case: Surgery under GA was planned for a 15-year-old male patient with isolated maxillofacial trauma. A Mikulic pad was placed in the oral cavity by the surgical team at the beginning of the operation in order to prevent the passage of the intraoral bleeding or secretions into the stomach. In the post-extubation period, the peripheral oxygen saturation was not increased and the respiratory effort was not sufficient, re-intubation was planned. During re-intubation it was observed that a Mikulic pad was blocking the airway. The pad was taken out via forceps and intubation was performed. Following the intubation, the pink, foamy fluid within the tube was aspirated. Both pulmonary sounds were rough and diffuse crepitanal rales were heard. The patient was taken to the intensive care unit after being diagnosed with clinical pulmonary edema.

Conclusion: NPPE is frequently seen among healthy young people whose muscle volume is high and, therefore, capable of high inspiratory negative pressure formation as in our case. The most frequent cause of NPPE is laryngospasm. Other causes include croup, epiglottitis, upper respiratory tract tumors, foreign substance aspiration, dark tracheal secretions, biting the endotracheal tube, or hematoma. However, no case of NPPE developing as a result of a Mikulic pad having been left within the oral cavity has been reported in the literature. Thus, forgetting intraoral pads placed into the mouth during surgical operations may cause a serious complication such as NPPE during post-operative awakening.

Key words: Pulmonary edema, airway obstruction, mikulic pad



Figure 1. Preoperative X-ray image of the patient

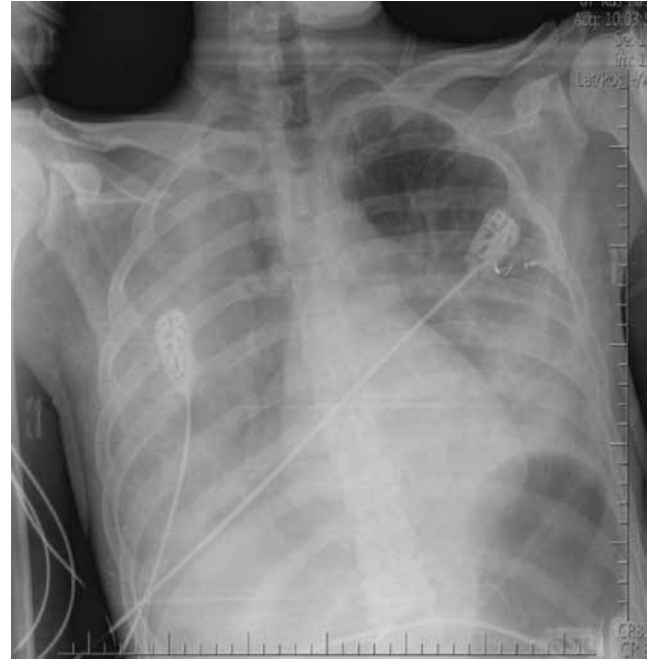


Figure 2. The presence of NPPE in X-ray image after the operation

P-114

A Patient with Hypermagnesemia and Delayed Recovery after Cesarean Section in Intensive Care

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Introduction: In this case report, a patient with delayed recovery after cesarean section is introduced and the potential effects of magnesium therapy on postoperative recovery is discussed.

Case: A 36 year-old woman admitted to emergency because of rigorous headache was internalized to obstetrics department for the diagnosis of severe preeclampsia. Magnesium sulphate 30 g has been administrated in thirty eight hours. On the second day urgent cesarean section due to progression of uncontrolled hypertension was performed. The patient was taken to intensive care unit associated with inadequate reversal of neuromuscular blockade. In her neurological evaluation, there was no response to pain stimulation. Pseudo cholinesterase enzyme level was detected in normal range.

As any central system pathology was not defined, delayed recovery was thought to be caused by hypermagnesemia (serum magnesium level 12.99 mg/dL postoperatively). Volume replacement and diuretic therapy were performed. Hemodialysis treatment was not considered as the patient had no renal insufficiency. Calcium gluconate monohydrate 225 mg IV was given for protection against cardiac toxicity. At first day, serum

magnesium level was reduced by 50% (12.99 mg/dL to 6.44 mg/dL). The patient was not recovered at first 24 hours after operation. Calcium replacement was proceeded due to low levels. On the postoperative day 3, serum magnesium reduced to 4.95 mg/dL and the patient was extubated after reversal of neuromuscular blockade.

Conclusion: Magnesium sulphate is used for preventing convulsion (in preeclampsia and eclampsia) and for inhibition of uterine contractions. The amount of excreted magnesium, changes directly proportional with blood concentration and glomerular filtration rate. Because of these reasons, the patients taking magnesium treatment should be monitored closely. Due to its neurological effects, hypermagnesemia may be a cause for postoperative recovery disturbances. Hypermagnesemia should be kept in mind among probable pathologies for the patients with insufficient recovery and postoperative respiratory distress.

Key words: Hypermagnesemia, delayed recovery, cesarean section

P-115

Severe Pneumonia after Seasonal Flu Vaccination in Intensive Care Unit

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Introduction: Seasonal flu vaccine (SFV) is recommended especially to the elderly with underlying medical conditions for reducing the flu-related morbidity and mortality. But true efficacy of the vaccine has come under question recently.

We aimed to present two pneumonia cases required intensive care unit (ICU) admission from about 1 week after seasonal flu vaccination.

Case 1: A 83 year old male patient with history of lung cancer, coronary artery bypass and 4th degree aortic stenosis was admitted to ICU with pneumonia and respiratory failure that developed later influenza-like symptoms. 12 days prior to his admission he had received SFV. Oseltamivir and antibiotherapy started immediately. He was discharged after being followed for 3 months.

Case 2: A 82 year old female patient with congestive hearth failure and chronic obstructive lung disease was admitted to ICU with pneumonia and respiratory failure. 10 days prior to her admission she had received SFV. When no response to antibiotics, oseltamir was added in the 8th day. She was died after being followed for 2 months.

Conclusion: The two elderly cases with co- morbidities, were treated with oseltamivir and antibiotics for pneumonia/ sepsis in ICU. Diagnostic testing isn't performed routinely, it is unknown whether the flu is positive. It's suggested that frequency of ICU admission, need for mechanical ventilatory support and mortality were higher for elderly vaccinated patients with underlying co- morbidities. Early antiviral treatment initiation was associated with a positive outcome.

Pigs vaccinated got severe pneumonia and lung damage if subsequently infected by a related strain of virus, suggesting that cross- reactive antibodies triggered by the vaccine made symptoms worse.

Although more data are needed, we suggest a high suspicion especially in the elderly vaccinated patients presenting with flu- like symptoms that may progressively get worse.

Key words: Flu vaccine, pneumonia, intensive care

P-116

Urea Cycle Defect Presenting with Coma in an Adult Patient with Unexplained Hyperammonemia

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Introduction: Ornithine transcarbamylase deficiency (OTC) is the most common urea cycle defect. Although it is defined in neonatal period, rarely it can be presented in an adult patient as mild urea defect without any symptoms. Stress factors can lead to crisis resulting in acute liver failure, coma and death.

Case: A 59-year-old male patient was referred to our institution with unconsciousness which was started 15 days ago. At presentation, he was intubated and his ammonia level of 4489 mg/dL. He was diagnosed to acute hyperammonemic encephalopathy, then plasmapheresis and venovenous hemodiafiltration were performed. At the 10th hour of hospitalization, his ammonia level was dropped to 3003 mg/dL. In a detailed anamnesis for questioning the etiology; it was learned that 2 years ago his nephews died because of type 2 citrullinemia. In our case, he was considered as possible urea cycle defects and the amino acid chromatogram, serum and urinary copper, ceruloplasmin level was requested. He was scheduled for urgent liver transplantation but follow-up neurological examination was revealed the brain death at the 22nd hour of hospitalization. Donor kidneys from the patient were successfully transplanted into two recipients. In our case; lysine, glutamine, ornithine, aspartic acid, valine levels were high. His family was directed to genetic research study. In his family; 2 men were identified as OTC and women up to 60% were identified as OTC carriage. Treatment and appropriate follow-up were scheduled.

Conclusion: Ornithine transcarbamylase deficiency is located in X chromosome of p21. 1.40% of homozygous males may present at adulthood period with milder clinical symptoms. 85% of the girls are asymptomatic. Our case is one of the oldest OTC case, reported in the literature. We want to draw attention information from a patient's family tree can be just as important as information from a laboratory test, and may help in making an appropriate diagnosis and in particular taking a family history may help assess the likelihood of genetic disease in relatives.

Key words: Hyperammonemia, ure cycle defect, brain death

P-117

Undiagnosed Systemic Lupus Erythematosus Presenting with Severe Sepsis: A Case Report

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Introduction: Patients with sepsis diagnosis at intensive care units have high mortality even though they take antibiotherapy and immunotherapy. If there is any underlying autoimmune disease, mortality is even higher. In our case, we report severe sepsis with undiagnosed systemic lupus erythematosus (SLE).

Case: A 65 years old woman was admitted with sepsis and general disorder diagnoses. The patient was given appropriate antibiotherapy and treatment for hemodinamical support. The clinical situation worsened rapidly with progressive lesions at patient's peripheral points especially hand fingertips and tip of the nose followed by generalized edema. Whole blood analysis revealed decreased hemoglobin and platelets. Polyclonal gammopathy has detected at immunoelectrophoresis. Continue renal replacement and hemodialysis treatment has been applied because of hypervolemia findings. Echocardiography revealed a large pericardial effusion. A pericardiocentesis was performed. As her generalized edema and renal failure developed with oliguria, we also applied double filtration plasmapheresis. Because clinical improvement observed, it was suspected the underlying autoimmune disease. Laboratory tests showed negative anti-DNA antibody and antinuclear antibody. Kidney and salivary gland biopsy were performed and salivary gland biopsy revealed chronic inflammatory cell infiltration but kidney biopsy revealed membranoproliferative glomerulonefrit. The patient was then transferred to and followed by the Department of Rheumatology with SLE diagnosis. One month later, the patient was discharged from Rheumatology Clinic.

Conclusion: In patients with a diagnosis of sepsis are not improving despite adequate therapy in the intensive care units, the underlying other clinical diagnoses should be investigated. Our description presents undiagnosed SLE with severe sepsis. Autoimmune diseases should be considered in resistant to treatment of sepsis patients, in order not to delay diagnosis and treatment.

Key words: Systemic lupus erythematosus, severe sepsis, autoimmune disease

P-118

Acute Myocarditis Faking Acute Myocardial Infarction Associated with Influenza A Virus

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Introduction: Myocarditis is an inflammatory disease of the myocardium whose etiology is thought to be either idiopathic, infectious or autoimmune. Among viral pathogens, influenza virus infection is thought to be rare, as the myocardiogenicity of the influenza virus appears to be rather weak. We present a case of influenza A (H1N1) virus -associated myocarditis, with no previous cardiac symptomatology.

Case: A 45-year-old female patient was admitted to hospital with angina -like symptoms and dyspnea. Within the past week, she had experienced fever, cough, sore throat, nausea and shortness of breath. She had a history of asthma and. Since the patient had acute myocardial infarction findings identified in the emergency department, she was taken as an emergency to the cardiac catheterization laboratory. Coronary angiography showed normal coronary arteries. She, arrested shortly after Coronary angiography, was intubated and revived within 5 minutes. The patient was taken to intensive care unit. As the symptoms and clinical findings of the patient fitted the criteria of H1N1. The patient was treated with oseltamivir. Over the following days, a reverse-transcriptase polymerase chain reaction test of NIRT showed a positive result. The patient was assisted with mechanical ventilator (MV) for 11 day. Following three days the patient was treated successfully and discharged in haemodynamic stable condition.

Conclusion: Acute myocarditis during influenza infection is a well-known complication. Influenza infection can cause myocarditis leading to rapidly progressing heart failure which can be fatal if not treated in time. If patients with angina like symptom and dyspnea are admitted to emergency department, influenza A virus -associated myocarditis should be under consideration.

Key words: H1N1, myocarditis

P-119

Hypoglycemia Refractor to Dextrose Infusion in Gabapentin Intoxication: A Case Report

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Introduction: Gabapentin which is structurally similar with gamma-amino butyric acid is using in the treatment of partial epilepsy, neuropathic pain, diabetic neuropathy, post herpetic neuralgia. One of the known effect of Gabapentin intoxication is refractory hypoglycemia.

Case: A 48-year-old woman was admitted to emergency department with loss of consciousness. At admission the blood pressure was 113/56 mmHg. The heart rate was 100 per minute. In blood gas analysis PaO₂ level was 90% and blood glucose (BG) was 37 mg/dL respectively. Subject was intubated transorally. I.V. 20% dextrose infusion was started

due to hypoglycemia. After 30 minutes, BG was increased to 155 mg/dl. Dextrose infusion was continued (50 cc/h). Diagnostic procedures including gastric lavage and intracranial tomography were negative. Activated charcoal was administered.

In subjects garden empty blisters for 70 pieces of venlafaxine 75 mg, 90 pieces of alprozalolam 1 mg, 10 pieces of metaklopropamid, 24 pieces of pregabalin 75 mg, 30 pieces of gabapentin 800 mg was found.

The patient continued to follow in intensive care department. Hemofiltration was made for 16 hours. Lipid solution (20%) infusion was continued for 3 days. During the follow up significant hypoglycemic episodes were observed. Dextrose infusion was continued because of hypoglycemic episodes. Although the subject had multiple drug intake the subjects regarded as Gabapentin intoxication. Subject begun to recover from unconsciousness and extubated on 48 hour after admission. Psychiatric treatment was continued due to subjects' major depressive symptoms and suicidal thoughts

Results: Gabapentin has a GABA-B agonist effect that stimulate the voltage-dependent Ca²⁺ channels. Stimulation is resulted with the increased release of insulin that causes hypoglycemia. Gabapentin intoxication should be kept in the mind In intoxicated subjects who had hypoglycemia refractor to dextrose infusion.

Key words: Gabapentin, hypoglycemia, intoxication, drug

P-120

A Case of Lambert-Eaton Myasthenic Syndrome with Small Cell Lung Cancer

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Introduction: Lambert-Eaton myasthenic syndrome (LEMS) is a rare autoimmune disorder of the neuromuscular junction that is characterized by muscle weakness of limbs. LEMS is frequently associated with malignancy, especially small cell lung cancer (SCLC). We report a case who death due to SCLC.

Case: A 64-year-old male patient with a 7-year of history of LEMS was admitted to our intensive care unit (ICU) because of respiratory failure and mechanical ventilation requirement. Following an examination that included a chest X-ray and computed tomography, and a bronchofiberscopy examination with biopsy, the patient diagnosed with SCLC. The clinical course was monitored with anticancer therapy. However, the patient's condition was deteriorating rapidly, and the patient died on the 17th day of treatment in the ICU.

Conclusion: Early diagnosis and treatment of cancer is important because delayed diagnosis may result in rapid disease progression and even death. About 60% of LEMS patients have an associated cancer. Therefore, patients with LEMS should be screened for the presence of possible malignant disease especially SCLC.

Key words: Lambert-Eaton myasthenic syndrome; small-cell lung carcinoma



Figure 1. Chest Radiography



Figure 2. Thorax CT



Figure 3. Abdomen CT

P-121

Pneumomediastinum and Pneumoretroperitoneum after Percutaneous Tracheostomy

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Introduction: Percutaneous tracheostomy (PT) has become a well established procedure in the intensive care unit (ICU) for patients requiring prolonged invasive mechanical ventilation. We report a rare case who developed pneumomediastinum and pneumoretroperitoneum after a PT.

Case: 72 year-old man was admitted to ICU with subarachnoidal and intracerebral haemorrhage who had respiratory failure. Griggs percutaneous tracheostomy with fiberoptic bronchoscopic guidance was planned. After the visualisation of the needle in the trachea lumen, tracheostomy cannula was placed after dilatation over the wire. We prevented any posterior tracheal wall injury and haemorrhage with this technique. After the procedure the patient was connected to mechanical ventilation. A few minutes later, saturation and tidal volume decreased to 70% and 100-150 ml respectively whereas peak airway pressure increased to 40 mmHg. So we tried temporary ambu bag ventilation but we observed abdominal distension. Respiratory acidosis was detected on blood gas analysis. Tracheostomy cannula was removed and the patient was intubated again. FOB examination was used to detect any complication related directly to the tracheostomy. The deterioration of patient's condition was attributed to the severe bronchospasm. Following the maintenance of an adequate ventilation, FOB guided PT was tried again. The chest radiograph showed extensive subcutaneous emphysema on his left side of the neck, axilla, pneumomediastinum and free air under diaphragm (Figure 1). CT scans of the chest, abdomen and pelvis revealed extensive subcutaneous emphysema over the chest wall, pneumomediastinum and massive pneumoretroperitoneum. There was no pneumothorax (Figures 2, 3).

Conclusion: The tracheostomy-related complications are usually minor, but life-threatening bleeding, hypoxia, and airway obstruction have also been reported in the literature, varying from 2.1% to more than 20%. Only the appropriately trained personnel should carry out or supervise the procedure to prevent the serious and potentially life-threatening complications.

Key words: Percutaneous tracheostomy, complication, pneumomediastinum, pneumoretroperitoneum

P-122

A Rare Laryngoscopy Complication, Massive Bleeding Due to Pharyngeal Laceration

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Introduction: A wide variety of complications of laryngoscopy have been reported (1). Lacerations of the pharyngeal structures are infrequent, which can result in severe hemorrhage (2).

Purpose: Our aim is to describe the multidisciplinary treatment of airway trauma and abundant arterial bleeding sustained during laryngoscopy.

Discussion: A 55-year-old male was given anesthesia induction for cataract surgery. A sudden abundant bleeding occurred during laryngoscopy, and the patient couldn't intubated. The direct laryngoscopy demonstrated the blade of laryngoscope perforate the soft palate, posterior wall of posterior pharynx and ascending pharyngeal artery and base of the tongue. The airway was secured with coniotomy, primer suturation and adrenaline tamponade for the hemorrhage was done, than tracheostomy opened. Cardiopulmonary resuscitation (CPR) for 10 minutes was done at the 20th minute after admitting to intensive care unit (ICU). His haemodynamic and laboratory parameters were unstable although massive blood replacement treatment. Cranial computer tomography and angiography showed that ascending pharyngeal artery was bleeding. After selective embolisation of the artery at the 6th hour of the ICU admission, he was more stable. He was treated spontaneously after the 6th day and discharged from the ICU on the 15th day.

Conclusion: We think that early diagnosis and multimodal treatment strategies may be life saving even if surgical repair was done, especially on unstable emergent cases.

Key words: Pharyngeal laceration, complication, laryngoscopy, embolization

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P-123

The Changes in the Brain of Patients Who Remained in a Persistent Vegetative State After Hypoglycemic Coma

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Hypoglycemic coma induces a purely neuronal lesion of the neocortex (layers 2 and 3), the hippocampus (neurons in the subiculum and the CA1 region and granule cells at the crest of the dentate gyrus), and the dorsolateral crescent of the caudoputamen in rat brains. The accumulation of excitatory amino acids, but not simply glucose starvation of the neuron, seems to play an important pathogenetic role.

We repeatedly studied CT scans and MR images obtained at 1.5 T in vegetative patients after profound hypoglycemia associated with diabetes mellitus.

In this patient, consecutive CT scans showed symmetrical, persistent low-density lesions with transient enhancement in the caudate and lenticular nuclei and transient enhancement in the cerebral cortex 2 to 4 days after onset. Repeated MR images revealed specific lesions in the bilateral basal ganglia, cerebral cortex, substantia nigra, and hippocampus, which suggests the particular vulnerability of these areas to hypoglycemia in the human brain. We speculate that the localized lesions represent tissue degeneration, including some combination of selective neuronal death, proliferation of astrocytic glial cells, paramagnetic substance deposition, and/or lipid accumulation. The absence of localized hemorrhages on MR images in hypoglycemic encephalopathy is in marked contrast to the presence of regional minor hemorrhages in postischemic-anoxic encephalopathy.

This is the important an evaluation in which multiple CT scanning and high-field MRI were used to focus on chronological changes in the brain of patients who remained in a persistent vegetative state after hypoglycemic coma.

Key words: Brain injuries, hypoglycemia, CT scans and MR images

P-124

Severe Transfusion Related Acute Lung Injury Managed with Venoarterial Extracorporeal Membrane Oxygenation in an Obstetric Patient

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Introduction: Transfusion related acute lung injury (TRALI) is a rare but potentially fatal complication of blood product transfusion. We present an obstetric case of severe TRALI who was successfully managed with venoarterial extracorporeal membrane oxygenation (VA ECMO).

Case: A 38 year-old, gravida 3, para 2 woman presented with mild vaginal bleeding at 40 weeks' gestation. Following delivery of the infant, there was great difficulty in achieving hemostasis despite a well contracted uterus. Transfusion with red blood cells (RBCs) was started after obtaining the hematocrite level below 24% and the patient became hypotensive. Fresh-frozen plasma (FFP) and platelets were also transfused to treat significant oozing in the surgical field. A hysterectomy was ultimately performed and the patient was transferred to intensive care unit (ICU).

Mental status changed in the ICU and the PaO₂/FiO₂ dropped below 200 mmHg. The patient was then intubated and mechanical ventilation started. Initial chest radiography showed bilateral symmetrical alveolar opacities. Estimated blood loss was 4L and a total of 4L of Ringer's lactate, 1000 mL of hetastarch, 10 units of RBCs, 6 units of FFP, and 10 units of platelets was administered. Because of intractable hypoxia we decided to start VA ECMO. Partial ventilator support was provided. The patient required VA ECMO support for 96 hours. Mechanical ventilation was weaned over the next 7 days and the patient was extubated.

Conclusion: TRALI is considered the leading cause of transfusion-related deaths. Since TRALI is usually a self-limiting process, VA ECMO may be well suited to the management of the most severe cases by providing oxygenation while allowing the lungs to recover as shown in our case.

Key words: ECMO, TRALI, transfusion

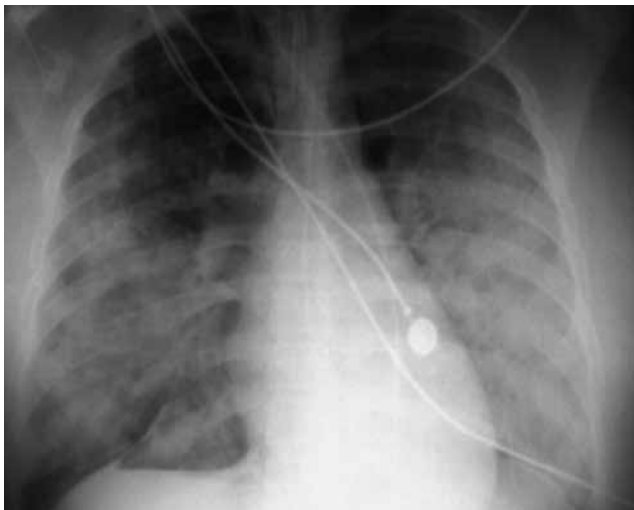


Figure 1. Chest radiography showing bilateral symmetrical alveolar opacities

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Bilaterally Pneumothorax and Pneumomediastinum During Treatment of Negative Pressure Pulmonary Edema- A Case Report

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Introduction: Negative pressure pulmonary edema (NPPE) is a rare but possibly lethal complication which may be seen after extubation and early postoperative period. The incidence of NPPE is 0.005-0.1% and the first etiologic factor is laryngeal spasm after extubation or entubation. We experienced a case of bilaterally pneumothorax and pneumomediastinum during treatment of NPPE.

Case: Seventeen year old male patient was made appendectomy urgently operated under general anesthesia because acute appendicitis. The operation time is 75 minutes. The patients was smoked 20 cigarettes per day during one year. Immediately after the extubation serious laryngeal spasm and vicious inspiratory effort were detected. When the SpO₂ value under 85% the patient was ventilated with 1.0 FiO₂ positive pressure. Difficulty with mask so the patient was performed sedation with 40 mg propofol infusion. The patient stability was provided about 5 minutes. Physical examination of patient there was diffuse crepitanal rale thorax bilaterally. Appearance of patient's chest X-ray was supported pulmoner oedema in the intensive care unit. Follow up the patient respiratory difficulty was increased and SpO₂ value was decreased. The patient was ventilated supplemental oxygen with CPAP. The patient has clear mind, orientation, much respiration and bilaterally pneumothorax but minimally the left side. Thorax tube was inserted right side and left side followed by chest X-ray. There is no cardiac pathology at ECG and cardiac enzyme. There is bilaterally pneumothorax and pneumomediastinum at thorax CT. The patient was treated with diuretic, steroid, antibiotics and fluid restriction. The following with intermittent CPAP of the patient was showed regression in chest X-ray and the patient was transferred to thorax clinic at 7th day.

Results: Patients with respiratory difficulty after extubation, NPPE must stick in the mind. Remember to pneumothorax when the patients have continuous respiratory difficulty. Rapid diagnosis and appropriate treatment must be necessary for prevent high morbidity and mortality.

Key words: Negative pressure pulmonary edema, CPAP, pneumothorax, pneumomediastinum

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Complicated Retrograde Ascending Aortic Dissection Associated with Thoracic Endovascular Aortic Repair

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Introduction: Aortic dissection results from an intimal tear that exposes the media to the pulsatile force of blood within the aortic lumen. It should be managed medically unless there are life-threatening complications present such as malperfusion, aortic rupture, severe pain and/or hypertension despite aggressive medical therapy. Thoracic endovascular aortic repair (TEVAR) is highly recommended for complicated acute type B dissection.

Case: 44 yrs. old woman under treatment for chronic hypertension accepted to emergency department for sudden onset back pain. Physical examination revealed BP: 200/98 (on the left), 196/91 (right) mmHg, pulse: 82/min. Carotid, femoral, lower/upper extremity pulses were palpated bilaterally. Transthoracic ECHO demonstrated normal left ventricle systolic function, EF 61%, dilated left atrium, dilated ascending aorta of 40 mm. She has been undertaken general anesthesia for TEVAR with Type B dissection. Stiff wire placed into left femoral artery under guidance with X-ray. Thoracic endovascular graft is placed in thoracic aorta over stiff wire. After procedure completed, invasive blood pressure monitoring from left radial artery has disappeared and cerebral pulse oximeter parameters declined. Left carotid pulse disappeared dramatically. Femoral pulses were intact, bilaterally. The rhythm has changed to ventricular fibrillation and we performed cardiopulmonary resuscitation. Defibrillation attempts failed. Patient has been cannulated and connected to heart-lung pump. TEE examination showed retrogradely ascending aortic dissection (rAAD) to aortic valves. Patient has been transferred to ICU connected with ECMO.

Conclusion: The present findings report rAAD as a potential complication of TEVAR for all indications and have estimated the risk of this complication to range between 1.3% and 6.8%. Lethality of this complication with an overall 30-day/in-hospital mortality rate is 33% including ICU. This complication can be under-recognized after procedure until haemodynamics get worsened. We report that cerebral oximeter and pulse detection bilaterally as a screening tool for transferring and ICU for this complication.

Key words: TEVAR, retrograde ascending aortic dissection, cerebral oximeter, ventricular fibrillation

P-127

Differential Ventilation in a Patient with Difficult Airway Management Due to the Tracheal Obstruction and Superior Vena Cava Syndrome

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Introduction: "Large cell neuroendocrine tumor" that is a rare type of lung neuroendocrine tumor causes airway management problems. When it is located at the right upper lobe, it can lead to serious respiratory and hemodynamic problems due to the tracheal, bronchial and vascular obstructions. We present this case to present alternative ventilation approaches.

Case: 65-years-old male patient who had previously not been diagnosed lung disease presented to another hospital with neck swelling, headache and shortness of breath and he was transferred to the intensive care unit with respiratory insufficiency. The patient was admitted to Anesthesiology Intensive Care Unit to apply tracheal stents and radiochemotherapy. Transthoracic biopsy resulted "Large cell neuroendocrine tumor". Mediastinal radiotherapy was initiated and maintained. CT showed that there was a mass 10x15 cm size in the right upper lobe compressing trachea and vena cava superior, obstructing bilateral main bronchus and vascular structures. During mechanical ventilation, very high airway pressure and hypercapnic respiratory failure have observed. Tracheal stent was implanted with rigid bronchoscopy by thoracic surgeon. However, airway pressure could not be reduced. We thought that tracheal stent failed to prevent compression of the mass. For this purpose, an exchanger catheter was able to be placed in the left main bronchus through the endotracheal tube. Separate ventilation was used for each lung to reduce the carbon dioxide retention and high airway pressure. Differential mechanical ventilation was provided by this catheter and endotracheal tube using two ventilators. Hypercapnia and high airway pressure were able to be controlled in a short-time successfully.

Conclusion: When mediastinal masses of lung tumors create pressure in the airway; it may cause serious challenges in the management of mechanical ventilation. To reduce compression of the tracheobronchial tree and to reduce the increased airway pressure and carbon dioxide retention, "differential mechanical ventilation" should be tried.

Key words: Airway management, differential ventilation, tracheal obstruction, vena cava superior syndrome

P-128

Persistent Left Superior Vena Cava Catheterization: A Rare Vascular Anomaly in Intensive Care

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Introduction: Persistent left superior vena cava (PLSVC) is a relatively rare vascular anomaly. It is, however, the most common variation in the thoracic venous system. This report describes a case of persistent superior vena cava detected after successful placement of a left internal jugular vein catheter.

Case: A 80-year-old man with a history of COPD and ischemic coronary artery disease was admitted to emergency room with cardiopulmonary arrest. Cardiopulmonary resuscitation (CPR) was started. After 6 minutes of CPR, return of spontaneous circulation was achieved. The patient was intubated and then transferred to the pulmonary intensive care unit. After his vital parameters were stabilized the patient was attempted to the left internal jugular vein catheterization which resulted uneventfully. Control chest X-ray (CXR) revealed that the catheter was going down on the left margin of mediastinum and then into the heart (Figure 1). A thoracic computerized tomography (CT) was performed in the emergency room to evaluate pneumonic infiltration in CXR. When evaluated carefully, CT scans showed right brachiocephalic vein draining into left one and forming a left superior vena cava in front of aortic arch. After descending at the level of atria, it was seen that left superior vena cava was draining into right atrium after crossing the left pulmonary artery (arrows in Figure 2 and 3)

Conclusion: PLSVC is a relatively infrequent congenital variation. The prevalence is estimated to be approximately 0.3% in individuals with a normal heart and 4.5% in individuals with congenital heart disease. It is normally asymptomatic, and is often detected during or after placement of a catheter or pacemaker leads through the left internal jugular or subclavian venous routes. Since it is the most common congenital variation in the thoracic venous system, the practicing intensivists should be aware of its occurrence.

Key words: Persistent left superior vena cava, vascular anomaly, catheterization, intensive Care

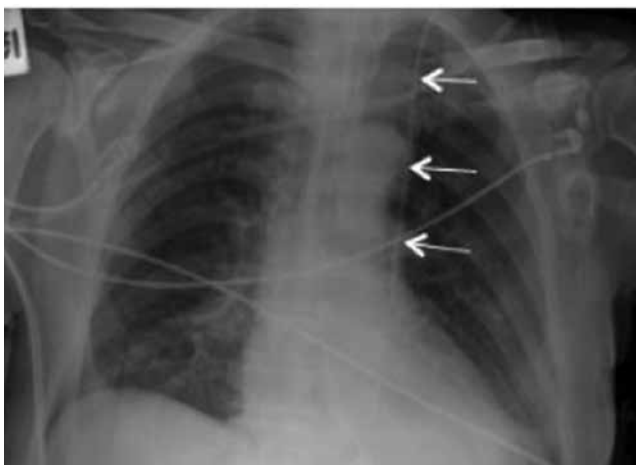


Figure 1. Chest x-ray after catheterization

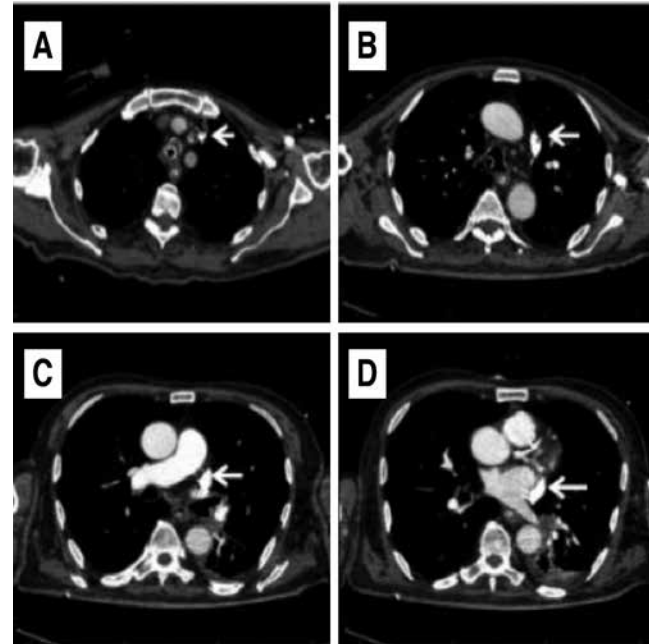


Figure 2. Transverse CT scans

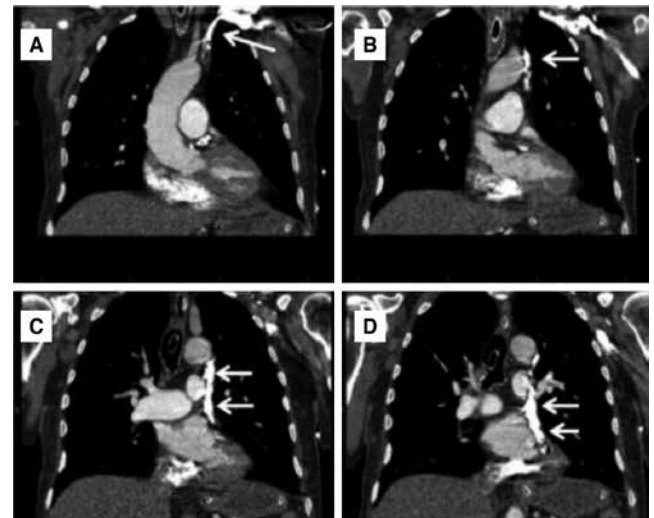


Figure 2. Coronal CT scans

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Moderate ARDS Due to Viral Pneumonia Caused by Influenza A H1N1 and Influenza B Co-Infection in a Patient with Kidney Transplantation

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The clinical outcome of pandemic influenza A H1N1 infection is highly affected by the host's response to infection. Among infected individuals, solid organ transplant recipients constitute a major risk group for developing severe complications from seasonal influenza.

We report a 65-yr-old male recipient of kidney transplant, who was admitted to the ICU with respiratory insufficiency due to viral pneumonia. The patient was diagnosed with co-infection of Influenza A H1N1 and Influenza B pneumonia which was followed by severe respiratory failure and moderate ARDS. On presentation, he was on the fifth day after symptom onset, receiving immunosuppression therapy with mycophenolate, tacrolimus and prednisone. On admission, treatment with oseltamivir and broad-spectrum antibiotics was initiated. Mycophenolate was stopped. Mechanical ventilation was initiated on ICU day 3 and moderate ARDS was present throughout the entire stay in ICU. Protective lung ventilation with low tidal volumes and high PEEP levels were used. Given his critical status, immune compromised state and clinical deterioration, tacrolimus was stopped. On day 16, not Influenza A, but Influenza B was negative on real-time PCR analysis. The patient still has been on care in our ICU, improving without any graft dysfunction findings.

In patients with solid organ transplantation, the immunosuppressed state represents a risk factor for severe pneumonia after infection with H1N1 virus. In the setting of humoral response necessity, if the options for renal replacement therapy are considered for sustaining renal function, reduction or discontinuation of immunosuppressive therapy is feasible in renal transplant recipients compared to other solid organ transplant recipients, founded on the fact that stopping immunosuppressive therapy and following graft rejection might have a better or worse outcome respectively.

In this case, treatment with oseltamivir, discontinuation of immunosuppressive regimen and the mechanical ventilation strategy seems to be well-tolerated.

Key words: Viral pneumonia, H1N1, Influenza B, Kidney Transplant Recipient, Solid Organ Transplant Recipient, ARDS

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Thyrotoxicosis Accompanying Diabetic Ketoacidosis

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Introduction: Diabetes mellitus and thyroid disorder are seen frequently. Thyroid dysfunction is reported more frequently in diabetics.

Case: The patient was a 32 years old diabetic. She checked into the ER with vomiting and nausea. She was oriented, cooperative and conscious. Papillae were isochoric, light reflex +/- . In physical examination she was tachypneic (Breathing frequency < 25/min), she had bilaterally diminished breath sounds, she was tachycardic (HR>120/min), and she was hypertensive (BP>190/120 mmHg). She had no urinary, or upper and lower airway infection symptoms. She had exophthalmia and pretibial edema. She had heavy glycosuria, ketonuria, blood glucose level was 495 mg/dl. In arterial blood gas sample she had hypoxemia and metabolic acidosis (Ph: 7.21, PaO₂: 50 mmHg, PaCO₂: 60 mmHg, BE: -12, HCO₃: 10). She was intubated and internated to the ICU. The diagnosis was diabetic ketoacidosis (DKA). Conventional fluid and insulin (IV) treatment was started. She was apraxial. Blood tests showed no signs of leukocytosis or CRP elevation. At the end of 24 hr. she had irregular blood sugar levels, together with hypertension, persistent tachycardia, exophthalmos, flushing and pretibial edema. These clinical signs pointed to thyrotoxicosis. Thyroid function test (TFT) results showed high FT3 and FT4 levels. She was in a state of thyrotoxicosis. Propylthiouracil, dexamethasone and esmolol infusion treatment were started. She was extubated, and noninvasive ventilation was administered. Meanwhile she became oligo-anuric, she had elevated liver function tests (LFT), BUN and creatinine. Renal replacement therapy, CWDF, was applied for 3 days. At the end of therapy blood sugar levels were normal, LFT and kidney function tests were in normal range. The patient was externated from the ICU to the endocrinology service.

Conclusion: We recommend that persistent tachycardia and hypertension in the presence of normovolemia in an aseptic DKA state should raise the suspicion of thyrotoxicosis.

Key words: Thyrotoxicosis, diabetic ketoacidosis, diabetes mellitus

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Just a Nuisance Effect? A Closer Look at Deltamethrin Poisoning: A Case Report

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Synthetic pyrethroids are among the most potent insecticides which have long been used in agriculture and medicine. Deltamethrin is type 2 pyrethroid insecticide which produces different signs of poisoning than other pyrethroids. Although they incorporate a high insecticidal activity by selective toxicity to the insect nervous system, they are considered safe because of their relatively low toxicity for mammals. The versatile clinical symptoms of the patients poisoned with pyrethroids, especially in the rural areas where agriculture is the main economic income, are sometimes challenging for the physicians whom encountered with them in the emergency departments or primary care settings. In this case report we aimed to present pyrethroid-induced paresthesia which is frequently seen after dermal exposure to pyrethroids. A 64-year-old man presented to our hospital's emergency department (ED) with the complaints of discomfort, loss of sensation and muscle cramps in his legs. His symptoms emerged approximately 1 hour after his application of agricultural drugs to his corn field and he was admitted to ED 2 hours after his symptoms initiation. He had used the water-soluble form of the deltamethrin 20 gr in a 150 cc of water and applied that with a sprayer. It was like a stinging and burning on his skin at first but progressed to numbness which feared the patient of having a stroke. The patient was transferred to intensive care unit after a thorough washing of his body and supportive therapy then initiated.

Though not a life-threatening condition and considered to be a nuisance effect, the lack of knowledge in the management of this paresthesia may lead to the increased anxiety of the patients and unnecessary use of more potent and expensive diagnostic and laboratory analyses such as electromyography, computerized tomography or enzyme assays for the differential diagnosis of the symptoms.

Key words: Organophosphate poisoning, deltamethrin, intensive care unit

P-132

Hypercalcemic Crisis: Acute Renal Failure and Respiratory Failure

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Introduction: Hypercalcemia occurs when normal range of serum calcium (Ca²⁺) level (8.5-10.5 mg/dL) is above the upper limit. The two most common causes of hypercalcemia are primary hyperparathyroidism and neoplastic diseases, which constitute 90% of the etiology (1). Parathyroid hormone should be examined initially for the etiology of hypercalcemia. This case had such high levels of calcium which have not been observed in the literature before.

Case: A 69-year-old male patient with weakness, faintness, nausea-vomiting, and confusion was admitted to the emergency department. He had Ca²⁺: 13.6 mg/dL and parathyroid hormone (PTH): 1078 (15-68) pg/mL in routine examination. The patient was diagnosed with primary hyperparathyroidism and given hydration with normal saline and diuresis with furosemide. The patient was applied calcitonin and zoledronic acid therapy as his calcium levels increased continuously (maximum Ca²⁺ level: 24.9 mg/dL) despite the treatment. The patient was admitted to the intensive care unit as his BUN and Creatinine levels increased, had ataxia, irritability, lethargy, confusion, and Glasgow Coma Scale (GCS) below 12. The patient's neurological and physical examination indicated confused consciousness, sleep proneness, isochoric pupils, positive light reflex in both eyes, decreased muscle strength, heart rate=125/min, blood pressure=165/95 mm/Hg, and superficial widespread crackles in both lungs. Noninvasive mechanical ventilation and hemodialysis was added to the treatment. The patient was intubated and taken to invasive mechanical ventilation following the closing of consciousness and fall to GCS=10. A significant reduction in Ca²⁺ level was not achieved despite the medical and hemodialysis treatment, and the patient was dead on the 12th day.

Conclusion: Hypercalcemia is a life-threatening disorder and requires prompt treatment. Acute renal failure is common in hypercalcemia. Hemodialysis is another treatment option to reduce calcium quickly when severe hypercalcemia signs (coma, serious arrhythmias, heart failure, renal failure, etc.), are present and hydrogenation is not appropriate (2).

Key words: Hypercalcemia, primary hyperparathyroidism, acute renal failure

Day	Ca ²⁺ mg/dL	PTH pg/dL	BUN mg/dL	Cre mg/dL	GCS
1	13.6	1078	30	0.9	15
3	11.3	940	25	0.8	15
5	14.7	1424	38	1.4	14
7	24.9	2344	73	2.4	12
9	22.4		64	1.3	10
11	18.6		88	2.3	7

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Pressure Wound: Fast Recovery with Type 1 Tissue Collagen

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Pressure ulcers do not heal and need much longer treatments effecting the morbidity and mortality in some patients. Collagen dressings may represent an important improvement, since collagen is a key element for wound scarring.

We present a case with a grade 3 sacral decubitus ulceration, that showed a significant improvement with collagen wound dressing care. The patient was 25 years old, he confined to bed because of muscular dystropy for the last 8 years. He developed spontaneous pneumothorax that repeated several times, therefore the thorax tube could not be withdrawn. He hospitalised for about three months, and the wound could be cared and followed up.

When he admitted to ICU he already had 5*5 cm in diameter, necrotic sacral pressure ulcer. The wound was debrided, softened with hydrocolloid dressings. When it was grade 3, 8*7 cm in diameter and a clean wound, Type 1 biologic collagen dressing was applied, the deepness of the wound (7 mm) was lessened; a second application was done after 10 days. A significant improvement was observed and the wound filled with granulation tissue completely after another 15 days permitting to plan skin grefting (Figures 1, 2, 3).

Collagen is an extracellular matrix protein playing a major role in connective tissue. It is the most abundant protein in humans and performs multipl functions. Collagen is a biomaterial and its role in wound management is well-documented. It encourages wound healing through the deposition and organisation of freshly formed fibers and granulation tissues in the wound bed and thus creating a very conducive enviroment for wound healing.

Key words: Collagen, pressure ulcers, ICU

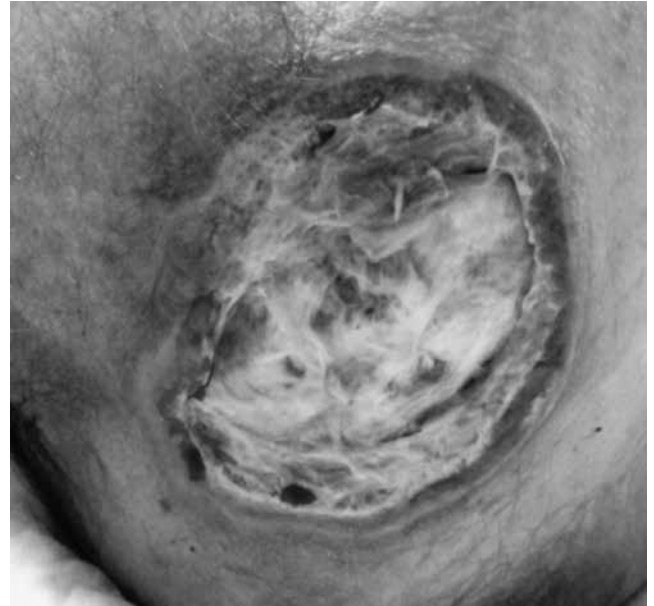


Figure 2.



Figure 3.



Figure 1.

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Normonatremic Central Pontine Myelinosis (CPM) After TUR-P with Saline Irrigation

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Introduction: CPM is a demyelinating condition occurs in the central pons. CPM has various neurologic symptoms (impaired cognition, paralysis). The most common cause of CPM is rapid correction of hyponatremia. Otherwise, other electrolyte disorders which induce osmotic stress may cause CPM.

Case: TUR-P (transurethral resection-prostate) surgery was planned for a 83-year-old male patient with DM, HT, coronary artery disease, chronic renal disease, minimal dementia, cerebrovascular infarction for his prostatic hyperplasia. In preoperative evaluation; no neurological sequelae was detected, vital signs were normal and preoperative laboratory values were in normal limits. The surgery continued 40 minutes under general anesthesia with stable vital signs. 12 L saline was used for irrigation. After recovery, the patient's vital signs, conscious level and laboratory findings were in normal levels and he was transferred to the ward. Four days after the surgery, patient's conscious level was depressed and his GCS (glasgow coma scale) decreased to 5 points and hyperchloremic (116 mmol/L) metabolic acidosis was detected. He was hypotensive and tachycardic. He was transferred to the intensive care unit (ICU), invasive mechanical ventilation and supportive fluid therapy was administered. In his daily laboratory results before ICU, all of his sodium levels were between 140-146 mEq/L. To exclude intracerebral vascular events, cranial CT was performed and any acute event was not detected. After these three days of ICU admission all laboratory findings even chloride and pH came back normal levels but he was still in coma. So diffusion MRI was performed and brain scan revealed central pontine myelinolysis. In the fifth day he came out of coma, was extubated successfully and transferred to the neurology ward for cognitive follow up.

Conclusion: This is one of the rare reports regarding CPM secondary to hyperchloremia. Several litres of irrigating saline are rapidly deposited in the body spaces, this may cause hyperchloreaemia and osmotic stress on brain. In CPM, overall prognosis is poor and treatment is supportive.

Key words: Central pontine myelinolysis, hyperchloremia, transurethral resection-prostate

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Management of Non-Invasive Mechanical Ventilation in an Elderly Patient with H1N1 Pneumonia

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Introduction: Media sensationalism on the H1N1 outbreak may have influenced decisional processes and clinical diagnosis.

Case: 82 years old female patient with congestive heart failure and hypertension was admitted to the emergency department with dyspnea and cough. She was then admitted to the infectious diseases clinic with diagnosis pneumonia. H1N1 considered as a factor. Swab samples were taken. The second day of hospitalization, the patient had increased respiratory distress. She was admitted to the intensive care unit. Her general condition was moderate, had clear consciousness, oriented, cooperated. The HR: 108/min, BP: 156/80 mmHg, SpO₂: 89%, respiratory rate: 26/min were measured. First venous blood gas result was as pH: 7.21, PO₂: 53 mmHg, PCO₂: 86 mmHg. There were crackles in the lower-middle zone of the right lung and rhoncus in the lower zones bilaterally. Pretibial edema was not observed. There was widespread infiltration, especially obvious in the right lower lobe. Urine output was normal. Piperacillin-tazobactam 3x4.5 mg iv and oseltamivir 2x75 mg PO were started. External CPAP was applied 3-4 times a day. CO₂ retention and saturation were recovered and the patient did not require intubation. On the third day in intensive care, cultures of swab samples revealed positive H1N1. General condition of the patient improved gradually with ongoing antibiotic and antiviral therapy. She did not need external CPAP anymore. On the sixth day, patient was transferred to the infectious diseases clinic. Three days later she was discharged home.

Conclusion: Early and rapid diagnosis of H1N1-related respiratory insufficiency needs rapid screening. However, clinicians need to rule out false positive and negative cases by RT-PCR on oral/nasal fluids or bronchoalveolar lavage specimens.

Key words: Noninvasive ventilation, H1N1, pneumonia, intensive care

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A Case Report of Afibrinogenemia with Both Venous Sinus Thrombosis and Subarachnoid Hemorrhage in ICU

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Introduction: Congenital afibrinogenemia is a rare autosomal recessive bleeding disorder and have been rarely reported with thrombotic events. Umbilical cord bleeding during the neonatal period is generally the first manifestation of the disease, but a later age of onset is not uncommon.

Case: In this report, we present the case of a 29-year-old female patient with afibrinogenemia who suffered from headache and vomiting admitted to our emergency service. A cranial computerized tomography (CT) showed subarachnoid hemorrhage (SAH) and multiple chronic infarction regions. After the patient transferred to intensive care unit with a 8 GCS point, she was confused and laboratory studies showed prolongation of prothrombin time, activated partial thromboplastin time, and undetectably low level of fibrinogen. No neurosurgical intervention applied. CT angiography ruled out intracerebral aneurysm and cranial MRI confirmed both subarachnoid hemorrhage and multiple chronic lacunar infarctions. MRI suspected cerebral sinus thrombosis and magnetic resonance venography demonstrated lack of flow in transverse venous sinus. So transverse sinus thrombosis and multiple chronic lacunar infarctions demonstrated in this case. In history, she did not suffered from any intracranial symptoms before. The SAH was more life-threatening so the patient was treated by the use of cryoprecipitate, fibrinogen concentrate and freshly frozen plasma. When fibrinogen level exceeded 100 mg/dl, the replacement therapy stopped. Patient's symptoms were regressed by fibrinogen increment and she was discharged to the hematology ward without any neurological sequelae.

Conclusion: Afibrinogenemia was usually manifested by bleeding disorders and rarely with thrombosis. But manifestation with both intracranial venous thrombosis and intracranial hemorrhage at the same time was very rare. The treatment of this paradoxical thrombotic tendency remained problematic and in our case we focused on the more fatal SAH complication and treated the patient with cryoprecipitate, fibrinogen concentrate and freshly frozen plasma with following coagulation parameters.

Key words: Afibrinogenemia, venous sinus thrombosis, subarachnoid hemorrhage

P-137

Sepsis in a Psoriasis Patient Under Treatment with Infliximab: A Case Report

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Introduction: Tumor necrosis factor (TNF) was cloned and characterized in 1984. TNF is considered a major proinflammatory cytokine, affecting various aspects of the immune reaction. All TNF inhibitors; etanercept, infliximab, adalimumab, certolizumab and golimumab are indicated only in autoimmune diseases, including rheumatoid arthritis, Crohn's disease and psoriasis. A case of sepsis that developed in a psoriasis patient treated with a TNF- α inhibitor is presented.

Case: 52 years old female patient with psoriasis vulgaris was planned infliximab therapy in dermatology service. After the infliximab infusion (Remicade® 400 mg in 2 hours) patient health situation begun worsening; dispne, tachypnea, tachycardia (135 bpm), hypotension (70/40 mmHg) and hyperthermia (38.70 C fever) was occurred. Patient transferred to intensive care unit immediately. Blood tests showed a leukocytosis with 24000/ μ l, C-reactiveprotein 42.4 mg/dl, creatinine 4.5 mg/dl. Invasive hemodynamic monitorisation was performed (PICCO®) and fluid management and inotropic therapy was given by guidance of Systemic vascular resistance, cardiac index, cardiac output measurements. The patient's clinical status deteriorated rapidly and died on the tenth day of hospitalization despite intensive respiratory and circulatory support.

Conclusion: Adalimumab, infliximab and etanercept are approved for the treatment of moderate to severe chronic plaque psoriasis in adult patients who failed to respond to, or who have contraindications to, or are intolerant to, other systemic therapies. TNF inhibitors are approved for the treatment of active and progressive psoriatic arthritis in adults with an inadequate response to previous disease-modifying anti-rheumatic drug therapy. Because of the affecting the immune system and impairing host defense mechanisms, they may also result in an increased risk of serious infections, such as tuberculosis, pneumonia, sepsis, osteomyelitis and progressive multifocal leukoencephalopathy. Although the therapy is associated with undesirable effects, the overall safety profile of this class should be considered positive and also fatal complications such as sepsis must be kept in the mind.

Key words: Sepsis psoriasis infliximab

P-138

Ventricular Fibrillation During Stem Cell Transplantation in the Intensive Care Unit

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Introduction: Hematopoietic stem cell suspensions are supplemented with dimethyl sulfoxide to reduce the freezing damage caused by storage which preserves their native physiological structure and functions (1). There are so many adverse reactions in recipients associated with the infusion of stem cells cryopreserved with dimethyl sulfoxide (1). We present a case that cardiac arrhythmia occurred while continuing the stem cell infusion.

Case: A 39 year old female patient was admitted to the intensive care unit due to sudden loss of consciousness and hemiplegia while under the treatment in hematology unit diagnosed with AML. She was unconscious and Glasgow Coma Score 5 on arrival to the intensive care unit. Thereafter the patient was intubated and mechanically ventilated. The edema around the minimal hemorrhage areas on the left parietal lobe was imaged with cranial computed tomography. In addition to existing treatment, it was decided to allogenic stem cell transplantation considering to the refractory AML by hematologists. When the stem cell infusion started the patient was hemodynamically stable and did not receive any inotropic medication. After 7 minutes following the first infusion of the peripheral blood stem cell, ventricular fibrillation occurred. The rhythm turned to normal sinus rhythm after the third defibrillation with 300 mg amiodarone during resuscitation. Second period of the stem cell infusion was completed without any problem with the presence of the amiodarone infusion. Despite treatment, the patient died less than 24 h later.

Conclusion: Dimethyl sulfoxide (DMSO) is a cryopreservation agent which is generally used for stem cell transplantation. It is known to have serious side effects such as cardiac arrhythmia. Two case reports define a cardiac arrest immediately after the infusion of stem cells cryopreserved with DMSO (2,3). In this case, we want to remind that such side effects may occur also in the intensive care unit during the infusion of stem cell.

Key words: Dimethyl sulfoxide, ventricular fibrillation, intensive care unit

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Unexplained Case of Bradycardia in Intensive Care: Rivastigmine Patch Effect

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Introduction: Since the introduction of the cholinesterase inhibitors to be the first line pharmacotherapy for mild to moderate Alzheimer's disease, most clinicians and probably most patients would consider the cholinergic drugs, donepezil, galantamine and rivastigmine.

Case: A 84-year-old woman with Alzheimer's disease was admitted to the ICU because of dizziness and respiratory distress. The patient was receiving the following long-term medication: diltiazem, quetiapine, piracetam, rivastigmine patch and atorvastatin due to hyperlipidemia and she had undergone heart valve replacement. Complete blood count, electrolyte levels, and cardiac biochemical markers were normal and had normal ECG results except for bradycardia. On the second day of hospitalization, patient's respiratory distress decreased, venous blood gas became normal but bradycardia was still continuing. On the third day, bradycardia was around 45-50/min when she was awake and continued in the 30-40/min range when she was asleep. The average heart rate in the holter analysis was 48/min, the minimum heart rate was 39/min and maximum heart rate was 60/min. On the fourth day heart rate was 50-55/min range so installation of a temporary pacemaker was planned by cardiologists. On the fifth day heart rate was 55-60/min and on the sixth day it was in 65-75/min range, so pacemaker installation was cancelled.

Conclusion: Arrhythmias related to cholinesterase inhibitors include bradycardia, atrioventricular block, QT prolongation, ventricular tachyarrhythmia, or even torsades de pointes. In our case only bradycardia was seen without any other arrhythmias. The underlying mechanism or pathogenesis of cardiac arrhythmias might be related to cholinergic overactivity.

Key words: Arrhythmia, bradycardia, rivastigmine, Alzheimer's disease

P-140

Case Report: Unexpected Death after Cesarean Section Due to HELLP Syndrome and Acute Portal Vein Thrombosis

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Introduction: HELLP Syndrome or Portal Vein Thrombosis (PVT) can rarely be encountered in the postpartum period. It is an unexpected condition to see both together.

Purpose: We wished to present the fact of HELLP Syndrome and PVT which occurred in the postpartum period, eight hours after cesarean section and caused the death of our patient after 48 hours.

Case: 39 years old, 35 weeks pregnant patient was planned caesarean section due to decrease of baby heart sounds. 8 hours after surgery, the patient was agitated and had epigastric pain and cold sweating. The patient was taken into intensive care unit. After 10 minutes,

Postoperative	9th hour	12th hour	15th hour	24th hour	36th hour	48th hour
pH	6.3	6.3	6.7	7.1	7.1	7.3
pCO ₂	63	73	49	40	41	44
pO ₂	82	77	65	160	148	91
HCO ₃	1.8	1.9	5.8	12	15	22
BE	-31	-31	-24			

the patient lost her consciousness. The patient was intubated and mechanical ventilation support was started. In abdomen USG, extreme hepatomegaly, intraabdominal common fluid, in intestine diffuse wall thickening existed. The patient was taken into an explorative surgery. The liver was extremely big, spleen was slightly big, intestines were edematous. 1000 ml acid fluid was drained. Abdomen Doppler USG was performed. It was evaluated as PVT. In contrasted abdomen CT, splenic vein, left, right and main portal veins were observed as thrombosis.

Discussion: Sudden onset epigastric pain and agitation are generally the first clinic symptoms of HELLP or PVT. In a short time the development of multiple organ failure is the indication of severe microcirculatory damage, further follow-up treatment is necessary, the mortality rate is high. HELLP cases were reported with successful liver transplantations. Seeing the two cases together brings to mind the possibility of some mechanisms triggering one another.

Conclusion: In the postpartum period, in the clinical table, situations like sudden indicative changes must be alarming for HELLP and PVT. Especially, liver transplantation must bring to mind in the case of HELLP. The association of these two cases must be investigated in terms of pathogenesis.

Key words: Postpartum, HELLP, portal vein thrombosis, death

Postoperative	9th hour	15th hour	24th hour	36th hour
Hb (gr/dl)	5.8	8.8	8.5	6.1
Platelet (/mm ³)	38000	49000	28000	65000
SGOT (IU/L)	349	2988	3657	1970
SGPT (IU/L)	194	2395	3153	1602
LDH (IU/L)	1417	9372	3521	4212

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Retroperitoneal Fibrosis: A Complicated Case

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Retroperitoneal fibrosis (RF) is a rare condition characterized by the presence of inflammatory and fibrous retroperitoneal tissue that often encases the ureters or abdominal organs. A complicated case with late diagnosis was reported.

69 years old male patient with coronary artery disease (CA bypass), gout (colchicine), admitted to a cardiovascular surgery hospital with respiratory insufficiency. Left sided massive pleural effusion, atelectasis, retroperitoneal mass lesion encircling aorta and vena cava, hydronephrosis were detected on CT. Effusion was drained and he discharged in 20 days. He admitted to another hospital with abdominal pain and swelling after 60 days; massive ascites, renal insufficiency were found and gastrointestinal examinations were done for the detection of any malignancy. No malignant cells were seen in ascites samples, and

he transferred to our hospital were he transferred to ICU after another 30 days with respiratory failure and deterioration of cerebral functions. He was hypotensive, tachycardic, oliguric. Entubation, mechanical ventilation, hemodynamic support and hemodiafiltration were initiated. On CT, retroperitoneal mass was confluent, encasing almost the whole intraabdominal organs and vessels, besides massive ascites and hydronephrosis. Ecocardiography revealed mitral and tricuspid insufficiency, myocardial hypokinesia and hypertrophy. Pleural-abdominal fluid samples were exudative, free of any malignant cells. Antibiotherapy initiated. Raddologic consultation for tissue biopsy was concluded that the abdominal mass contained cystic lesions and should have been regarded as aggressive retroperitoneal fibrosis rather than malignancy. Steroid therapy (1 mg/kg) was started besides symptomatic therapy. Patient was not recovered and died on the 8th day of his ICU stay.

RF should be differentiated from various infections and malignancies, but biopsy is needed only if the CT findings were not typical. A history of radiation therapy or prior surgeries and exposure to some drugs (ergot-derivatives, methysergide, bromocriptine, beta blockers, methyl dopa, hydralazine, and analgesics) have been found associated with it. Our patient had a history of long-term colchicine use, although this drug is used for the treatment with steroids, besides other immunosuppressive agents.

Key words: Retroperitoneal, fibrosis, mass

P-142

An Interesting Thinner Intoxication Case: Suborbital Injection

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Introduction: Thinner intoxication is a life-threatening table that included severe complications such as neurotoxicity, myotoxicity, hepatotoxicity, nephrotoxicity, and cardiotoxicity. Fever, nausea, vomiting, methemoglobinemia, disrithmia and sudden death may be seen.

The patient described in this report attempted to commit suicide by injecting 8-10 mL thinner into the right suborbital intradermal area and also ingesting 7-8 mL.

According to the our knowledge this is the first case reported in the literature to survive acute thinner intoxication with intradermal injection and also oral intake.

Case: A 17 year old male was admitted to the emergency department with alleged history of suicidal injection and also ingestion of thinner. Gastric lavage was applied in emergency department admitted to the hospital. He was brought within an hour of thinner ingestion with complaints of headache, weakness and dizziness. Patient was taken to the intensive care unit. On his examination, the patient was semi-conscious, with a dusky discoloration of nails and tongue along with tachycardia and mild tachypnea. Erythema and edema was seen on the right temporal region and right orbita.

Other vital parameters, laboratory values and systemic examination were within normal limits. Oxygen therapy was given and vitals monitoring was carried out. Tissue necrosis was seen to the suborbital region after a few days. A surgical intervention was made to the patient by the Plastic and reconstructive surgery. Patient was discharged with cure.

Conclusion: It is reported that 45-50 ml of orally ingested thinner is enough to cause severe complications. But our case has taken lower amount thinner. In conclusion, although internal organ damage appears due to oral intake or inhalation of thinner as intoxication, the intradermal injection of thinner leads to tissue necrosis due to chemical damage and requires a surgical intervention, should be considered.

Key words: Thinner, intoxication, organ failure

P-143

Peripartum Cardiomyopathy

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Introduction: Peripartum cardiomyopathy (PPCMP) is a rare but serious clinical disorder which occurs between the last four weeks of gestation and postpartum five months and is associated with heart failure and left ventricule dysfunction. In this case report we present a PPCMP patient whose pregnancy had to be terminated at the 33th gestational week.

Case: A 31 years old and 33 weeks nullipar who had nausea, vomiting and hepatic dysfunction has been followed up and investigated by the gastroenterology department. The patient has been counsulted to gynecology department with initial diagnosis of toxic hepatitis of pregnancy. In the physical examination, the patient had pretibial edema and fine crackles audible on auscultation. The patient was sent to the operating theatre for cesarean section. General anesthesia was maintained, central venous pressure was 19 mmHg and blood pressure was 80/40 mmHg. Dobutamine infusion 6 mcg/kg/min was started. The patient was extubated in the intensive care unit at postoperative third hour. Left ventricular systolic dysfunction was demonstrated by echocardiography with LV ejection fraction of 35-40%, generalized hypokinesia and asynchrony. In ECG negative T wave, 0.5 mm of ST elevation in the leads I, aV L and wide QRS were present. Troponin levels were high (4.28 ng/mL), non ST elevation MI or peripartum cardiomyopathy were considered. Acetylsalicylic acid, clopidogrel, enoxaparin and digoxin medications was started. In the second day, she was reintubated and hemofiltration was started due to acidosis. In the following days, norepinephrine, dopamine and adrenaline had to be infused hemodynamics. Despite supportive therapy, cardiac arrest occurred on the eighth day.

Conclusion: Peripartum cardiomyopathy is a rare, pregnancy specific disorder, characterized with LV systolic dysfunction in healthy pregnant. The women at the last month of pregnancy with dyspnea should be hospitalised for this disorder.

Key words: Peripartum cardiomyopathy, pregnancy, cardiomyopathy

P-144

Severe H1N1-Associated Acute Respiratory Distress Syndrome: Case Report

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Introduction: Acute Respiratory distress syndrome has been reported to be the most devastating complication of H1N1 infection. We reported a 40 year-old man with ARDS due to confirmed H1N1 virus infection and managed with a lung protective ventilator strategy.

Case: A 40 year old man was admitted to emergency department with a one week history of pneumonia. He was taking antibiotics. He was admitted to ICU with rapidly worsening shortness of breath and fever. He had tachycardia and tachypnea. The chest radiograph revealed bilateral patchy infiltrates. Arterial blood analysis showed severe hypoxemia with a PaO₂/Fi O₂ < score of 100. His white cell count was 7100/mL. Non invasive positive-pressure ventilation was performed with helmet mask. His hypoxia worsened and required intubation. Mechanical ventilation was managed with a tidal volume of 6 ml /kg and higher levels of PEEP. He was treated with empirically antibiotics (Meropenem, Linezolid, clarithromycin), osetamivir and bronchodilators. Within 24 hours after ICU admission, the patient impaired gas exchange and sedation was initiated with propofol. Bacterial cultures were negative. H1N1 influenza A virus was confirmed by the reverse transcriptase-polymerase chain reaction assay of tracheal aspiration. Oseltamivir was stopped on day 4th. His control chest radiograph showed normal lung morphology on the 11th. day and he was successfully weaned from ventilatory support.

Conclusion: Female gender, obesity and younger age have been observed as risk factors in cases of H1N1 associated respiratory failure. Patients with pandemic influenza-associated ARDS had higher lung injury scores at presentation and over the course of the first six days of treatment when compared with non H1N1 associated ARDS controls. Clinicians should be prepared to manage H1N1 associated complications in all affected patients admitted to the hospital setting such as prompt isolation and immediate antiviral therapy.

Key words: H1N1, ARDS, case report

P-145

Limbic Encephalitis Resembling Acute Herpetic Encephalitis as a Cause of Refractory Seizures

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Introduction: The formations autoantibodies that against different synaptic proteins or receptors occur and accordingly develop autoimmune encephalitis are reported in recent years. We describe a patient with a diagnosis of limbic encephalitis which has no neurological problems previously, characterized by nonspecific symptoms such as seizures and fever, anti-GABA B receptor antibodies have been positive.

Case: Admitted to the hospital with seizures and fever 61-year-old female patient's neurological examination was assessed as drowsy, limited orientation-cooperation, positive bilateral Babinski reflex. Edema and hypodense areas were found in the cranial tomography. Antiviral therapy was started in patient that abundant leukocytes seen in the lumbar puncture. The hypoxic-ischemic changes in cerebral meningeal enhancement MRI and subcortical white matter were observed in patient who continued seizures. HSV-PCR results were found negative in the CSF. Right heart failure echocardiography findings were detected when patient who general condition deteriorated was intubated. The inferior vena cava filter was placed in patient who detected subacute encountered compatible signs of deep vein thrombosis in bilateral lower extremity venous Doppler examination. CA-125 level that performed on suspicion of malignancy was found above normal in patient with conscious, cooperative but non-orientation, personality changes, speech impairment and dementia. Screening for malignancy could not be identified in any findings. Limbic encephalitis panel was studied in patient with behavioral changes, ongoing seizures and dementia from patients and because GABA B receptor antibodies were positive, limbic encephalitis was diagnosed. After intravenous immunoglobulin started for treatment, the seizures were reduced and the overall situation was improved. In 6th month follow-up of patient, breast cancer with widespread metastases were diagnosed.

Conclusion: We concluded that autoantibody screening may be useful in diagnosis and treatment in patient develops acute encephalitis, particularly intractable seizures and psychiatric symptoms and screening for malignancy should be screened regularly.

Key words: Limbic encephalitis, acute encephalitis, refractory seizures

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Critical Illness Polyneuropathy and Myopathy: Early Rehabilitation Might Improve the Functional Recovery

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Introduction: Critical illness polyneuropathy (CIPM), a complication of critical illness, is a primary axonal degeneration of motor and sensory fibers presenting with muscle weakness (1). It significantly contributes to the unexplained difficulty in weaning from mechanical ventilation and to a prolonged rehabilitation period (2).

Case: A 43-year-old male patient with lung cancer and isolated adrenal metastasis underwent right pneumonectomy by thoracic surgery clinic. The patient was transferred to intensive care unit with pneumonia and acute respiratory distress syndrome in the postoperative seventh day. He was intubated and mechanical ventilation was instituted with a long term sedation and neuromuscular blockage. Appropriate antibiotics were

used for sepsis and the patient had noradrenaline infusion for septic shock. Steroid therapy was given for adrenal insufficiency. On neuromusculoskeletal system examination, we detected weakness of bilateral upper and lower extremities muscles, absent deep tendon reflexes after steroid therapy. Sedative and neuromuscular blocking agents were stopped. Light touch, pain, temperature and joint position perception were impaired. The electrophysiologic tests revealed subacute sensorineural axonal polyneuropathy. The serum creatine kinase level was normal. With a diagnosis of CIPM based on the current evidences he had early rehabilitation programme combining mobilisation with physiotherapy. The muscle weakness of the patient was better so that he started ambulation. He was transferred again back to thoracic surgery ward.

Conclusion: In patients with CIPM, the inability or difficulty in weaning off mechanical ventilation increases intensive care unit morbidity. Even months to years after the acute event, many patients continue to suffer decreased exercise capacity and compromised quality of life. The awareness of CIPM could help to prevent the condition.

Key words: Critical illness, polyneuropathy, steroid, rehabilitation

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P-147

Thiamine Use in Refeeding Syndrome Accompanied by Resistant Electrolyte Imbalance

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Introduction: Refeeding syndrome (RS) is a deadly complication which can be encountered during "refeeding" of malnourished patients. Insulinergic system becomes active by carbohydrate ingestion in patients with malnutrition, and PO₄, K and Mg ions move into the cell. In these patients, thiamine, a cofactor of carbohydrate metabolism, may become deficient. "Risk awareness" is the most important step in the management of these patients (1).

We aimed to present the results of treatment of a 87-year-old patient who was in ICU due to resistant fluid-electrolyte imbalance and diagnosed with RS.

Case: A 87-year-old female patient with Alzheimer's disease was hospitalized to neurology clinic due to general physiological poverty and aspiration pneumonia. Antibiotic therapy and TPN (30 kcal/kg/day) were started. On the day 4, general condition of the patient worsened and severe electrolyte imbalance developed. The patient was consulted to our department. The patient had no renal or gastrointestinal pathology

and was not taking drugs that lead to K⁺ loss. TPN was stopped. Enteral feeding together with K⁺ (90 mEq/day) i.v. were started. During follow up, K⁺ values remained under 3 mmol/L. She was not taking methimazole treatment (which was prescribed for nodular goitre) for the last 2 months. Laboratory tests revealed a TSH value of 0.0027 uIU/ml and aFT4 value of 1.61 ng/dl. Methimazole (1x1) was started via nasogastric route. Pneumonia was regressed, antithyroid treatment was continued, need for IV K⁺ continued. Peripheral edema (+++) was observed. During follow up, BMI was 16, despite replacement; hypoalbuminemia, hypomagnesemia, hypocalcemia, and hypophosphatemia persisted. Considering TPN (30 kcal/kg/day) by her hospitalization, diagnosis of RS was made. On the day 10, thiamine (200 mg/day) IV. and folic acid (5 mg/day) were added. During the following days, the patient responded to electrolyte replacement treatment (Table 1). Percutaneous endoscopic gastrostomy was opened. The patient was discharged on the day 26 with a home-care plan.

Conclusion: In patients with malnutrition, a thiamine replacement should be given before starting the nutrition in order to prevent RS. Energy intake should be 10 kcal/kg/day at start, and then, it should be gradually increased between 4 to 10 days (2). Hemodynamic-laboratory parameters should be closely monitored. All these measures may be life-saving in patients under high risk.

Key words: Malnutrition, Refeeding syndrome, electrolyte imbalance, thiamine

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Table 1										
	Day 1	Day 2	Day 5	Day 7	Day 9	Day 12	Day 16	Day 22	Day 26	Normal Values
Glucose	141	-	118	119	101	152	126	119	128	70-105 mg/dl
BUN	64	42	30	21	14	23	27	27	38	21-43 mg/dl
Creatinine	0,8	0,62	0,36	0,33	0,36	0,45	0,36	0,43	0,43	0,4-1,1,2 mg/dl
AST	11	8	9	9	13	13	10	17	24	5-34 U/L
ALT	<6	7	<6	<6	9	13	10	13	27	0-55 U/L
Total Protein	6,1	-	5,9	-	-	5,2	-	5,1	5,6	6,2-8 g/dl
Albumin	2,9	2,5	2,4	2,4	2,4	2,6	3	3,1	3,1	3,5-5 g/dl
K	3,7	3,0	2,7	2,5	2,7	3,7	3,5	5	4,5	3,5-5,1 mg/dl
Ca	8,5	8,1	7,8	6,7	7,3	7,9	8,6	8,7	8,7	8,4-10,2 mg/dl
Phosphor	-	2,3	2,5	2,4	1,9	2,1	3	3,1	4,1	2,8-4 ng/dl
Na	147	140	133	130	126	130	135	138	137	136-145 mg/dl
Chloride	-	-	99	-	94	-	101	-	-	98-107 mmol/dl
Mg	-	1,47	1,57	1,47	1,88	1,36	1,35	1,38	1,84	1,6-2,6 mg/dl
Folate	1									3-20 ng/MI
B12	312									137-883 pg/mL

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Case Report: Acute Abdominal Compartment Syndrome and Massive Hydrothorax Occuring as Percutaneous Nephrolithotomy Complication

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Introduction: During percutaneous nephrolithotomy process (PCNL), there may be unwanted fluid transition into the abdomen or the thorax. If it is not noticed, serious complications may develop due to fluid accumulation.

Purpose: The presentation of severe cardiopulmonary failure fact was aimed in our report, which occurs during PCNL process depending on the development of acute abdominal compartment syndrome (ACS) and massive hydrothorax.

Case: PCNL operation was planned for a 14 year old, ASA1 patient. The operation lasted 130 minutes. In the last 20 minutes of the operation the patient had mild tachycardia. Airway pressure increase and SPO2 decrease (90-92%) were observed. When assessing about the depth

of anaesthesia, bleeding state, respiration and cardiovascular state; the surgical team indicated that they completed the operation. When the patient was brought into the supine position, severe abdominal distension was noticed. The patient had ventilation difficulty, bradycardia and hypotension. SPO2 20-30%, HR: 30/min, BP: 50/30 mmHg. Although 500 ml fluid was drained, the clinic table did not improve. Immediately laparotomy was made and was drained 3000 ml fluid. The patient's hemodynamic and respiratory states were stabilised. With a thorax CT, bilateral pleural effusion was identified, it was massive on the right. From the right 500 ml pleural effusion was drained.

Discussion: During PCNL process, at ureteral catheter stage, at dilatator application stage, or at stage stone breakage pelviccaliceal system may be damaged. This case causes fluid transmission to the other compartments. When fluid transmission increases in abdomen and thorax, changes in respiratory parameters and cardiovascular system must be alarming. During the PCNL attempt given fluid follow-up is the most important point.

Conclusion: PCNL procedure is an iatrogenic rare cause of ACS development. Immediate decompression is lifesaving when it is noticed. This is a complication that will be prevented by the used flushing fluids follow-up.

Key words: Percutaneous nephrolithotomy, abdominal compartment syndrome, hydrothorax

P-149

Serious Complications Due to the Central Venous Catheterization in a Multiple Trauma Patient

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Introduction: Subclavian catheterization may cause life-threatening complications including pneumothorax and hemothorax, which may lead to a more complex condition in a chest trauma patient. We report a case of multiple trauma complicated with hemothorax due to a misplaced central venous catheter with tip of the guide-wire in subcutaneous tissue during subclavian catheterization.

Case: A 47-years-old male had multiple trauma, C7 spine fracture, multiple bilateral rib fractures, hemothorax, pneumothorax and bilateral chest tubes. He was on mechanical ventilation in our ICU. Left subclavian

catheterization was performed. In our first attempt, we could not advance the guide wire easily and tried to withdraw it. In our second attempt, we inserted a new catheter without difficulty. To verify the location of the catheter, blood gases test were analyzed in blood specimens from the catheter and turned out as venous blood. Two hours after catheterization, 500 ml hemorrhagic fluid was released through the left chest tube. Chest X-ray showed the catheter was in the left hemithorax neighboring the mediastinal structures and a piece of the guide wire below the left clavicle. Emergency thoracic CT showed that the catheter entered the thoracic cavity through the left subclavian region and extended to the paramediastinal region. Emergency surgery was performed to remove the catheter and the pieces of the guide wire. The subclavian artery was not damaged and there was only minimal venous injury. The patient had no related problem during the postoperative period.

Conclusion: A commonly used method to verify that a central venous catheter is inserted into a vein is to blood should be drawn into the injector easily and be in venous nature. Since this criterion does not exclude blood aspirated can be intrapleural hemorrhage in the presence of ipsilateral hemothorax, catheterization should be accompanied by ultrasonography.

Key words: Central venous catheterisation, hemothorax, venous access, multiple trauma

P-150

Haemophagocytic Lymphohistiocytosis

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Introduction: We had 2 patients with Haemophagocytic lymphohistiocytosis (HLH). We decided to share this topic.

Case: In both of our cases fever, pancytopenia and high ferritin levels was remarkable. Our first case had bone marrow infiltration and she considered to have HLH triggered by infection and died in the 4th day due to severe sepsis. The second case had fever and ferritin levels was over 40.000 ng/ml. Because of positive serological markers Lupus-associated HLH was considered. The patient was observed in the ICU for 30 days and then discharged to neurology service.

Discussion: Haemophagocytic diseases diagnosis is made through the criteria listed in Table 1. Fever and splenomegalis are the most frequent clinical symptoms while hepatitis and encephalopathy, central nervous system related symptoms like meningism and convulsions are also reported. Lymphadenopathy, rash, icter and neurological symptoms are rarely seen. Increased LDH, hyperbilirubinemia, hypofibrinogenemia, increased hemolysis and disseminated intravascular coagulation could be observed. Pancytopenia and high ferritin values were remarkable in both our cases. As we have presented in the bone marrow smear of our first case, hemophagocytosis in bone marrow, spleen, lymph nodes, central nervous system and skin, is a characteristic of HLH.

Primary HLH, if not treated, is 100% fatal with average life expectation of two months. The secondary form is 50% fatal if not treated. HLH-2004 protocol consisting of dexamethasone, etoposide, cyclosporine and intrathecal methotrexate is widely used in treatment.

Conclusion: HLH should be considered for the patients with long lasting and recurring fever, progressing pancytopenia or hepatosplenomegaly

either at the beginning or during the treatment of the primary infection and bone marrow should be aspirated as soon as possible to investigate for hemophagocytosis. In this manner, it would be possible to get better results since the treatment of HLH, which has such a high mortality, would start earlier.

Key words: Haemophagocytic lymphohistiocytosis, ferritin, ICU

Medscape

A diagnosis of HLH can be established if the patient either has a molecular diagnosis consistent with HLH or fulfills at least five of the following diagnostic criteria:

- Fever
- Splenomegaly
- Cytopenias (in ≥ 2 of 3 lineages in the peripheral blood)
Hemoglobin <90 g/l (<100 g/l in infants <4 weeks old)
Platelets $<100 \times 10^9/l$
Neutrophils $<1 \times 10^9/l$
- Hypertriglyceridemia (≥ 2.99 mmol/l) and/or hypofibrinogenemia (≥ 4.41 μ mol/l)
- Hemophagocytosis in the bone marrow, spleen, or lymph nodes without evidence of malignancy
- Low or absent natural killer cell cytotoxicity
- Hyperferritinemia (≥ 500 pmol/l)
- Elevated sCD25 levels ($\geq 2.4 \times 10^6$ U/l)

Abbreviations: HLH, hemophagocytic lymphohistiocytosis; sCD25, soluble interleukin 2 receptor a subunit.

Source: Nat Rev Clin Onc © 2010 Nature Publishing Group

Table 1. Diagnostic criteria of HLH. Alemtuzumab as a Bridge to Allogeneic SCT in Atypical Hemophagocytic Lymphohistiocytosis Matthew P. Strout, MD, PhD; Stuart Seropian, MD; Stuart Seropian, MD Faculty and Disclosures CME Released: 04/20/2010; Valid for credit through 04/20/2011

	Case 1	Case 2
Clinic	61 years old female Hypothyroidy (+) Hospitalized in the ICU due to postop femur fracture at the 10 th day fever, hepatosplenomegaly, jaundice and sepsis with progressive respiratory distress	47 years-old female Asthma (+), hypothyroidy (+) Hospitalized in the ICU due to fever, pneumonia, deterioration in mental status
Laboratory	Wbc: 1000 k/ μ L (37% PNL), Hb: 8.2 g/dL, Plt: 86.000 k/ μ L Ferritin: 4.736 ng/mL Triglycerid: 412 mg/dL Fibrinogen: 253 mg/dL	Wbc: 1800 k/ μ L (37% PNL), Hb: 5.9 g/dL, Plt: 46.500 k/ μ L Ferritin: >40.000 ng/mL triglycerid: 481 mg/dL Fibrinogen: 299 mg/dL ANA+, anti Ro+, low C3-C4
Bone marrow biopsy	Extensive hypercellular bone marrow, lymphohistiocytic cell infiltration, hyperactivite erythroid series, severely suppressed myeloid series, no findings for lymphoma or leukemia	hypercellular bone marrow.increase in megakaryocytes, increased dysmorphic and dysplastic changes, stage 1-4 fibrosis, CD68+, macrophage+, 8-10% plasma cells
Diagnosis	Hemophagocytic Lymphohistiocytosis	Lupus-associated Hemophagocytic Lymphohistiocytosis
Treatment	Erythrocyte susp., thrombocyte susp. fresh frozen plasma multiple antibiotics corticosteroids	Fresh frozen plasma multiple antibiotics prednol 500 mg 1 mg/kg IVIG for 2 days,
Clinical course	Deceased in the 4 th day of stay	Steroids reduced gradually and discharged at the 30 th day of stay

	Gene	Chromosome location	Protein
Primary/genetic			
Familial HLH (FHL)			
Known defects			
FHL 1	Unknown	9q21.3-q22	Unknown
FHL 2	PRF1	10q21-22	Perforin
FHL 3	UNC13D	17q25	Munc 13-4
FHL 4	STX11	6q24	Syntaxin 11
FHL 5	STXBP2 (UNC 18B)	19q13.2-3	Munc 18-2
Unknown defects			
Sporadic onset associated with immune deficiencies			
Chediak-Higashi syndrome	LYST	1q42.1-q42.2	Lyst
Griscelli syndrome type 2	RAB27A	15q21	Rab27a
X-linked lymphoproliferative disorder type 1	SH2D1A	Xq25	SAP
X-linked lymphoproliferative disorder type 2	BIRC4	Xq25	XIAP
Other rare immune defects such as HPS-2, SCID, ITK deficiency			
Secondary/acquired			
Infectious			
Autoinflammatory/macrophage activation syndrome			
Malignancy			
Immunosuppression			
Metabolic			
Abbreviations: HSP-2 = Hermansky-Pudlak syndrome type 2:ITK = interleukin-2-inducible T-cell kinase: SCID = severe combined immunodeficiency			

Table 3. Classification of HLH
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P-151

Weil Disease in Intensive Care Unit: Two Case Reports

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Introduction: Even leptospirosis is a world wide zoonosis, it is more common in developing countries. It is transmitted to human by direct contact with the sick animal's urine or contaminated material. Weil disease is associated with multiorgan insufficiency.

Case 1: Fifty two-year-old man, presenting with nausea, vomiting and jaundice was admitted to intensive care unit (ICU) due to acute renal failure, severe thrombocytopenia and leucocytosis. The patient was a farmer and had a picnic near a sewage one week before. At admission, he was conscious, oriented and cooperated, his hemodynamic parameters were stable. He had petechial rash on his body and cervical lymphadenopathy. His scleras and skin were icteric.

Case 2: Fifty nine-year-old woman has applied to local hospital with high fever, nausea-vomiting, abdominal pain and malaise. She was given medical treatment with the diagnosis of flue. She was admitted to our hospital emergency unit because her complaints didn't regress. She was taken to ICU due to severe sepsis findings after few days. She was tachycardic, hypotensive and tachypneic with icteric scleras and skin. She had a history of swimming in a lake near a farm.

Having both patients fever, jaundice, nausea and vomiting with high bilirubin and transaminase enzyme levels, acute renal failure and thrombocytopenia, these findings were thought to be compatible with Weil disease. Diagnosis was made with microscobic slide agglutination test. Ceftriaxone 3x1 gr and Doxycycline 2x100 mg treatment was started. They were discharged after clinical and laboratory parameters were improved.

Conclusion: Weil disease is diagnosed with the suspicion of the clinician in a patient with acute renal failure, thrombocytopenia, high liver enzyme and bilirubin levels. The diagnosis and treatment may delay because it may interfere with some infectious and non-infectious states presenting with multiorgan dysfunction. Early diagnosis and treatment, influence the progress of the disease significantly.

Key words: Weil disease, ICU, zoonosis

P-152

Refracter Metabolic Acidosis Due To Ileo-Vesical Fistula Corrected by Nephrostomy

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Introduction: In metabolic acidosis or alkalosis definitive treatment is to find out the underlying cause and use the treatment options according to this direction.

Case: We represent a patient who had severe metabolic acidosis due to ileo-vesical fistula and treated with nephrostomy.

Forthy-four years old female patient was operated due to sigmoid cancer 5 years ago. The patient was admitted to the surgery service with dysuria, hematuria and fecaluria. Cystoscopic examination of bladder showed enterovesical fistula. While the patient was preparing for surgery she was admitted to intensive care unit (ICU) because of severe metabolic acidosis (pH: 7.19, PaO₂: 44 mmHg, PaCO₂: 17.0 mmHg, HCO₃: 3.9 mmol/l, BE: -20) and hypoxemia (SaO₂: 74%). Computed tomographic scans of the abdomen also revealed ileo-vesical fistula.

Despite mechanical ventilation and pharmacological treatment which includes vasopressor, potassium, bicarbonate infusion, and her metabolic acidosis didn't improve. Ileo-vesical fistula was thought to be the reason of metabolic acidosis; so we planned to divert the urine from the intestine by bilateral nephrostomy. After the procedure patient's metabolic acidosis was improved and didn't need further pharmacological treatment.

Conclusion: Surgery to remove the fistula and primary closure of the bladder fistula is the treatment choice in enterovesical fistula. In our case the presence of pneumonia, need for vasopressor support, and severe metabolic acidosis are associated with significant perioperative morbidity and mortality. As a result bilateral nephrostomy was applied to the patient who has resistant to pharmacological treatment.

Key words: Metabolic asidosis, ileo-vesical fistula, nephstomy

P-153

Sheehan's Syndrome Complicated with Metabolic Encephalopathy and Coma: A Case Report

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Introduction: Sheehan's syndrome is postpartum hypopituitarism caused by necrosis of the pituitary gland. The spectrum of clinical presentation changes from non-specific complaints such as weakness, fatigue and anaemia to severe pituitary insufficiency resulting in coma and death. The aim of this case report is to present a Sheehan's syndrome appeared with stupor.

Case: 39-year-old female patient was admitted to emergency room with altered level of consciousness. She was intubated with GCS 3 and transferred to ICU. Her previous medication with oral levothyroxine sodium and prednisolone for Sheehan's syndrome was obtained from her medical reports recorded three years ago. The patient could not carry out the treatment regimen properly. All specific infection markers like *Treponema pallidum*, TBC-PCR; VDRL investigated 'negative' except *Brucella* and also LP of the patient recorded 'negative' for bacterial and viral meningitis. The cranial CT was normal and the image of empty sella was detected on MRI (Figure 1). After diagnosis of metabolic encephalopathy signs on EEG, she was treated with appropriate antibiotics for *Brucella* infection, intravenous hydrocortisone and enteral levothyroxine while being mechanically ventilated. All these laboratories, images and clinical findings supported severe hypothyroidism and adrenal insufficiency. She had a percutaneous dilatational tracheostomy, and PEG was performed on the 15th day. Due to *Pseudomonas pneumonia*, weaning from ventilator failed till the 37th day. On the 40th day, she was transferred to internal medicine service with an intact tracheostomy, after removal of tracheostomy cannula she

was discharged from the hospital 90 days after the first admission, with a GCS 12.

Conclusion: As an endocrine emergency, Sheehan's syndrome may present itself with coma, which is precipitated by discontinuation of treatment or interruptive infections. Early diagnosis and appropriate treatment with hormone replacement therapy can reduce the risk of morbidity and mortality.

Key words: Sheehan's syndrome, metabolic encephalopathy, panhypopituitarism, intensive care unite, levothyroxine sodium



Figure 1.

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Lithium Toxication Can Mask Septic Shock

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Introduction: Lithium toxicity has severe hematologic, respiratory, renal, and neurologic side effects which can also be seen in patients with severe sepsis. We describe a mortal case with a diagnosis of lithium intoxication at the admission of the hospital.

Case: A 49 year old white female with a bipolar disorder treated with lithium had been hospitalized with diarrhea, weakness, hypotension. She had an acute kidney injury with a creatinine level of 2.21mg/dl and BUN was 108mg/dl. Lithium level decreased from 3.16mEq/l to 1.73mEq/l (0.3-1.2 mEq/dL) after hemodialysis. She had been intubated because of respiratory failure and referred to our hospital to the intensive care unit (ICU) with dopamin infusion. Because of high procalcitonine levels > 100 ng/ml, CRP 432mg/l and fever of 38.4C, antibiotherapy has been started. Vasoactive agent changed to noradrenalin because of low systemic vascular resistance (SVR) 602dynes/cm⁵ (figure 1). PaO₂/FiO₂ ratio was under 200mmHg and bilateral alveolointerstitial changes was compatible with acute respiratory distress syndrome (ARDS) on chest radiography. On the second day of ICU patient received veno-arterial extracorporeal membrane oxygenation (VA-ECMO) because of hypoxia and hypotension despite high dose vasoactive agents and treated with continuous veno-venous hemofiltration. FiO₂

requirement decreased after VA-ECMO but organ dysfunction existed on the third day. Despite all the treatment modalities she died on the third ICU day because of septic shock.

Conclusion: Both sepsis and lithium intoxication can result in organ dysfunctions including ARDS. In this case, the diagnosis of severe sepsis was masked by the symptoms of organ dysfunction related to lithium intoxication and this caused delay in antibiotherapy. Antibiotherapy was not considered at the first hospital admission although dopamin infusion started regarding the diagnosis of sepsis. After measuring low SVR and high lactate levels we preferred norepinephrine as suggested in sepsis guidelines. Hemodialysis decreased lithium levels but VA-ECMO was not effective in ARDS which is originated from organ dysfunctions.

Key words: Lithium, septic shock, acute respiratory distress syndrome (ARDS), extracorporeal membrane oxygenation (ECMO)

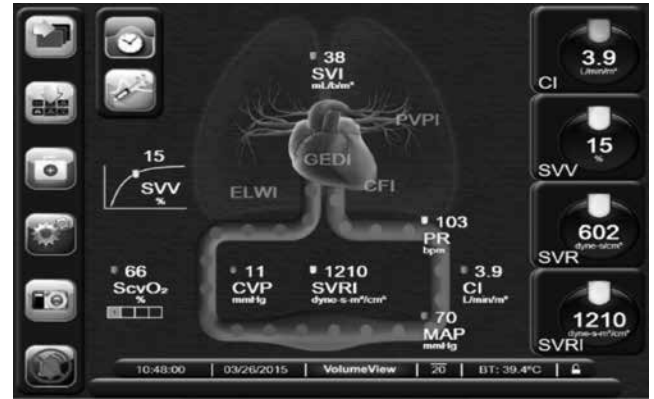


Figure 1. Hemodynamic measurements of patient with invasive cardiac output monitor

P-155

A Rare Complication of Central Venous Catheter; Following Jugular Venous Arch Via External Jugular Vein

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Introduction: Central venous catheters (CVC) are widely used and mandatory equipments in anesthesiology clinical practice, however, it is important to ensure its proper placement. Malposition of the catheter tip is one of early complication of this procedure.

Case: The patient was 72 years old female with rheumatological heart disease and candidate for valve replacement. A catheter was placed through the right internal jugular vein with all aseptic precautions using the Seldinger technique. It was advanced further without any resistance. Immediately after the operation, an anteroposterior chest radiograph, obtained to confirm the position of the catheter, revealed the diffuse subcutaneous emphysema and right external vein location of the catheter turning end up from bulbous inferior jugular vein (Figure 1).

Conclusion: We report an unexpected and rarely seen malposition of a catheter in the right external jugular vein (EJV), where it entered into the right internal jugular vein (IJV). Due to the anatomical variation, the malpositioning of the CVC into the IJV via EJV can be seen. After placement of all central venous catheters, a chest radiograph should be obtained.

Key words: Malposition, central venous catheter, external jugular vein



Figure 1. Malposition of central venous catheter in the right external jugular vein

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Cerebral Venous Sinus Thrombosis Which Was Diagnosed After Cesarean Section Operation: Case Report

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Introduction: Diagnose of cerebral venous sinus thrombosis is difficult due to the variable and nonspecific clinical symptoms. Clinical findings range from headache with papil oedema to focal deficit, seizures and coma. In this case report, we presented a 36 year old woman diagnosed as cerebral venous sinus thrombosis after cesarean section.

Case: A 36 year old woman underwent cesarean section with spinal anesthesia at 36 weeks of pregnancy. On the 3th day post- partum, she noticed occipital headache, paresthesia on the left side of her face and upper left limb. Patient was admitted to Intensive care unit. Cranial computed tomography after contrast injection, revealed high parietal hemorrhagic infarct. Her coagulation parameters were normal. Protein C, Protein S activity and Antithrombin III antigen level were in normal ranges. The investigation was complemented by MRI and venous MRI of the brain which demonstrated thrombosis of the right transvers sinus. Her blood pressure was 200/100 mmHg. She had no HT history during her pregnancy. HT was treated with esmolol infusion. Levotirasetam was administred for seizure prophylaxis. Anticoagulation with low molecular weight heparin was started. On postoperative day 6, she developed a generalized grandmal seizure, associated with acute left hemiparesis, blurred vision and somnolance. Control CT revealed extensive brain oedema and enlargement of the parietal hemorrhagic infarct. The patient was consulted with neurosurgery and decompression craniotomy was performed. She was discharged with weakness of the left upper limb. On follow up after 6 months, she had no further reccurrences or new symptoms.

Conclusion: Cerebral venous sinus thrombosis should be kept in mind especially in the presence of postpartum atypical headache and neurological symptoms following spinal anesthesia. Early diagnostic test with venous MRI of the brain and early medical intervention with systemic heparinization is critical for the patients.

Key words: Cerebral venous sinus thrombosis, cesarean, case report

P-157

Sequential Compression Device Usage in the Hypotension Management of the Patient with Spinal Cord Injury: A Case Report

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Introduction: Autonomic dysfunction, including abnormal blood pressure and hearth rate are common consequences of Spinal cord injuries (SCI) after trauma. An adequate blood pressure is critical to maintain the perfusion in the spinal cord. In this report we aimed to present the management of the hypotension and bradycardia in the patient hadSCI.

Case: Forty-two years old male patient who suffered from a motor vehicle accident hospitalized. On admission, the patient had no loss of consciousness, abnormalities in hemodynamic parameters but had tetraplegia and paradoxical breathing. Computerized tomography revealed that fractures in the C5 which was narrowing spinal canal. The initial treatment was started with Methylprednisolone. After the emergency operation, the patient was transferred to the intensive care unit and the hemodynamic parameters was stabile. In the second day bradycardia and hypotension which did not respond to the fluid therapy, was occurred and norepinephrine was started to maintain the mean arterial pressure (MAP) above 80 mmhg. Transthoracic echocardiography showed normal findings. The external sequential compression device (SCD) was applied and than norepinephrine could be stopped.

Conclusion: The autonomic nervous system has two components; sympathetic and parasympathetic parts that regulate the blood pressure and hearth rate. Due to the injury on the sympathetic system and the parasympathetic activity becomes unopposed. The absence of the peripheral arteries' vasoconstrictor tone cause to the blood pool in the peripheral areas so the fluid resuscitation can increase the venous return. If the MAP can not achieve to the target point, vasopressor agent have to infuse. SCD that is used safely for the prevention from the deep venous thromboembolism produce compression and decompression periods and this force prevent pooling of the blood in the lower limbs. As in our case, SCD usage may support the mean arterial pressure in the patients who had SCI.

Key words: Spinal Cord Injury, hypotension, bradycardia



Figure 1. Fracture in the C5

P-158

Therapeutic Hypothermia Following out of Hospital Cardiac Arrest

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Introduction: Primary percutaneous coronary intervention (PCI) is preferred reperfusion strategy for ST-elevation acute myocardial infarction (STEMI). In comatose survivors of cardiac arrest, the role of mild induced hypothermia (MIH) is demonstrated to improve neurological recovery. In our case, we addressed the feasibility and safety of combining the 2 therapeutic modalities (primary PCI and hypothermia) in comatose survivors of cardiac arrest after return of spontaneous circulation (ROSC).

Case: A 43 year-old male was brought to the emergency department (ED) after ROSC. The total time from loss of pulse to ROSC was approximately 35 minutes. The patient had a GCS of 6 and vital signs were heart rate of 90 beats/min, blood pressure of 98/68 mmHg, respiratory rate of 20 breaths/min and O2 saturation of 86% on 100% oxygen via bag valve mask. The patient was intubated in the ED and transferred to the catheterisation laboratory for urgent coronary angiography and primary PCI. Therapeutic hypothermia was initiated in the intensive care unit (ICU), approximately 3 hours after arrival to the ED. The patient was sedated and paralyzed with propofol and rocuronium, and cooling blanket were used to cool the patient to target temperature of 32-34 °C. Therapeutic hypothermia was maintained for 24 h. The patient was extubated on post-admission day 2 and returned to his baseline neurologic status with the exception of some short-term memory difficulties.

Conclusion: Neurologic injury is the most common cause of death in patients with out-of-hospital cardiac arrest and contributes to the mortality of in-patients with cardiac arrest. In this case, the combination of the two therapeutic modalities has been demonstrated to improve neurological recovery in comatose survivors of cardiac arrest. Wider awareness among medical staff may increase the early use of therapeutic hypothermia following cardiac arrest after ROSC.

Key words: Hypothermia, STEMI, ROSC

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A Rare Malposition of Central Venous Catheters: A Case Report

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Introduction: Central venous catheters (CVCs) are used to provide temporary or long-term vascular access. They are useful in the management of various conditions, such as those requiring regular blood sampling, total parenteral nutrition and haemodialysis. Complications associated with the insertion and maintenance of CVCs includes pneumothorax, arterial puncture, arrhythmias, malposition, infection and thrombosis. We present a case report about a rare CVCs malposition.

Case: A 82 -year-old female patient presented to our intensive care unit with unconsciousness cerebrovascular disease. He was treated with non-invasive ventilation due to carbon dioxide retention. We administered interna jugular vein catheterization. We controlled all line of catheter for blood return by aspiration. Chest X-ray revealed that CVC was retroverted in internal jugular vein (Figure 1). We thought that cause of retroversion of CVC may be thrombosis and vein valve. We didn't pull the catheter back because of normal blood return of catheter lines.

Conclusion: More than 15% of patients undergo CVC cannulation experience complications, which can be mechanical, thrombotic, or infectious. The traditionally preferred position of the catheter tip is in the distal third of the SVC to minimize complications such as vascular perforation, local vein thrombosis, catheter malposition and arrhythmias. CXR is still considered the gold standard for identifying catheter malpositions. We suggest that place of CVC tip is confirmed with chest X-ray after CVC cannulation.

Key words: Central venous catheters, malposition, complication

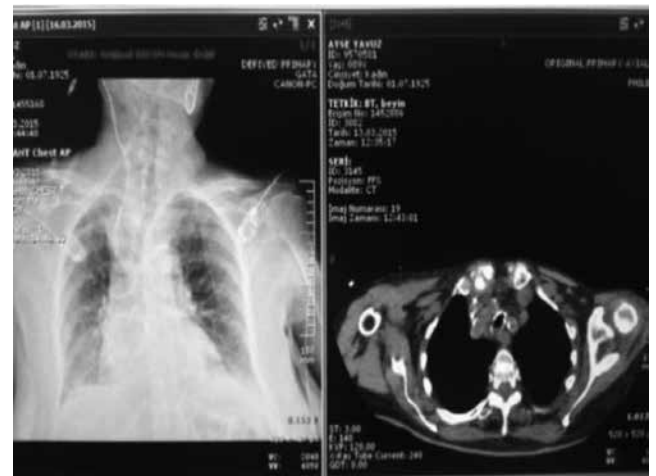


Figure 1. Images of chest x-ray and CT

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Cytokine Adsorban System Efficiency in an Inflammatory Syndrome

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Introduction: Cytokine adsorbing systems can be beneficial in patients who have an autoinflammatory disease with severe infection.

We present an inflammatory syndrome which cytokine adsorban system was used.

Case: Twenty years old male patient with resistant auto inflammatory syndrome (Resistant Familial Mediterranean Fever) was admitted to ICU with acute respiratory failure after an upper respiratory tract infection. APACHE II and SOFA scores were 20 and 3, respectively. He has bilateral infiltration in chest-X ray, PaO₂/FIO₂ ratio was 75. He was intubated because of severe ARDS and placed in prone position under deep sedation. There was no response to prone position, in terms of hypoxia and hypercapnia (pH: 6.58, PaO₂: 69 mmHg, PaCO₂: 168 mmHg, HCO₃: 30.9 mmol/L, BE: -5,1). Carbon dioxide (CO₂) levels didn't reduce with mechanical ventilation so we start to insufflate oxygen 4 Lt/min through the intubation tube to clear CO₂. Because of decrease in diuresis, increase in urea-creatinine levels we started continuous renal replacement therapy. CO₂ levels gradually decrease but he was in severe cytokine storm and procalcitonin (PCT) level was 1021 µg/lit. We planned to use cytokine adsorbing system for clearance of cytokine especially Interleukin-1 (IL-1). Cytokine adsorbing system was used 8 hours/per day for four days through the hemofiltration system. His PCT level was decreased to 17, 31 µg/lit at the end of cytokine adsorbing treatment. As his inflammation decreased he gets better. He was discharged after tracheostomy performed because of muscle weakness and weaned at the 32. day.

Conclusion: In auto inflammatory diseases PCT levels usually rise due to cytokine storm. Immune suppression is one of the treatment choice, but if there is an infection, cytokine adsorbing system can be used. In our case cytokine adsorbing system has been used 4 times and PCT levels have decreased significantly.

Key words: Autoinflammatory syndrome, cytokine adsorban systems, cytokine storm

P-161

Acute Lung Injury- ARDS in H1N1: Timing of Therapy: Challenge for Anesthesiologist

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Introduction: In some viral or bacterial infections, a minority of patients developed rapidly progressive pneumonia leading to acute lung injury (ALI)-acute respiratory distress syndrome (ARDS). We reported two case of acute lung injury and their treatments.

Case: 34 year old male patient with severe acute respiratory failure was admitted to ICU. The patient was hospitalized with progressively worsened fever, coughing and dyspnea lasting for one week. Severe pneumonia was first considered and antibiotics were started (levofloxacin, vancomycin) empirically and O₂ was given through nasal cannula. The clinic progressed to severe dyspnea in hours and after short Non-invasive ventilatory (NIV) support patient was intubated and accepted to ICU with severe ARDS. Oseltamavir 75 mgx2 and Puls steroid therapy (1mg/day) was added to antibiotics and patient mechanically ventilated. With no reply to the therapy the patient was scheduled to ECMO therapy and transferred to different ICU center where the same medical therapy continued under ECMO support. After a few weeks therapy patient clinics improved. The second case was 33 female patient with same clinic. After symptoms of fever, coughing for a week she was accepted to our ICU with ALI-ARDS. The therapy of oseltamavir, vancomycin, levofloxacin, puls steroid (1 gr/day) and NIV was started. In a few days the patient's clinic improved. The culture results showed H1N1 infection. Initial therapy of oseltamavir, pulse steroid therapy, vancomycin, levofloxacin and NIV support results as suitable therapy for H1N1 induced ALI-ARDS. ECMO support is vital therapy in severe cases.

Conclusion: Suspicion of viral infections and timing of current therapy in H1N1 induced ALI-ARDS is a challenge for anesthesiologist

Key words: ARDS, H1N1, NIV, oseltamavir, pulse steroid

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Transcutaneous Oxygen Monitorization in Sepsis Case

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Introduction: Severe sepsis is associated with organ dysfunction, hypoperfusion and hypotension (1). In the evaluation of hypoperfusion, in addition to arterial blood gas analysis and lactate values, transcutaneous oxygen measurements may also be used. Transcutaneous oxygen values give information about oxygen delivery to tissues (2). In this case, transcutaneous oxygen monitor that used in a patient with sepsis will be presented.

Case: A 39 year old male patient was admitted to intensive care unit with deterioration of general condition after stem cell transplantation because of Hodgkin's lymphoma. His blood pressure was 60/30 mmHg, heart rate 125/min, Spo2 60, Glasgow Coma Score 5 and APACHE II score 33 (78.8%). Patient was intubated and mechanically ventilated. Noradrenaline infusion and antibiotic treatment was started with preliminary diagnosis of septic shock. Blood cultures were positive for acinetobacter baumannii. On the third day of admission, transcutaneous oxygen monitorization was used with arterial blood gas analysis. The transcutaneous index (PtcO2/PaO2) which is calculated with the arterial blood gas analysis during monitorization were as follows; PtcO2 index: 0.68 and pH: 7.37, pO2: 87.3, pCO2: 26.1, lactate: 4.28. On the next day, cardiac arrest developed and the patient was considered exitus following resuscitation.

Conclusion: Sepsis has fatal course with the development of microvascular thrombosis, hypoperfusion, ischemia and tissue injury. There is a strong correlation between tissue oxygenation and mortality (1). PtcO2 have been used to represent tissue oxygenation and perfusion in critically ill adult patients (3). The dependence of PtcO2 on PaO2 using a PtcO2 index have been assessed in the previous study (3). As in this case, a PtcO2 index < 0.7 has been related with hemodynamic failure in adult patients (4). Unfortunately the relationship between PtcO2 and arterial blood gases is still unclear. Although there is no result with these findings, the transcutaneous monitorization may be useful in patients with sepsis in addition to arterial blood gas analysis.

Key words: Sepsis, transcutaneous oxygen monitorization

P-163

Cardiac Arrest: Complete Heart Block Presenting as Epilepsy

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Introduction: Differentiation between cardiac and neurological origin of epilepsy may be challenging.

Until cardiac arrest the patient treated with antiepileptic drug due to misdiagnosed epilepsy then the diagnosed was changed to AV block.

Case: A 76-year-old female patient with a known history of diabetes mellitus and hypertension was followed up in the neurology clinic with a diagnosis of epilepsy. Cardiac arrest was occurred. After resuscitated about 10 minutes the patient was referred to our ICU. The first evaluation of patient's; unconsciousness, pupils dilatation was occurred, pupils light reflex +/+, intubated, heart rate was 80 beats min-1, blood pressure: 90/60 mmHg and Glasgow Coma Score: 7. The laboratory panel was normal including complete blood count, cardiac biomarkers, sodium, potassium levels and thyroid function tests. Seizure-like episode in ICU ECG showed complete heart block. Single-chamber temporary cardiac pacemaker was inserted and the rhythm of 80 beats/min arranged by cardiology department. Patient was extubated one day after the unconsciousness and transferred to cardiology clinic to insert dual chamber pacemaker.

Complete heart [atrioventricular (AV)] block is a condition in which no conduction of electrical impulses occurs from atria to ventricles. AV Block may lead to development of severe bradycardia and acute heart failure. Epilepsy is diagnosed by combining the clinical features of the temporary loss of consciousness, family history and electroencephalography. False diagnosis rate among patients with epilepsy is reported between 5% and 31.5%. Cardiac reasons can be misdiagnosed as epilepsy.

Conclusion: Some patients with AV complete block can be misdiagnosed as epilepsy. More attention to history taking and to evaluation of the results of electro encephalography and ECG results may decrease the false diagnosis rate.

Key words: AV block, cardiac arrest, epilepsy

P-164

Fatal Acute Paraquat Poisoning: Case Report

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Introduction: Because paraquat(PQ) which is used to kill weeds resulted in a high rate of mortality. While the agent causes ulcers in the gastrointestinal tract and oral mucosa with its direct corrosive effect, determining the mortality is lung failure and hepatorenal damage by free radicals.

We aimed to draw attention to the importance of the follow-up of these patients by presenting this case we followed up in our clinic with severe hepatorenal failure and lung injury PQ poisoning case who died

A 28-year-old female patient, took a drug involving PQ active ingredient for suicide, who discharged after 24 hour follow-up by another clinic due to well health condition. Patient admitted to our hospital with respiratory distress and dysphagia 5 days after intoxication. At admission to the intensive care unit patient had GCS: 15, HR: 120/min, SpO₂: 88%, BP: 130/81 mmHg, RR18/min. In the physical examination the oropharynx was hyperemic, multiple ulcers in the mouth and on the lip mucosa, hoarseness were present. ABG parameters were pH: 7.41, PO₂: 67, PCO₂: 21.0, HCO₃: 13.1, BE: 9.2 and urea: 241mg/dL, creatinine 12.94 mg/dL, ALT: 41U/L, AST: 93U/L, total bilirubin 8.1 mg/dL, direct bilirubin 4.60 mg/dL, Na142 mEq /L,K: 4.6mEq/L.

The patient underwent emergency hemodialysis for 4 hour. After hemodialysis cyclophosphamide, methylprednisolone treatment was given. Patient was intubated at the seventh hour of the hospitalization, and had a mechanic ventilation support with 21-30% FiO₂ due to aggravated respiratory failure. Patient had immunosuppressive therapy for 3 days and underwent hemodialysis daily. Patients had bilateral diffuse increased opacity on chest radiographs, consistent with increasing fibrosis. The patient died at the eighth day of admission.

PQ increases the formation of free oxygen radicals and causes tissue damage with the inflammatory process induced by free radicals. Therefore, with symptomatic treatment, avoidance of oxygen support, hemoperfusion and application of cyclophosphamide treatment are among recommendations. Despite all this treatment plan,our patient died due to multiple organ failure; essentially due to late beginning of treatment. With this case, importance of early treatment in a rapidly progressive clinical PQ intoxication was demanded to be pointed.

Key words: Paraquate, intoxication, lung fibrosis, hepatorenal failure, oxygen radicals

P-165

Pulmonary Emboli: Like Walking on a Tightrope

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Introduction: Acute pulmonary embolism (PE) is a common and sometimes fatal disease with highly variable clinical presentation. Age and condition of the patient are important factors for survival after massive PE. 28 year old patient experienced bilateral upper extremity venous tromboemboli 1 year ago. He was on unfractionated heparin. He suffered from severe chest pain, cough and dyspnea for the last week. On admission to ICU, he was fully alert, tachypneic (RR: 30), tachycardic (HR: 120). Blood pressure was 110/70 mmHg and temperature was 36,5. Laboratory: pH: 7.52; pCO₂: 28; Po₂: 48; HCO₃: 25; laktat: 1.0; wbc: 10000, hgb/hct: 16/48, platelet: 24000, low fibrinogen and elevated d-dimer levels. Chest CT angiography screen showed massive pulmonary embolus on bifurcation of the pulmonary artery. Transthoracic echocardiography revealed right ventricular diameter enlargement and pulmonary artery pressure was 65 mmHg. The patient referred to cardiology. Trombolytic treatment wasnot recommended as trombocyte count was 24000. Catheter embolectomy was performed but was not successful as embolus could not be completely cleared by this intervention. Therefore, patient referred to chest surgery and massive trombus from the pulmonary artery was removed by surgery.

His condition was dramatically improved after the surgical intervention and he discharged and referred to haematology for further screening after a week. The initial approach to patients with suspected PE depends upon whether the patient is hemodynamically stable or unstable, from general supportive measures to mechanical respiratory support, trombolysis, catheterisation or operation as well as the medical therapy like volüme resuscitation and anticoagulants and vasoactive agents. A small percentage of patients with PE present with hemodynamic instability or shock (approximately 8%; "massive" PE).

Our patient was haemodynamically stable with moderate to severe respiratory symptoms. The size of the trombus removed was surprisingly large, occupying many branches of the pulmonary artery as well as the bifurcation. Although it was apparently a massive tromboemboli, he was not decompensated probably related to his young age and fit condition.

Key words: Pulmonary, emboli, ICU, pulmonary trombus



Figure 1. Pulmonary trombus

P-166

Diagnosed with Cardiac Arrest in Pregnant Patient: Bochdalec Hernia

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Introduction: Bochdalek hernias are congenital diaphragmatic defects result a failure of fusion of the posterolateral diaphragmatic foramina. Symptomatic Bochdalek hernias in adults are infrequent and may lead to gastrointestinal dysfunction or severe pulmonary disease. We describe our experience with this rare entity.

Case: A 39 years old, 24 weeks pregnant patient has applied to emergency service with epigastric pain and suspected gallstone. Cardiopulmonary arrest has occurred during USG; following 10 minutes CPR she has been transferred to ICU. The chest X-ray exhibited free air trapp in the left lung basal area and USG showed free fluid in the abdomen. The gastric and splenic perforation in mediasten has been diagnosed. She has been transferred to operation and primary gastric and diaphragmatic repair has been performed. The ex fetüs has been delivered. The patient is under mechanical ventilation already in ICU. Generalised oedema and ischemic areas were determined in CT. Ischemic ensephalopatia has been diagnosed. Symptomatic Bochdalec hernias are common in the neonatal and early pediatric age groups, they are relatively rare outside of this range. Adult Bochdalec hernias more commonly present with gastrointestinal symptoms than with pulmonary symptoms. Frontal and lateral chest radiography is a good screening tool but thin-section CT scanning has higher sensitivity for these lesions.

Conclusion: Approximately 100 to 150 reports of adult Bochdalec hernia can be found in the world literature. The majority of these cases are incidental, asymptomatic posterolateral diaphragmatic defects. The clinicians shouldn be aware of this rare entity in nonspecific gastric symptoms.

Key words: Bochdalec hernia, cardiac arrest, pregnancy



Figure 1.

P-167

VT/VF Storm: A Rare Manifest of Brugada Syndrome

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Introduction: Brugada syndrome, an inherited arrhythmogenic cardiac disease, manifests with sudden death. Herein we describe a case of a patient without structural heart disease who presented with incessant ventricular tachycardia (VT) and syncope and who had a type1 Brugada pattern on ECG.

Case: A 32 year-old male presented to the emergency room with syncope and VT after this Ventricular fibrillation (VF) occurred. After defibrillation patient recovered after 35 min of resuscitation and transported to ICU. The 12-lead ECG during sinus rhythm (Figure 1) showed abnormalities specific for the Brugada syndrome with a RBBB morphology, left-axis

deviation. There was no family history of seizure sudden death. Results of his laboratory investigations and chest X-ray were normal. Cerebral CT showed diffuse oedema result of CPR. Our patient followed by hypoxic ensefolopaty is still ongoing in ICU and planing implantation of ICD (implantable cardioverter-defibrillator). Brugada syndrome is an arrhythmogenic disease characterized by coved ST segment elevation and J point elevation of at least 2 mm in at least two of the right precordial ECG leads (V1-3) and ventricular arrhythmias, syncope, and sudden death. This entity may be inheritable, involving a defective ion channel. Syncope and sudden cardiac death are specifically ascribed to malignant polymorphic VT and VF. The syndrome usually manifest in the third and fourth decade. There are 3 types of ECG manifestations that are recognized. The type 1 pattern is like diagnostic of Brugada syndrome and is characterized by coved ST-segment elevation greater than 2 mm and followed by a negative T wave (Figure 2). Currently, the only proven effective therapy for Brugada syndrome is the (ICD) for sudden death prevention.

Conclusion: In our case, we illustrate a patient presenting with a VT/VF storm in the setting of Brugada syndrome, a rare manifestation of this syndrome.

Key words: Brugada syndrome, cardiac arrest, ventricular fibrillation, ventricular tachycardia

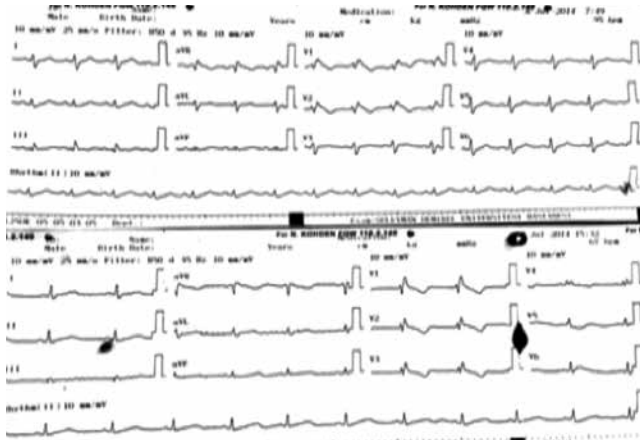


Figure 1.

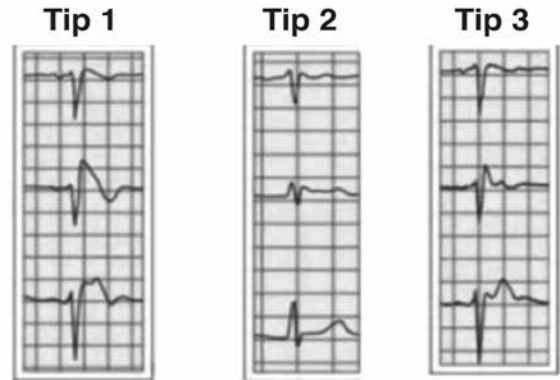


Figure 2.

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Intensive Care Unit Follow Up of HELLP Syndrome and Acute Renal Failure

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Introduction: HELLP syndrome is a serious complication of pregnancy which is characterized by microangiopathic hemolytic anemia, hepatic dysfunction and thrombocytopenia and leads maternal and fetal mortality by affecting multiplesystems in the body.

A 34 week pregnant woman who had been operated in another hospital for C&S because of fetal distress was transferred to our Intensive Care Unit (ICU) for perioperative hypertension and failure of postoperative extubation. In first examination Glasgow Coma Scale (GCS) was 12, pupillary light reflex +/+, TA: 122/96 mmHg, pulse: 140/min. Right radial arter catheterisation and right femoral vein catheterisation were performed. Hb: 8.8 gr/dl, Hct: 24.5, Plt: 37000, Na: 127 mEq/L, K: 6.8 mEq/L, AST: 3957, ALT: 1649, LDH: 5493, T. Bil: 5.3, D. Bil: 2.6, BUN: 29, Creatinine: 1.92, Urea: 61, Uric acid: 8.7, INR:1.7, CRP: 88.4, PCT: 8.4. Other laboratory findings were normal. Anuria and generalised edema were present in the patient. APACHE II: 26, CVP: 16 mmHg. After catheterisation from right subclavian vein for hemodialysis, 2 seances of hemodialysis were performed. She was extubated on 4th day of admission. Proper antibiotherapy was applied due to culture results. On 10th day of admission she was transferred to nephrology service with GCS: 15, pulse: 86/min, TA: 125/82 mmHg, SPO2: 96% findings. During service follow up there was no need for extra hemodialysis. After 3 days of service follow up she was discharged from hospital.

In HELLP syndrome complications occur with 13-65% rate. Most common complications are need for blood transfusions, common microvascular coagulations, acute renal failure and ARDS (1). In pregnancies with HELLP syndrome, pregnancy should be terminated and careful follow up in a multidisciplinary ICU should be preferred.

Key words: HELLP syndrome, acute renal failure, intensive care unit

P-169

Acute Bismuth Toxicity with Complete Recovery Despite Delayed Supportive Therapy

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Introduction: Medications that contain bismuth salts are effective treatment options for diarrhoea and peptic ulcer disease. Exceeding intake of these salts over therapeutic doses, cause encephalopathy, nephrotoxicity and mucosal injury (stomatitis, gingivitis, colitis etc.) which are caused directly by bismuth itself. There isn't any effective therapy of chronic toxicity, but in acute exposure, gastric lavage, chelation therapies and dialysis can be used to protect and restore renal function.

Case: Twenty-two-year-old female patient was admitted to a hospital after intake of 55 pills containing bismuth subcitrate (Denol® 300 mg/Genesis) aiming to suicide. After 62 hours of exposure, chelation therapy was initiated but after occurrence of anuric renal failure with metabolic acidosis despite this treatment patient was admitted to our intensive care unit. At time of admission vital signs were stable, however laboratory tests revealed acute renal failure with metabolic acidosis (serum creatinine 4 mg/dl, pH: 7.27, HCO₃: 9.8 mmol/l, base excess: -15). Patient was anuric and postrenal causes were excluded. Hemodialysis was initiated after 66 hours from exposure. After 7 cycles of hemodialysis renal functions of the patient were recovered and she was followed up without dialysis. One month after her admission she was totally recovered with normal urinary and serum findings

Conclusion: Bismuth containing medications are easy to obtain due to increasing prevalence of peptic ulcer disease and Helicobacter pylori infection. More than 6 weeks of chronic intake, precipitation occurs and toxicity may be seen. Chronic ingestion leads to precipitation of bismuth in central nervous system and causes encephalopathy. Ingestion of large amounts of bismuth are observed in suicidal attempts and the doses exceeding the therapeutic range, nephrotoxicity develops. Here we presented a lucky case with bismuth toxicity that caused acute anuric renal failure with metabolic acidosis and complete recovery after appropriate supportive therapy.

Key words: Bismuth, intoxication, renal failure, hemodialysis

P-170

A Patient with Bronchiolitis Obliterans Following Bone Marrow Transplantation: Case Report

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Introduction: Bronchiolitis obliterans (BO) is a localized inflammatory process of the bronchioles causing fibrotic obliteration of the lumen. BO is a characteristic pulmonary complication which occurs usually within a few years after bone marrow transplantation (BMT). We report a patient with symptomatic BO and history of previous pneumothoraces caused by multiple bullae after BMT.

Case: A 18-year-old male was admitted to our intensive care unit because of respiratory distress after port catheter placement under sedoanalgesia. At the age of 14, he had been diagnosed with talasemia major, for which he had received a BMT. He developed GVHD. No chronic GVHD symptoms were observed over the years after BMT. After admission to our clinic, computed tomographic scan of the lung revealed in addition consolidation in the bilateral lower lobe and multiple bullous in the right lung field (Figure 1). Arterial blood gas analysis revealed severe hypercapnea with hypoxemia. He was intubated and treated with mechanical ventilation (MV) with a fraction of inspired oxygen (FiO₂) of 1.0, Vt of 0.2 l, peak pressure of >30 cmH₂O and positive end-expiratory pressure (PEEP) of 20 cm H₂O for the first 24 hours to maintain an SpO₂ >80%. He was also treated with inotropes for severe hypotension. He died from septic shock caused by pneumonia and respiratory acidosis within 24 hours.

Conclusion: Patients at increased risk of BO following allogeneic BMT include the elderly, patients with immunosuppressed, patients and patients with chronic GVHD, in whom BO developed. Spontaneous pneumothorax can occur in the setting of severe BO. We suggest that successful management of spontaneous pneumothorax in the transplantation patient needs a careful search for BO that includes chest radiographs, CT scanning of the chest. Early therapy should be initiated because the onset of pneumothorax may be relative to the onset of BO.

Key words: Bronchiolitis obliterans, bone marrow transplantation, pneumothorax

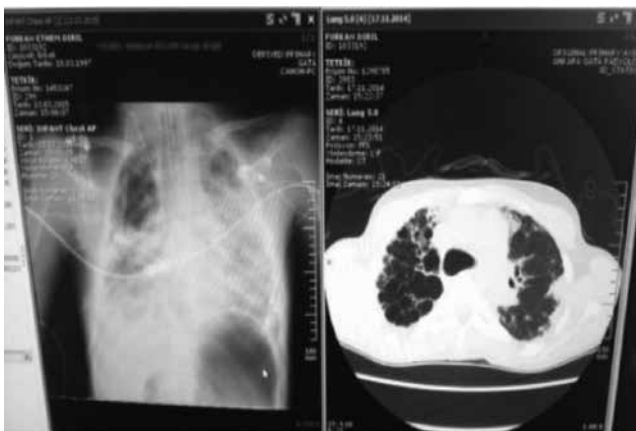


Figure 1. Images of chest x-ray and CT

P-171

Respiratory Insufficiency in Antifospholipid Syndrome

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Introduction: Antiphospholipid syndrome (APS) is characterised by antibodies directed against membrane anionic phospholipids, or associated plasma proteins. The main clinical manifestation is recurrent venous or arterial thrombosis. We present the pathogenesis and the management of respiratory insufficiency in an APS patient.

Thirty-year old female (72 kg) presented to the emergency ward with coma, tachypnea, and cyanosis, and was immediately intubated. She had a history of mitral valve prolapsus, and APS. A month ago, she received antibiotics for 20 days due to pneumonia. During the course of antibiotherapy, she had elevated blood urea and creatinine levels, and was advised to increase her water intake.

When she arrived to the ICU, she was sedated, intubated, her pupils were isocoric, direct and indirect light reflexes were bilaterally intact. Auscultation of the lungs revealed bilateral rales, and the endotracheal aspirate was pink and foamy. Blood pressure was 170/80 mmHg, heart rate was 110/min, and body temperature was 370 C. Echocardiography revealed high grade mitral valve insufficiency, left atrial dilatation, pericardial effusion, and an ejection fraction of 45%. Chest radiography was positive for lung oedema. Following two bolus doses of furosemide, she had a urine output of 2 l at the third hour. The patient was extubated the next morning.

APS is a multisystemic disease. While acute respiratory distress syndrome and alveolar hemorrhage are rare, pulmonary thromboembolic disease and pulmonary hypertension may occur in 60% of cases. Therefore, the differential diagnosis of pulmonary hypertension in APS cases should include cardiac valvular disease and left ventricular dysfunction. Pulmonary oedema due to over-hydration is an easily overlooked cause of respiratory insufficiency in APS patients. We conclude that a detailed history is the most important step in the management of patients with rare disorders such as APS.

Key words: Antiphospholipid syndrome, respiratory insufficiency, pulmonary edema

P-172

Levetiracetam Induced Pancytopenia in ICU

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Introduction: Levetiracetam, structurally the similar to piracetam is a new antiepileptic drug reported to have a high degree of tolerability in both adults and children with epilepsy. Treating partial onset, myoclonic, or generalized tonic-clonic seizures in patients with epilepsy. It is used in combination with other medicines. Common adverse events of levetiracetam include psychiatric reactions, suicidal behavior, sleepiness, fatigue, skin reactions, coordination difficulties, blood abnormalities. Hematologic adverse effects are extraordinary. We present a case of pancytopenia most likely induced by levetiracetam in a 23-years-old boy with hypoxic encephalopathy

Case: A 23-years-old boy was admitted to our ICU with hypoxic encephalopathy. He was receiving midazolam therapy for her epileptic seizures. No recent medication, apart from midazolam, had been introduced. Brain computed tomography scan revealed brain edema and hypoxic encephalopathy. The patient was mechanically ventilated. Routine blood biochemistry was normal range. Intravenous levetiracetam 2 g/day was added to sodium valproate therapy. On the day of admission, complete cell count (CBC) showed haemoglobin: HGB 13.4 g/dl (normal range 12-18.1 g/dl); platelet: PLT466x103/ml (normal range 142-424 103/ml); white blood cells (WBC) 14.8x103/ml (normal range 4.3-10.3 103/ml). Three days later, CBC showed pancytopenia with HGB 7.9 g/dl, PLT 98x103/ml, and WBC 3.9x10³/ml levels. The patient received 2 units of packed red blood cells. Pancytopenia induced by levetiracetam was suspected and the drug was withdrawn. Three days later, improvement in the CBC was observed, with hemoglobin level at 11.1 g/dl, platelet count of 213x103/ml, and WBCs 8.7x103/ml. CBC levels remained within normal ranges over the following days.

Conclusion: Clinicians prescribing levetiracetam for progressive myoclonus epilepsies should be aware of the possibility of levetiracetam-induced serious pancytopenia and blood counts should be periodically checked during treatment.

Key words: Levetiracetam, pancytopenia, icu

P-173

Alpha Lipoic Acid Intoxication: Treatment and Outcome

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Introduction: The aim of our report is to increase awareness that the antioxidant alpha-lipoic acid, which is marketed primarily as energy supplement and weight loss, has potentially lethal effects.

The case which reported here was presented with severe complications such as; respiratory failure, anuria, elevation of liver enzymes, thrombocytopenia, coagulopathy and coma. According to our knowledge this is the first case reported in the literature, who was survive from acute alpha-lipoic acid intoxication with such complications.

Case: A 24-year-old girl was ingested, for non-suicidal intention, a large amount of alpha-lipoic acid, which led to multiorgan failure within 24 h. According to patient's relatives, she has ingested a minimum of 7 alpha-lipoic acid tablets of 600 mg each. Multiorgan failure consisted of respiratory failure (ARDS-like), anuria, elevation of liver enzymes, thrombocytopenia, coagulopathy and coma. When we first accepted the patient, diffuse lacunar infarct was detected in her brain, on the computerized tomography. Therapy consisted of mechanical ventilation (lung protective), veno-venous hemodiafiltration and supportive treatment. Veno-venous hemodiafiltration was continued until the drop of creatinine levels and enough hourly urination, which was two weeks. Liver enzymes, platelets, and coagulation parameters got normal levels on the follow-up.

The patient has been following in our intensive care unit for 6 weeks. Mechanical ventilation (CPAP) and supportive treatments are still on going.

Conclusion: In conclusion, we believe that when you come across rare intoxication, such as alpha-lipoic acid, you should act immediately, especially think of veno-venous hemodiafiltration. The early you start your treatment the early you get success.

Key words: Intoxication, alpha- lipoic acid, multiorgan failure

P-174

Traumatic Esophagus Perforation

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Introduction: The rate of injury of the esophagus (E) within thoracoabdominal trauma is 2%. The most frequent injury is in the cervical region of the E.

Case: A nine-year-old female child was transferred to the emergency department due to injury as a result of falling from a height of 1 m off garden barriers. General condition was moderate, that the patient was conscious and was cooperating, HR: 136 beat/min, BP: 110/59 mmHg, Htc 42%, bilateral respiratory sound was equal, that in the 10 cm left side of the abdomen line, in the left lumbal region, the omentum was prominent and there was an abdominal wall cut of 2x1 cm. In the chest graphy, the bilateral lungs were expanded and the subdiaphragmatic free air was not present. Perioperatively damage in the transverse colon was observed in the surgical area and it was repaired by primary suture. Since there was hemodynamic stability in the postoperative period, the patient was sent to the ward. HR: 160 beat/min in the postoperative 6th hour, the patient was consulted by reanimation. Oxygen inhalation, pediatric consultation and bronchodilatation nebuler treatment were recommended. In the postoperative 10th hour, the patient was transferred to ICU after a successful 10 min CPR, due to cardiopulmonary arrest. Pneumothorax in the left lung and pleural effusion were observed. A thorax tube was inserted. Nearly 1000 ml of in-stomach liquid was drained. For E perforation, a conservative approach was planned. On the postoperative second day, sudden hypotension was observed and hence noradrenaline, dopamine and dobutamine infusions were made to the patient. When BT became 39 C, septic shock was considered. Endotoxin filter was initiated. Upon the observation of renal dysfunction, CVVHDF was initiated. The patient died in the postoperative 14th day.

Conclusion: In E injury, early diagnosis and thoracotomy are required. The E perforation mortality rate is between 16-25%. It should be remembered that every patient being exposed to penetration trauma shall be considered as a candidate for E problems and that the treatment plan shall be made carefully.

Key words: Esophagus perforation, trauma, sepsis

P-175

**Theophylline Intoxication In Intensive Care Unit:
A Case Report**

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Introduction: Theophylline is a bronchodilator agent that is widely used in asthma, chronic obstructive pulmonary disease (COPD), neonatal apnea and bradycardia. A serum level of theophylline above 15 µg/mL increases intoxication risk. Acute intoxication might present with a wide range of symptoms including nausea, vomiting, agitation, hyperglycemia, acid-base disorders, convulsions, ventricular arrhythmias and death. In this report we present a patient who had theophylline intoxication and been followed in intensive care unit (ICU).

Case: 43 years old male patient with a 5 years COPD history attempted suicide by ingesting 49 theophylline pills (14.7 gr). Patient admitted emergency room after 5 hours by nausea, vomiting and vertigo complaints. He has been hospitalized in ICU for follow-up. IN one hours time patients' general status deteriorated and he developed tachypnea, tachycardia and hypotension. After a syncope for 30 seconds patient has lost his consciousness. Hemodialysis has been initiated under noradrenalin infusion for hypotension. After 3 consecutive sessions of hemodialysis initial drug level of 58 µg/mL dropped into normal ranges at third day. Patient has been discharged from ICU to psychiatry ward.

Conclusion: Theophylline intoxication might present in acute or chronic form. If drug level is above 15 µg/mL treatment must be initiated immediately. Our patient had 3 time higher drug levels according to this threshold but yet he responded immediate hemodialysis and been discharged from ICU in 72 hours. We believe that hemodialysis is an efficient treatment method for theophylline toxicated patients who present with life threatening symptoms.

Key words: Theophylline, intoxication, intensive care

P-176

Larengeal Edema: A Complication After Thyroidectomy in Children

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Introduction: The thyroid is a butterfly-shaped gland which is located in front of trachea. Postoperative respiratory obstruction is very serious complication. Laryngeal edema one of the reason of postoperative respiratory obstruction following thyroidectomy. We report two children who are brother at 9 year old and sister at 3.5 year old with both known MEN2b due to p.c618s ret protooncogen mutation. They had undergone prophylactic thyroid surgery to prevent meduller thyroid cancer. Both of them had an early postoperative respiratory uncifficiency due to upper airway obstruction. They were intubated with uncuffed (6.5 and 5.0) tubes. Electrothermal Bipolar vessel sealing system and harmonic scalpel were used during dissection of thyroids from trachea. Both of them had an early postoperative respiratory difficulties. In first case, boy was coughing and had minimal stridor and intercostal retractions after extubation. An nebulized budesonide and nebulized racemic adrenaline were administrated. He was observed in postoperative care unit for 3 hours and then transfered to ward. In second case, 3 year old girl had serious stridor, abdominal and intercostal retraction after extubation. An additional dose of dexamethasone, nebulized budesonide, nebulized racemic adrenaline and iv magnesium were administrated. She desaturated to 60% due to respiratory uncifficiency. Thus, we decided to reintubate her. Firstly, we observed vocal cords with direct laryngoscopy. The vocal cords were mobile and subglottic edema were observed. So she reintubated with uncuffed tube (no:4) and transfered to ICU. She had been need mechanical ventilatory support for 14 days. The multiple extubation trials performed but she did not tolerate spontaneous breathing due to upper airway edema. Steroids were performed for two weeks. She extubated to observe her clinic status before decision of tracheostomy. We realised that she had minimal substernal retraction and breathing distress. The risk of respiratory complication are increased after thyroid surgery in children. The symptoms were more severe in younger child because of the soft tracheal wall and weak tracheal cartilages.

Key words: Thyroid surgery, children, laryngeal edema

P-177

Transfusion Related Acute Lung Injury After Plasmapheresis: A Case Report

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Introduction: Transfusion-related acute lung injury (TRALI) is a rare but potentially fatal complication of blood product transfusion. TRALI has been defined as new acute lung injury (ALI)/acute respiratory distress syndrome (ARDS) occurring during or within six hours after blood product administration. TRALI is an uncommon syndrome that is due to the presence of leukocyte antibodies in transfused plasma. TRALI is believed to occur in approximately one in every 5000 transfusions. We present a patient developing TRALI after plasmapheresis.

Case: A 36-year old, man patient with 45% third degree of chemical burn was taken to the department anesthesiology of Gülhane Military School of Medicine, for recovery. He was entubated and on mechanical ventilator with IPPV mode, FiO₂: 60%. After 14 days, his hemoglobin, hematocrit, white blood cells and trombosit had started to rapid decrease. The diagnosis was trombotic trombositic purpura and the decision was plasmapheresis with 15 fresh frozen plasma. 16. day, plasmapheresis was started. The second day of plasmapheresis, he developed noncardiogenic pulmonary edema. His oxygen saturation decreased to 74% and a chest X-ray revealed bilateral pulmonary infiltrates. He continued to receive oxygen and FiO₂ was increased 100%. His oxygen saturation improved to 96% after the decision of shutting off the plasmapheresis.

Conclusion: TRALI should be considered when patients develop acute lung injury within 6 hours of transfusion. It appears to be a multifactorial process that culminates in neutrophil activation and acute lung injury. The incidence of TRALI has been reduced successfully through the adoption of predominantly male donor plasma, screening women for HLA antibodies, and the selective deferral of donors with antibodies. However, awareness that any blood product, including RBCs, may cause TRALI will continue to advance our understanding and optimal management of this life-threatening acute complication of transfusion.

Key words: Transfusion related acute lung injury, plasmapheresis, bilateral pulmonary infiltrate

P-178

The Management of the Neck Edema After Arthroscopic Shoulder Surgery: A Case Report

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Introduction: Shoulder arthroscopy is widely performed surgery in the orthopedic practice. However it is generally safe surgery, complications including nerve injuries, infections, respiratory distress have been reported in the literature. In this case report we present the management of the patient with neck edema after shoulder arthroscopy.

Case: Sixty five years old male patient with rotator cuff rupture was scheduled for arthroscopic shoulder surgery. The patient was placed beach- chair position and procedure was performed with delivering 0.9% saline 70ml/min under 50 cm H₂O pressure to the shoulder joint space under general anesthesia. At the end of the surgery, there was a diffuse swelling in the patient's neck and chest. Because of low cuff leak volume, the patient was not extubated and transferred to the intensive care unit due to possibility of respiratory distress. A chest X-ray showed that the soft-tissue enlargement. The patient was kept sedated. Furosemide 30 mg via intravenous was administered and the patient's head was elevated. After 24 hours the patient's neck edema resolved. Cuff leak test was done. Following the patient was able to breathe around the endotracheal tube, the extubation was performed. The patient was discharged from intensive care unit.

Conclusion: The fluid extravasation into the deltoid muscle and the chest frequently occur during arthroscopic shoulder surgery but the airway obstruction is a rare and can be fatal. High pump pressure, prolonged procedure, lateral position, reduced subcutaneous soft tissues are the known risk factors for the extra-articular fluid leakage. The extubation of the patient had edema in the neck is the another concern. These patient should be follow up carefully against the possibility of the airway obstruction and reintubation. Cuff leak test is a predictor of the post extubation stridor and performing this test prevent the patients from the reintubation.

Key words: Shoulder, arthroscopy, edema



Figure 2. After surgery



Figure 1. After surgery

P-179

Acinetobacter Bronchitis Seen in an Intensive Care Physician

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Introduction: *Acinetobacter baumannii*, like other types of acinetobacter, is a gram-negative, non-fermentative bacteria which can colonize at immunosuppressive patients especially in intensive care units. *Acinetobacter* species can cause severe pneumonia and bronchitis resulting significant morbidity and mortality. *A. Lwoffii* and *A. Calcoaceticus* are other types of *Acinetobacter* which were reported frequently in the literature.

Case: We reported a 39 year old woman, who was a physician, working on a critical care unit, to pay attention nasocomial infections in health-care workers. She had no additional diseases. She was smoker. The patient had headache, nasal-postnasal drip and listlessness. She took Amoxicillin+Clavulanate for 5 days. However, she emerged dispnea, wheezing, cough and sputum at the end of the fifth day. WBC, sedimentation, CRP, chest-radiography and pulmonary function tests were normal. Clarithromycin (p.o., 2*500 mg), Salbutamol and Beclomethasone-Formoterol (inhalation) were started. 80 mg Prednisolone+200 mg Teofilin (IV) were administered. 40 mg Prednisolone was continued for three days. At the tenth day of Clarithromycin administration, symptoms of the patient worsened. WBC count was 14000/ mm³ (neutrophil-predominance). CRP increased but chest radiography were still normal. Night sweats started and sputum character became dark yellow and sticky. Eventually *A. Lwoffii* was identified in the culture of sputum. The antibiotic was then switched to Moxifloxacin 400 mg. Symptoms regressed and there was no identified bacteria on sputum culture taken a week later.

Conclusion: Skin and mucous membranes may have *Acinetobacter* as contaminant-saprophytes and opportunistic pathogens in healthy people. 25% of healthy adults have this bacteria on their skin and 7% healthy adults and children on their nasopharyngeal tract. Use of broad-spectrum antibiotics create occasion to emerge for these bacteria's. It is true that indiscriminate use of broad-spectrum antibiotics is occasion for opportunistic pathogens. Nasocomial infections, especially *Acinetobacter*, should be considered in pneumonia and bronchitis seen in health-care workers.

Key words: *Acinetobacter*, pneumonia, bronchitis, nasocomial infections

P-180

A Rare Cause of Noninvasive Mechanical Ventilation Failure: Post Intubation Tracheal Stenosis

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Introduction: Post-intubation tracheal stenosis (PETS) occurs after extreme pressure of the endotracheal tube cuff (more than 30 mmHg) that leads to ischemic necrosis of the tracheal mucosa and cartilage preceding excessive granulation tissue. Herein we report a case with PETS who presented as hypercapnic respiratory failure unresponsive to noninvasive ventilation.

Case: A 49-year-old female was admitted to intensive care unit (ICU) with the history of cardiac arrest due to ventricular fibrillation. Following extubation after 16th day, she was then transferred to the coronary ward. At third week of her stay, she started to have dyspnea and difficulty in breathing. On her arterial blood gas evaluation she had respiratory acidosis with moderate hypercapnia. She then transferred to coronary unit for noninvasive ventilation (NIV). Under NIV, hypercapnia did not improve and she had a pulmonary consultation. Pulmonary consultation revealed she had a new onset stridor and an emergency fiberoptic bronchoscopy (FOB) was performed. FOB showed severe tracheal stenosis just below the vocal cords (Figure 1).

Conclusion: It is important to consider PETS in postextubation-NIV failure. The incidence of PETS after tracheal intubation and tracheostomy is up to 21%. Lesions of the tracheal wall which may cause stenosis and obstruction of the airway is a serious clinical condition that may result severe respiratory insufficiency and even death. The most common location of the stenosis is the contact region of endotracheal tube cuff with tracheal mucosa. Because of very high cuff pressures ischemic damage begins within the first few hours after intubation and web-like fibrosis develop within 3-6 weeks the damaged area. Bronchoscopy have the best diagnostic yield for PETS. Therapeutic modalities include conservative treatment, laser phototherapy, argon plasma coagulation, mechanical dilatation, stent placement, tracheal resection.

For patients with clinical signs of tracheal stenosis after extubation, bronchoscopy should be done as early as possible.

Key words: Post-intubation tracheal stenosis, non invasive mechanical ventilation failure

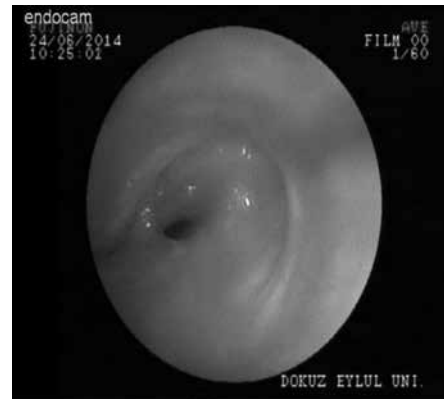


Figure 1. Tracheal stenosis due to granulation tissue

P-181

Methanol Intoxication: Case Report

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Introduction: The metabolites of methanol are toxic rather than itself. Methanol is metabolised to formaldehyde by alcohol dehydrogenase and at the end of all reactions formic acid is formed. These metabolites are responsible from metabolic acidosis, blindness, cardiovascular instability and death formed by methanol intoxication.

Case: A 49 years of age male patient with chronic alcohol usage history who was operated for serebral hemorrhage time before admitted to the emergency service with syncope. At this service, follow up was recommended with peripheral vertigo diagnosis. 30 hours after his first admission to the emergency service loss of consciousness was observed. From his family it was learned that he had drunk cologne. He was taken to intensive care unit after endotracheal intubation. In his first physical examination his GCS was 6/15. Pupillary light reflex was intact bilaterally and his pupils were isocoric. Arterial blood gas examination: $\text{pH}=6.99$, $\text{pCO}_2=22$, $\text{HCO}_3=7.7$ pulse was 77/min and TA was 60/40 mmHg. Dopamine (10mcg/kg/min) and steradine (10mcg/kg/min) infusions were started. Also ethyl alcohol was given at 10ml/kg bolus and 1.5/kg maintenance doses for 3 days. NaHCO_3 infusion with 1mEq/kg dose and hemodiafiltration were also applied. At Cranial MR symmetrical necrotic and hematoma regions on putamen and capsula externa were observed bilaterally (Figure 1). On 14th day of hospitalisation percutaneous tracheostomy was managed. On 92th day of hospitalisation mechanical ventilation was terminated and GCS was 12/15. He was transferred to palliative care unit.

Conclusion: A silent period with no symptoms lasting from 40 minutes to 72 hours is seen in methanol intoxication. This situation is due to slow metabolisation of methanol to formaldehyde. After this period typically visual defects, headache, dizziness and confusion were observed (1). Methanol intoxication should be thought in patients with sudden consciousness changes and chronic alcohol usage history.

Key words: Methanol intoxication, hemodiafiltration, intensive care

Reference

1. Neurological Sciences 2007; 24: 338-42.

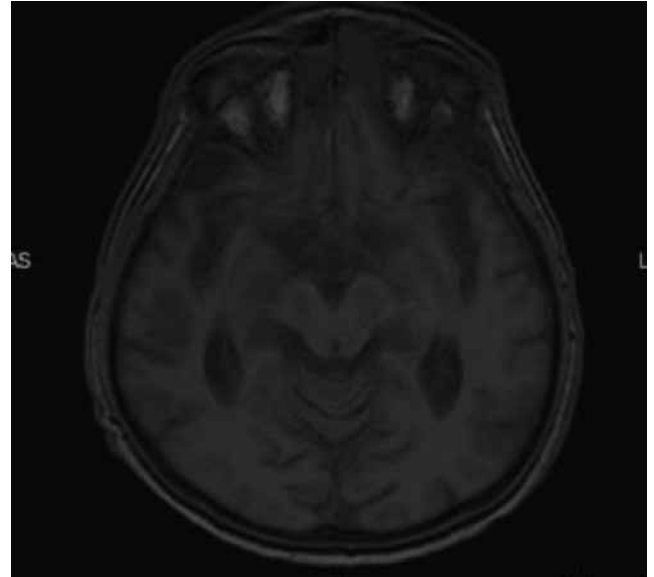


Figure 1. Cranial MR

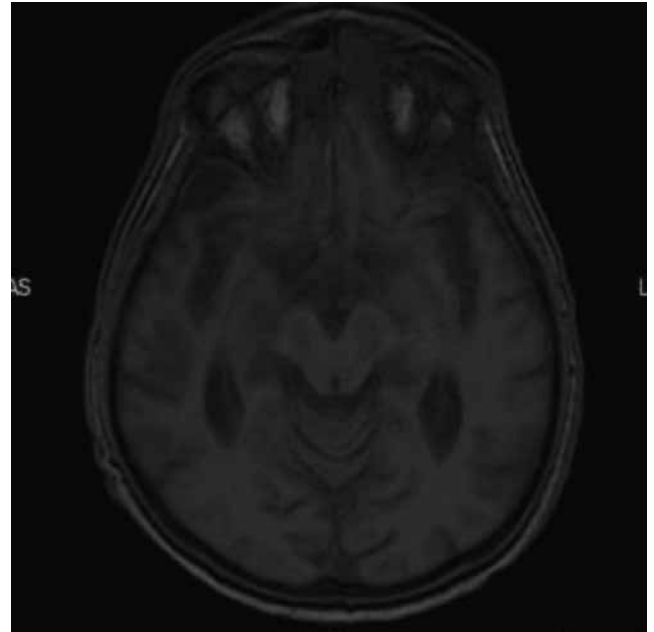


Figure 1. Cranial MR

P-182

Severe Ovarian Hyperstimulation Syndrome Leading to ICU Admission

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Introduction: Ovarian Hyperstimulation Syndrome (OHSS) is an iatrogenic complication of ovulation induction. The most frequent complication is ovarian hyperstimulation syndrome (OHSS). Pleural effusion and abdominal ascites accumulation frequently accompany this syndrome.

Case: A 22-year-old woman with primary infertility was referred to our ICU, because of severe breathlessness, decreased urine output, nausea, vomiting, lower abdominal pain and abdominal distention. On admission, her blood pressure was 140/90 mmHg, heart rate 125/min and respiratory rate of 28/min. Chest examination revealed bilateral dull notes on percussion along with diminished air entry on auscultation suggestive of bilateral pleural effusion.

A baseline work-up at ICU admission showed an elevated total leukocyte count (TLC) of 15400 with 75% neutrophils, hematocrit 27.6%, serum creatinine 1.46 mg/dl and serum albumin 1.08 gm/dl. Arterial blood gas (ABG) on room air showed PaO₂ 78 mmHg, pH 7.46, PaCO₂ 26.7 mmHg, HCO₃ 21 mmol/L, and O₂ saturation of 96%. Hepatic and coagulation profile were normal. Chest radiograph showed bilateral pleural effusion (right>left) without any cardiomegaly. Echocardiography revealed normal contractility with no evidence of pericardial effusion. Ultrasound abdomen revealed grossly enlarged bilateral ovary showing presence of multiple enlarged follicles of size > 13 cm along with ascites and 18x9 mm hematoma was present. Thus she was diagnosed as a case of severe OHSS. During her ICU stay monitoring included parameters like central venous pressure, invasive blood pressure, input and output along with laboratory parameters.

4th day of hospitalization intubated mechanically connected to the ventilator in APRV mode. Tracheostomy was opened after about 10 days. The patient underwent seven times hemodialysis and five times CVVHDF due to acute renal failure. At 37th of day patient was transferred nephrology intensive care unit.

Conclusion: Given the clinical and laboratory findings of OHSS is a non-infectious SIRS table. There is no specific treatment of OHSS.

Key words: Severe ovarian hyperstimulation syndrome, non-infectious SIRS, ICU

P-183

Cholinergic Symptoms Derived from Rivastigmine Use

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Introduction: Rivastigmine is a cholinesterase inhibitor using in treatment of Alzheimer's disease. In this case report we represent a toxicity development following rivastigmine use.

Case: An 86 years old female patient with Parkinson's disease (PD) admitted to the emergency service with fatigue complaint. The patient was diagnosed as urosepsis and started on antibiotherapy. The patient was already receiving levodopa/carbidopa/entacapone treatments due to PD and started on transdermal rivastigmine patch treatment due to Alzheimer diagnosis. Patient receiving BIPAP treatment for respiratory failure was intubated due to CO₂ retention. 20 mcg/kg/min dopamine and 0.4 mcg/kg/min noradrenaline were started to patient due to hypotension. Patient was transferred to anesthesia intensive care unit (ICU) since the general condition of the patient was not improving but worsening. The initial status of the patient was intubated and the patient was receiving 4.5 g intravenous piperacillin/tazobactam (3 times a day), 60 mg subcutaneous enoxaparin sodium (once a day), oral carbidopa/levodopa/entacapone treatment (100/25/200 mg respectively, 3 times a day), 9 mg rivastigmine transdermal patch (once a day) and 40 mg methylprednisolone (once a day). Miotic pupils, bilateral wheezing, rhonchus, increase in bronchial secretions, increased intestinal motility (10-12/min), hyperhidrosis, diarrhea and diuresis were observed in physical examination.

Rivastigmine patch treatment was stopped at the second day of transfer to anesthesia ICU. Afterwards; requirement for inotrope treatment was decreased and dopamine treatment was stopped gradually within a week. Hyperhidrosis, diuresis and diarrhea symptoms were also resolved. We supposed that the cholinergic symptoms like hypotension, miosis, hyperhidrosis, diuresis and diarrhea might be related with rivastigmine toxicity. 1, 2, 3 blood cholinesterase level wasn't studied at the time.

Conclusion: There is an increasing trend in using medications affecting the autonomic nervous system recently. These drugs should be used carefully and the adverse effects should be evaluated meticulously in especially elderly patients with concomitant diseases on multiple medical treatments.

Key words: Rivastigmine toxicity, cholinergic, autonomic nervous system

P-184

The Benefit of Thromboelastogram Technics in a Patient with Acquired Haemophilia A

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Introduction: Acquired hemophilia A (AHA) is a rare autoimmune disorder that presents with life-threatening bleeding and immune-mediated antibodies develop against factor VIII. Thromboelastogram (TEG) is a point of care method used to monitor homeostasis and manage transfusion.

We present an AHA patient which is treated with TEG measurements. Prolonged active partial prothrombin time (aPTT), low F-VIII and high F-VIII inhibitor levels were evaluated as acquired hemophilia A by the hematologist.

Case: 78 year old man presented with bleeding from the operation site and hematuria since 3 days after hemicolectomy for colon cancer was admitted to our hospital. At the assessment in our intensive care unit, he has tachypnea, tachycardia with high ventricular response atrial fibrillation, low blood pressure and APACHE II score was 20. The laboratory findings were: hemoglobin: 6.7 gr/dl, platelet count: 167 000 mm³, prothrombin time: 14 seconds, aPTT: 75sec (n=30-40sec). Left hemothorax and hematoma in the abdomen was seen in the computed tomography. A thorax tube was placed and he was operated for infected hematoma. TEG analysis was performed during the patient's stay in intensive care as a guide for replacement strategy. The results showed that clotting time (CT) was prolonged, α angle was decreased, extension at clot formation time (CFT). Even though these values normalized after F-VII treatment, the patient's condition worsened due to multi-organ failure and acute respiratory distress syndrome, which resulted in the patient's death.

Conclusion: AHA should be considered for patients who have bleeding after surgery because of its idiopathic nature and risk of mortality. TEG is a useful method that can guide the treatment for patients with bleeding in the ICU.

Key words: Acquired haemophilia A, thromboelastogram, bleeding disorders

P-185

Plasmapheresis in the Acute Attack Treatment of Neuromyelitis Optica and Neuromyelitis Optica Disorder Spectrum

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Introduction: Optic neuritis (ON) is an inflammation of the optic nerve. ON may be the first sign of the idiopathic inflammatory demyelinating diseases (IIDD) such as multiple sclerosis (MS) or neuromyelitis optica (NMO) and NMO spectrum disorders (NMOSD). With this case series, we want to discuss approaches to plasmapheresis treatment of two ON cases having atypical clinical features with loss of vision.

Case 1: A 42 year-old male patient applies to hospital with a complaint of sudden blurred vision in the right eye, the visual acuity in the right eye is recorded as hand movements. Optic nerve contrast in the right eye is recorded on the orbital MRI. Despite IV methylprednisolone and oral steroids, no change is recorded in his clinical findings. After ten months, pain in the left eye and blurred vision following the pain developed. The visual acuity in the left eye is clear but central scotoma existed. He is prescribed 1 gr IV methylprednisolone and the visual acuity in the left eye decreased for 0.8. Then, he is prescribed to have plasmapheresis taking five times. By the plasmapheresis the visual acuity of the patient remained stable.

Case 2: A 44 year-old female patient with NMO diagnosis applies to neurology with loss of vision first in the right eye and in the left eye after two days. A hyperintense lesion covering the optic chiasm preventing the visual contrast in both eyes is recorded in the orbital MRI. Despite having IV methylprednisolone for 10 days clinical findings are same. The patient is prescribed plasmapheresis treatment 7 times. The plasmapheresis prevents the visual complaints.

Conclusion: The atypical features should be taken into consideration and possible NMO should be considered in making a distinctive diagnosis. In patients with ongoing complaints despite administered the treatment, plasmapheresis should be considered as an effective treatment approach.

Key words: Neuromyelitis optica, plasmapheresis, optic neuritis

P-186

Drug Abuse and Myocardial Infarction

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Introduction: Heroin-induced myocardial infarction has been seldom reported. Cocaine-related myocardial infarction is well-known phenomenon. We presented a case of drug abuse such as heroin, cocaine, bonsai and arrest after heroin injection.

Case: A 28-year-old young male was brought to the emergency with sudden cardiac arrest after heroin injection intravenously. He had no history of valvular or congenital heart disease. There was no history of fever, headache, any flu-like symptoms, systemic illness or drug allergy. His parents were alive and there was no history of diabetes mellitus, coronary artery disease, hypertension or cerebrovascular disease in first degree relatives. He was also using cocaine, bonsai. After 25

min of cardiopulmonary resuscitation, cardiac rhythm turned to sinus tachycardia. His vital signs were blood pressure 60/45 mmHg, pulse 130 beats/min, respiratory rate 25/min. Arterial blood gas analysis was pH: 7.20, PaO₂: 65 mmHg, PaCO₂: 59 mmHg, HCO₃: 14 mEq, BE: -16. ST elevation was seen at D1, aVL, V1-6 (acute anterior MI). Laboratory findings were Troponin I: 0.665 and CK-MB: 131. Cardiogenic shock manifestation was seen clearly. Transthoracic echocardiography demonstrated limited movement of the anterior cardiac wall and a left ventricular ejection fraction (EF) of 15%. Myocardial infarction (MI) with left ventricular failure was diagnosed. Coronary angiography showed 100% occlusion of left ascending coronary artery (Figure 1). Acetyl salicylic acid 1x100 mg, clopidogrel 1x75 mg, atorvastatin 1x80 mg were administered. Ventricular fibrillation attacks was seen and cardioversion was applied. After 3 days of admission to intensive care unit his EF was 25%. Cardiac arrest was occurred after recurrent attacks of VF and resuscitation was unsuccessful.

Conclusion: Cocaine is a potent coronary arterial vasoconstrictor. It can cause endothelial injury, platelet aggregation, thromboxane production and therefore, coronary thrombosis. Heroin might have a direct toxic effect on the coronary arteries and induce acute coronary occlusion, either by provoking a local coronary spasm or inflammation.

Key words: Acute myocardial infarction, heroin abuse, cocaine abuse



Figure 1.

P-187

A Patient with Achalasia Who Developed Acute Respiratory Failure: A Case Report

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Introduction: Achalasia is a motility disorder characterized by absence of peristalsism in the body of esophagus and failure relaxation of the lower esophageal sphincter (LES) during the action of swallowing. In this case, we aimed to report a rare case of achalasia complicated with acute onset of stridor and respiratory failure which may have been mortal.

Case: A 74-year-old female patient was brought to the emergency service with acute onset of stridor and respiratory distress. Cervico-thoracic computerized tomography revealed an increase in the esophageal diameter, mediastinal enlargement and food residue inside the esophagus. It was seen that dilated esophagus compressed the trachea and seriously narrowed its lumens. In line with these findings, the

patient was treated in the intensive care unit and discharged by planning for elective surgical treatment of his achalasia in any other hospital.

Conclusion: Continual high-pressure contraction may lead to accumulating swallowed foods in the body of esophagus and to occurring mega-esophagus by dilatation in the proximal of LES. Acute respiratory failure may develop with the compression of massively dilated esophagus to the airways. In the situation which there are no symptoms of achalasia, stridor can be thought to the foreign body aspiration. Our patient had a history of achalasia and admitted with stridor to emergency department. In these patients, the most fundamental and indispensable intervention is the securing of airway by using endotracheal intubation and this is followed by nasogastric tube insertion or performing esophageal decompression with the help of gastro-esophagoscopy. While the patient was under intubation and sedation, esophagus decompression was performed in the intensive care conditions and then was extubated without any problems.

In the patients with dyspnea, it should be kept in mind that one of the reasons of acute respiratory failure may be Achalasia. Ensuring the airway is very important due to complications that may occur in these cases.

Key words: Achalasia, stridor, respiratory insufficiency, aspiration

P-188

Intensive Care Unit Follow Up in Guillain-Barre Syndrome Patient with Bilateral Facial Paralysis

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Introduction: Guillain-Barre Syndrome (GBS) is a kind of acute auto immune polyradiculopathy which is induced by acquired bacterial or viral infections and it is commonly serious and fulminant.

Case: 32 years old male patient came to hospital with perioral drowsiness and weakness of his arms and legs. He had history of influenza 15 days before his admission. In his physical examination he was conscious and cooperated, on motor nerve examination right upper extremity: 5/5, proximal right lower extremity: 4/5, distal right lower extremity: 5/5, left upper extremity: 5/5 proximal left lower extremity: 4/5, distal left lower extremity: 5/5. On sensory nerve examination there was common hypoesthesia in trunk and extremities. In lumbar puncture examination there was high protein in cerebrospinal fluid (98 mg/dl). Cervical magnetic resonance imaging was normal. During follow up bilateral facial paralysis and difficulty in swallowing were added to the clinical course. When respiratory muscles were affected he was accepted to Intensive Care Unit (ICU) with GBS diagnosis. Glasgow Coma Scale (GCS) was 12, motor response; upper extremities could localise the painful stimuli and no response at bilateral lower extremities. Pulse: 101/min, TA: 140/80 mmHg, SO₂: 98%. IVIG was given for 6 days at 0,4 gr/kg/day dosage. Mechanical ventilation was applied for 4 days. On 7th day of hospitalisation he was transferred to service with GCS: 15. His facial paralysis did not recover at this stage and physical treatment, eye drops and patches for dry eyes were suggested to the patient.

Conclusion: Bilateral peripheral facial nerve paralysis can be observed with GBS. It should be kept in mind that respiratory muscles can also be affected and mechanical ventilation maybe needed for these patients.

Key words: Bilateral facial paralysis, gullian barre syndrome, intensive care unit

P-189

The Effect of Lipid Emulsion During Advanced Cardiac Life Support for Bonzai Cardiovascular Toxicity

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Introduction: Worldwide, bonzai is among the most widely used illicit drugs. The main active substance, affects cannabinoid receptor 1 in the brain and cannabinoid receptor 2 in the periphery, with predominantly psychoactive effects. Published reports describe a temporal relation between tetrahydrocannabinol use and the development of acute myocardial infarction, cardiomyopathy, and sudden cardiac death.

Lipid resuscitation refers to the use of an intravascular infusion of a lipid emulsion to treat severe, systemic drug toxicity. The role of lipid emulsion has expanded to treatment of cardiac toxicity due to other lipophilic drugs. The similarity of several subsequent reports suggests that underlying ischemic heart disease or cardiac conduction defects may predispose to localanestheticcardioxicity.

Case: 23-year-old man reported heart fluttering and near syncope a few hours after bonsai smoking. In the emergencydepartment, he was found to have a right bundlebranchtype ventriculartachycardia and had failed more than 40 mins of standard life support therapy including ventilation with oxygen, vasopressors, and force diuresis. Current guidelines suggest that 20% lipid emulsion initially be administered as a bolus of 1.5 mL/kg over min. Following completion of the bolus, a continuous infusion of 0.25 mL/kg/min should be started. Followed 20% lipid infusion at 16. hours rapidly restored normal cardiac markers and hemodynamic parameters. The patient recovered completely with no evidence of myocardial damage after 96 hours.

Conclusion: The mechanism underlying the association between tetrahydrocannabinol use and myocardial infarction is currently unknown. The first is the 'lipid sink' hypothesis that suggests that lipid-soluble local anesthetic molecules in the aqueous phase are extracted by the injected lipid. The lipid sequesters the local anesthetic and reduces the concentration of tissue bound local anesthetic. Alternatively, the metabolic hypothesis postulates that lipid impedes local anesthetic's inhibition of acyl carnitine, thereby improving mitochondrial metabolism. Finally, it has been proposed that lipid emulsion increases calcium concentrations in myocytes thereby improving contractility (6).

Key words: Bonzai, tetrahydrocannabinol, cardiovascular disorders, lipid resuscitation

P-190

Out-of Hospital Cardiac Arrest Survivor Treated with Mild Therapeutic Hypothermia

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Introduction: Cardiac arrest outside the hospital is common and has a poor outcome. Only a few patients survive cardiac arrest with favorable neurologic recovery¹. We present the case of a patient following out-of-hospital cardiac arrest in whom therapeutic hypothermia treatment was utilized with a positive neurological outcome.

Case: A 25 year old male medical student complained angina when playing football match with his doctor friends. A few minutes later with pulseless electrical activity of cardiac arrest occurred and early chest compression was begun by his doctor friends. On admission to emergency department, cardiopulmonary resuscitation required forty five minutes of resuscitation prior to restoration of cardiac rhythm and perfusion. Coronary angiography was performed immediately and determined that occlusion of 60% proximal and 99% distal left ascending coronary artery. Therapeutic hypothermia initiated with ice-cold (4°C) intravenous fluid and coronary stent placement was performed. ST elevation was seen at D1-2, aVF. On admission to intensive care unit, vital signs were blood pressure 140/95 mmHg, pulse 133 beats/min. Arterial blood gas analysis was pH: 7.0, PaO₂: 77 mmHg, PaCO₂: 57 mmHg, HCO₃: 15mEq/L, BE: -16. Mild therapeutic hypothermia (MTH) was maintained by external hydrogel-coated pads that circulate temperature-controlled water to the patient's abdomen, back and thighs with supportive treatment for 24 hours. The patient was then rewarmed, weaned off sedation and paralytics and good neurologic function demonstrated. He was extubated on day 3 and transferred to rehabilitation ward neurologically intact on day 27 with only loss of short-term memory.

Conclusion: Out of hospital cardiac arrest is recognized as a worldwide, serious public health problem¹. This case was a witnessed arrest and early intervention was performed. MTH was initiated at coronary unit. Hospital interventions comprised of targeted temperature management, optimal ventilation/oxygenation, optimizing hemodynamic parameter, seizure control, and electrolyte/glucose control have been developed to improve neurological outcome and survival of patients after cardiac arrest².

Key words: Therapeutic hypothermia, myocardial infarction, cardiopulmonary resuscitation

P-191

Pulmonary Embolism in a Patient with Glioblastoma Multiforme; A Case Report

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Introduction: Pulmonary embolism is a cardiovascular emergency observed approximately in 0.4% of the population, which is presented with non-specific symptoms like cough, dyspnea, chest pain, hemoptysis and syncope. We aimed to report a pulmonary embolism case with an intracranial tumor as an etiological factor.

Case: 57 years old female receiving corticosteroid therapy because of Glioblastoma Multiforme (GBM) was presented to the emergency department with dyspnea and syncope. In computed tomography of thorax, a filling defect in main and lower lobe pulmonary arteries bilaterally. The patient was fully conscious, oriented and cooperated when she was admitted to the intensive care unit. Respiratory and cardiovascular system examinations were normal except tachypnea. Neurological examination revealed hemiparesis on the left side and a left foot drop. In magnetic resonance imaging of the lumbar and cervical spine, spondilosis and multiple disc pathologies were observed. There was no pathologies observed in ECHO. The clinical parameters were as follows; arterial blood pressure 110/56 mmHg, heart rate 110/min, respiratory rate 25/min and SpO₂ 98%. In arterial blood sample pH was 7.51, PaCO₂: 31.7 mmHg, PaO₂: 66 mmHg, base excess: 3.3 mmol/L and HCO₃: 27.3 mmol/L. D-dimer was 590 mg/L. SpO₂ rates deteriorated to 84% without oxygen supplementation. Enoxaparin 8000 IU 2x1 sc was started immediately. During follow ups, respiratory rates were within 19-27/min and SpO₂ levels 91-97% ranges under oxygen supplementation with face mask. The patient was stable and discharged from the intensive care unit on her fifth day.

Conclusion: Pulmonary embolism is one of the most common causes of death. Presence of GBM increases the risk of pulmonary embolism independently. At the same time it prevents physicians from implementing thrombolytic therapy because of the risk of bleeding. That is the reason, why we must prefer low molecular weight heparin treatment instead of thrombolytic therapy.

Key words: Pulmonary embolism, glioblastoma multiforme, dyspnea

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Intensive Care Unit Follow Up for A Pregnant With Massive Pulmonary Embolism

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Introduction: Pregnancy is a period in which deep venous thrombosis (DVT) risk increases. Symptomatic DVT rate during pregnancy is 0.05-0.3%. It was shown that in 1 of each 10 DVT cases pulmonary embolism (PE) complication occurs (1).

Case: 30 years of pregnant ASA I woman with 5 weeks of gestation after in vitro fertilisation (IVF). She came to emergency department with symptoms as endurance of left leg for 1 week, angina for 5 days and dyspnea. In first examination she was conscious, TA: 90/60 mmHg, pulse: 80/min, respiratory rate: 14/min, fever: 36.7. Decrease in respiratory sounds on right middle and lower zones. Arterial blood gas examination in room air was pH: 7.53, PaCO₂: 24.9, PaO₂: 92.9 SO₂: 98%. D dimer was: 10.67 (0-0.55). Lower extremity venous doppler examination revealed acute DVT on left side. With these findings she was hospitalised with PE diagnosis. Actilyse (plasminogen activator) 50 mg and fractionated heparin infusion at 18 IU/kg/hr dosage was applied. During follow up increase in angina and deterioration of general condition of the patient was observed. Control arterial blood gas examination revealed pH: 7.5, pCO₂: 25.6, pO₂: 57.9, SO₂: 92%. Then she was taken into intensive care unit with massive PE diagnosis. She was intubated and mechanical ventilation with sedation was started. After 24 hours she was extubated. During follow up vaginal hemorrhage and spontaneous abortus was observed. After healing of respiratory and cardiovascular parameters she was transferred to obstetrics and gynecology service.

Conclusion: Massive PE in pregnant needs multidisciplinary approach. IVF therapy is highly expensive and difficult. Then during this therapy DVT examination is very important because it can result with pulmonary embolism. During massive pulmonary embolism therapy dangerous hemorrhages for pregnancy and life can occur.

Key words: Pulmonary embolism, pregnancy, intensive care

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P-193

Cardiac Arrest Due to Pneumoperitoneum After Peg Insertion in Als Patient

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Introduction: Amyotrophic lateral sclerosis (ALS) is a neurodegenerative disease characterised by progressive muscular paralysis reflecting degeneration of motor neurones in the primary motor cortex, corticospinal tracts, brainstem and spinal cord. We present a ALS entity that pneumoperitoneum has occurred following percutaneous endoscopic gastrostomy (PEG) and the intensive care period of this patient.

Case: PEG has been planned for 63 years old male patient related to dysphagia and weight loss. After the procedure dyspnea and respiratory arrest was seen; following 5 minutes CPR he has transferred to ICU. Pneumoperitoneum was detected in the chest X-ray. On the following 5th day the free air has been resorbed. Nutrition with PEG has been started. Trachetomy was planned on the 10th day in ICU. On the 35th day of ICU necrotizan enterocolit has been diagnosed but cardiac arrest was developed and no response to CPR has been received. Enteral nutrition may be required in ALS, and is usually achieved by PEG enteral nutrition is widely used to treat dysphagia in ALS. The insertion of the enteral tube has traditionally been achieved by PEG. PEG improves life quality in ALS and other motor neuron diseases but there is no convincing evidence that it prevents aspiration or improves survival. Pneumoperitoneum is an early (72 hours) but rare complication of PEG insertion.

Conclusion: ALS is associated with a hyper metabolic state, therefore patients require increased calorie intake. PEG is a widely used nutrition therapy in these cases but rare complications such as pneumoperitoneum results in long term ICU stay and enhances mortality rates.

Key words: ALS, PEG, pneumoperitoneum, cardiac arrest



Figure 1. Chest graphy



Figure 1. Chest graphy

P-194

A Rare Case of Organophosphate Intoxication; Misuse for Head Lice

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Introduction: Organophosphate (OP) insecticides are widely used in rural areas. OP poisoning occurs mainly via the gastrointestinal and respiratory tracts and the skin. Severe Intoxication is usually the result of ingestion to attempt suicide. The type and severity of symptoms depend on the amount of OP involved and the nature of the exposure. We report a case with OP poisoning who was self-treated applying insecticide as hair rinses against head lice.

Case: A 38 years old female with psychiatric disorders history complaining for head lice uses an unnamed OP insecticides as a treatment by herself. After cutaneous application, patient had symptoms of cholinergic excess, lost consciousness, and had a seizure. She was admitted to intensive care unit with Glasgow Coma Scale (GCS) score 9. All laboratory values were normal, except for a decreased serum cholinesterase level reported as 257 IU/l. Patient received medical therapy with pralidoxime and atropine infusions and also was thoroughly washed especially including the hair. Therapy was continued for 4 days, until a significant clinical and laboratory improvement (serum cholinesterase level 4988 IU/l) was achieved and discharged from the hospital with GCS score 15.

Conclusion: OP compounds are commonly used in agricultural products, including insecticides. Intoxication is so formed by inhibiting the enzyme acetylcholinesterase at cholinergic synapses, resulting in excess cholinergic stimulation at the neuromuscular junction, the sympathetic and parasympathetic nervous systems, and the central nervous system. They are rapidly absorbed by all routes of exposure, including dermal, respiratory and gastrointestinal way. The specific treatment comprises the administration of atropine and pralidoxime. Decontamination should be done according to the exposure ways as soon as possible. However OP intoxications are mostly seen in suicide attempts; misuse and exposure must be kept in the mind especially at farmers, patients with psychiatric disorders and pediatric groups.

Key words: Organophosphate, intoxication, intensive care unit

P-195

Transfusion Related Acute Lung Injury After Caesarean Section

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Introduction: Transfusion related acute lung injury (TRALI) is a serious clinical condition characterized by non cardiogenic pulmonary edema and seen acutely after blood products transfusion. Today it is thought to be the most important reason of mortality and morbidity related to blood and blood products transfusion.

Case: 27 year old woman was taken to cesarean section and one unit erythrocyte suspension was given due to decreased hemoglobin level postoperatively. Two hours later she was taken to diagnostic laparotomy and extra one unit erythrocyte suspension was given intraoperatively. At the postoperative first hour agitation, dyspnea and saturation decrease were observed suddenly. The patient was re-intubated and followed with mechanical ventilation. After 4 days of supportive therapy, she was extubated and at the fifth day transferred to the ward.

TRALI is suggested to be related to 2 different mechanisms. The first mechanism, 89% of cases, is immunity related TRALI. The other mechanism is related to granulocyte reactivation due to bioactive lipids and cytokines seen especially in the delayed blood products.

Conclusion: Suspicion due to clinical and radiological parameters still have a great importance for TRALI diagnosis. Today there is still lack of awareness about TRALI in medical practice and this deficiency leads to misdiagnosis. That's why when dyspnea is seen soon after blood transfusion, TRALI should be kept in mind and it shouldn't be forgotten that patients can be easily treated with supportive therapy.

Key words: Transfusion, lung, injury

P-196

Prolonged Prone Positioning for A Morbidly Obese Patient with Acute Respiratory Distress Syndrome

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Introduction: Obese patients are at risk for aspiration of gastric contents and also developing atelectasis. It has been shown that early prolonged application of PP with high PEEP offers an absolute survival advantage. We herein described an obese patient whom aspirated gastric contents at the beginning of bariatric surgery.

Case: 26 years old type 2 diabetic male patient with body mass index 40 had undergone bariatric surgery. After endotracheal intubation, there was a fall in SpO₂ from 100 to 75% over a period of 2 minutes. When endotracheal suctioning performed, clear secretions had seen. The content of the secretions suctioned from stomach was same as coming from endotracheal tube. Aspiration of gastric contents was preliminary diagnosis for the cause of desaturation. During the operation desaturation persisted and recruitment manoeuvre performed. After recruitment PEEP increased to the 14 cmH₂O but SpO₂ was 93 and remained around 93%. After surgery, the patient transferred to intensive care unit. First arterial blood gas sampling showed PaO₂/FiO₂ 145. A chest radiograph revealed bilateral alveolointerstitial infiltrates. This clinical scenario was compatible with moderate ARDS.

We continued PP for 16 hours. Sedation done by propofol infusion. During prone position PEEP support decreased and FiO₂ values improved. After sedation stopped, patient had extubated in a few hours later on supine position. On day 3, the patient was discharged from the intensive care unit.

Conclusion: Obese patients are at risk for aspiration of gastric contents and also developing atelectasis. It has been shown that PP appears effective in facilitating the reversal of atelectasis and improving airway drainage. This clinical case report suggests early prolonged application of PP with high PEEP is effective and safe for a morbidly obese ARDS patient which is originated from gastric content aspiration.

Key words: Prolonged prone positioning, morbidly obese, aspiration, Acute Respiratory Distress syndrome

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Multiple Thromboembolism in Cancer Patient

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Introduction: Thromboembolism is often a complication in cancer patient and the patient who received chemotherapy. This clinical condition was named Trousseau's syndrome; hemostatic abnormalities vary from abnormal coagulation tests to massive thromboembolism. In this case report; we presented a patient who had over carcinoma and received chemotherapy, hospitalised in our intensive care unit (ICU) because of certain ischemic events.

Case: 48 year old, female patient who had been operated for ovarian cancer. Six chemotherapy cure cycle were performed. She was hospitalised in the Intensive Care Unit because of unconsciousness. Her glasgow coma scale was 11. Cranial magnetic resonans of the patient showed left middle cerebral artery stenosis. LWHH therapy was started (0.4cc S.C.). Her hemogram parameters were WBC: 12100 mm³, Hg: 3.5 g/dl, Hct: 10.3%, PLT: 13.800 mm³. Erythrocyte and platelet were transfused. Bone marrow metastasis was predicted and bone marrow biopsy was planned when platelet count would be increased optimal level for the patient. On the 11th day the acute mesenteric artery ischemia symptoms were observed and the patient died at the same day. Thromboembolic events may occur in cancer patients with or without chemotherapy 15% in clinical. Migrating thromboembolism which may be seen as a paraneoplastic syndrome in these patients are defined as Trousseau syndrome.

Conclusion: As a conclusion; risk of the thromboembolism is always higher in cancer patient.

Key words: Thromboembolism, carcinom, ICU

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P-198

Severe Influenza A Virus (H1N1) Infection in Pregnancy

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Introduction: H1N1 pneumonia may be life threatening to pregnant women in the third trimester and should be carefully followed on wards.

Case: A 24 -year-old woman at 28 weeks of gestation admitted to the emergency department with progressive worsening dyspnea, productive cough, myalgia, and fever. Her vital signs were temperature of 38 °C, pulse rate 102/min, blood pressure 100/50 mmHg, respiratory rate 38 breath/min and oxygen saturation 85% under 5 L/minutes oxygen support. Laboratory examinations were as follows: WBC 8400 K/mL (91% neutrophils, 8% lymphocytes); CRP 178 mg/L; Procalcitonin 0.95 ng/mL, d-DIMER 2.29 mcg/ml, Fibrinogen 448 mg/dl. She was intubated and mechanically ventilated with P-SIMV mode. (PEEP: 14, Pcontrol: 16, respiratory rate 20 per/min, FiO₂: 80%). 30 minutes after intubation, deep respiratory acidosis was appeared (Ph: 7.03, PO₂: 85 mm/Hg, PCO₂: 81, HCO₃: 20.6 SPO₂: 91%, lactate: 0.8 mmol/L, BE: -11). Recruitment manoeuvre has been applied and PEEP increased up to 22 cm H₂O. Although with this level PEEP temporary improvement has been shown but PaO₂/FiO₂ ratio was dropped below 85 again. Bedside transthoracic ultrasound showed hepatization in both lungs with widespread B-lines (Figure1). Echocardiography was normal with no sign of pulmonary emboli or infective endocarditis. Despite modifications of ventilator settings and recruitment manoeuvre, pulmonary compliance and arterial blood oxygenation remained critically low and patient continued to decompensate. Urgent cesarean delivery was performed. After surgery we proned the patient and stayed at this position approximately 16 hours. The PCR testing returned with a positive result for H1N1. Antimicrobial treatment with intravenous levofloxacin+ceftriaxone and oral oseltamivir were applicated. All culture reports were negative. After 4 weeks in the ICU percutaneous tracheostomy inserted and she slowly was weaned from ventilator settings.

Conclusion: Early application of prolonged prone-positioning improves survival among patients with ARDS. In this case, we showed early extended prone positioning ventilation may be a rescue therapy in H1N1 infected patients with severe ARDS.

Key words: Influenza A virus (H1N1), pregnancy, prone-positioning, ARDS

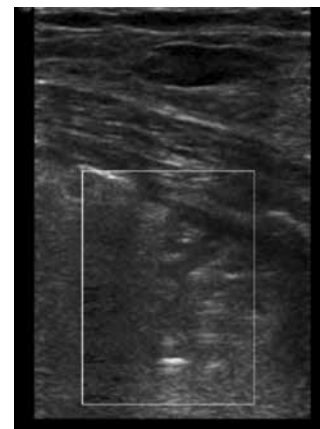


Figure 1. Lung ultrasound of patient showing infiltration

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Intoxications due to Synthetic Cannabinoids in Intensive Care Unit: Three Bonsai Cases

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Introduction: A recent increase in users of synthetic cannabinoid (SC) like Bonsai due to their low costs and easy accessibility indicates a serious public health problem. Due to lack of tests routinely used to detect SCs in toxicities, diagnose of intoxications are based on history. Since reporting cases of intoxications due to SCs will contribute to the relevant literature, we will present the cases followed in our unit over the last two years.

Case 1: A 25-years-old male known to use Bonsai, presented to the emergency unit with unconsciousness and superficial respiration. His blood pressure was 180/80 mmHg and heart rate (HR) was 100 beat/min. He was intubated, admitted to the intensive care unit (ICU) and became conscious quickly. His vital signs were followed. Twenty-four hours later, he was extubated. After 72- hour-follow-up in the ICU, he was discharged.

Case 2: The patient was fainted and had Bonsai with him when he was found. Since he had somnolence, he was admitted to the ICU. His vital signs were monitored. During 24-hours follow-up, he became conscious and was discharged.

Case 3: When a 22-years-old male on treatment for substance abuse was brought to hospital, he was unconscious due to Bonsai intake in a high dose. Since he had respiratory failure, he was intubated, admitted to the ICU and sedated with midazolam. His blood pressure was 120/60 mmHg, HR was 110 beat/min and respiratory rate was 25/min. His vital signs were closely monitored. On the second day, he was extubated, and discharged one day later.

Conclusion: SCs cause mild effects including tachycardia, hypertension, agitation and delirium and severe effects like psychosis, convulsions, acute renal failure, myocardial infarction and respiratory failure. SCs should be kept in mind in young patients with unconsciousness and respiratory failure without clear etiology.

Key words: Synthetic cannabinoids, bonsai, intoxication

P-200

An Unusual Presentation of Pulmonary Embolism: Case report

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Introduction: Despite the higher incidence, pulmonary embolism, is one of the challenging conditions required urgent intervention. The early diagnosis can decrease the risk of recurrent embolism and mortality. The current case report is aimed to present a patient with pulmonary embolism in the intensive care unit.

Case: A 64 years old patient with the diagnosis of subarachnoid hemorrhage and a history of obstructive pulmonary disease, and hypertension, referred to the intensive care unit (ICU) from another hospital. The medical history showed a surgical operation of right total knee replacement about six months ago, hence most of time confined to bed. A cerebral angiography was performed and revealed an aneurism that endovascular coiling could not be applied except surgery. After surgical approach, the patient was hemodynamically stable in the ICU. However, sudden hypoxia and unconsciousness were occurred in the postoperative third day. In addition, subfebrile fever was observed and the chest radiograph (Figure 1) pointed out the pulmonary embolism. In CT angiography; thrombus extending to the both pulmonary arteries and branches, right lung superior lobe anterior segment atelectasis, and ground-glass pattern in both lungs were detected. The doppler ultrasonography of the lower extremities showed no findings. The cranial CT showed an increased of intracranial hemorrhage, after enoxaparin 6000 IU administration. Therefore, enoxaparin stopped and vena cava filter was suggested by the pulmonologist. Unfortunately, the patient was not stable for transport. In the 5th day of follow-up, cranial CT detected a decrease in hemorrhage area, thus enoxaparin could be initiated as 2 \leq 3000 IU. On the 10th day of treatment, the patient condition was stabilized and admitted to the ward, and enoxaparin dose was changed to 2 \leq 6000 IU.

Conclusion: The present case revealed that inferior vena cava filter can be an alternative method with any contraindications of anticoagulant medications.

Key words: Pulmonary embolism, intensive care, vena cava filter



Figure 1. Hampton's hump (Pleural based opacity)

P-201

Diffuse Alveolar Hemorrhage as A Predisposing Factor of Hemophilia A

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Introduction: Hemophilia A is a rare X chromosome linked bleeding disorder due to Factor VIII deficiency. In this report we aim to present a case with diffuse alveolar hemorrhage (DAH) induced by Hemophilia A.

Case: Thirty three years old male patient admitted to the emergency department with a complaint of melena. Patient was scheduled for endoscopic evaluation. Meantime he developed respiratory distress. In physical examination his blood pressure was 128/72 mmHg, heart rate was 112/min and SpO₂ was 80%. Chest radiography reveals perihilar infiltration. Hypoxia and hypocapnia was detected in arterial blood gas evaluation. Patient was admitted to the intensive care unit (ICU). He had been diagnosed as Hemophilia A at 8 years old. Respiratory distress got worse and patient was intubated with suspected pulmonary embolism or pulmonary hemorrhage. Mechanical ventilation support was maintained with PRVC mode. Methylprednisolone and bronchodilator treatment was started. Diffuse pulmonary hemorrhage was detected in thoracic tomography. Three-day Factor VIII (2000U) replacement therapy and desmopressin 0.3 mg/kg treatment was initiated at 4th day in ICU. Sedation was achieved with 4 mg/hr midazolam. After 3 days mechanical ventilation was changed to CPAP mode (FiO₂: 40%). At 8th day in ICU patient was extubated and non invasive mechanical ventilation was performed. Patient was discharged from the ICU at 14th day.

Conclusion: DAH can appear as a result of an autoimmune disorder or a pulmonary infection. Diagnosis is commonly based on tomography, restrictive pattern of the pulmonary function test and bronchoscopy. DAH had been reported as a rare clinical complication of Hemophilia A. Prognosis vary due to the underlying clinical reason. In our case, clinical statement had been extremely recovered with factor replacement. Desmopressine, steroid and bronchodilator therapy as well as mechanical ventilation support is also recommended for the treatment.

Key words: Diffuse alveolar hemorrhage, hemophilia A, intensive care unit



Figure 1. Anteroposterior thorax graphy



Figure 2. Thorax tomography cross section

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Acute Hepatitis Due To Use of Herbal Tea: A Case Report

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Introduction: Several factors, consisting of viruses, drugs, alcohol, metabolic diseases, toxins, infectious diseases, ischemia and autoimmunity have potential to lead acute hepatitis, characterized by inflammation and necrosis in the liver cells. Acute hepatitis related to herbal products is not uncommon due to increase use of these products, despite to limited information on these side effects. We report a case of acute hepatitis presented after use of herbal products called cheery stem and parsley juice.

Case: Sixty one years old woman admitted to our emergency room with complain of dizziness, nausea and vomiting lasting for 24 hours. The physical examination is typically unremarkable except right upper quadrant tenderness of abdomen, and also elevated levels of the liver enzymes (ALT: 351 U/L, AST: 516 U/L, ALP: 244 U/L, GGT: 159 U/L ve LDH: 850 U/L) were observed at admission. However, repeated blood tests on third hour showed the increase trend in liver enzymes (ALT: 829 U/L, AST: 1026 U/L, GGT: 234 U/L, LDH: 1467 U/L) which was consisted with acute hepatitis. Further evaluation revealed that recent new herbal medicine use which was cheery stem and parsley juice for ten days, adjuvant use of lime and rosehip tea daily for two years. Immediately, her herbal product use stopped and further evaluation on acute hepatitis etiology revealed no potential factor beside these herbal product uses. In follow up, her liver enzymes were normalized in second week of hospital discharge.

Conclusion: Detailed history of the patients has paramount importance when evaluating etiology of the acute hepatitis. Clinician must focus on herbal product use of patient beyond prescription drug. Also, our report highlighted potential toxic effect of cheery stem and parsley juice on liver.

Key words: Acute hepatitis, toxic hepatitis, herbal tea

P-203

Two Cases Which Get Mixed with Mushroom Poisoning

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Introduction: The clinical situations in mushroom poisoning varies widely. It can be seen as gastrointestinal system complaints whereas death can be possible if multiorgan dysfunction occurs, especially liver and kidney failures. In this paper, we reported 2 cases that were sent to our hospital as diagnosed mushroom poisoning. After examining detailed history, these cases were understood that there were other pathologies. We aimed to emphasize that mushroom poisoning can easily get mixed with some other medical cases in which there are no mushrooms, but the same clinical features as mushroom poisoning.

Case: We reported 2 cases that suffered from nausea and vomiting and known consumption of mushrooms and then taken to the our intensive care unit because of mushroom poisoning. But it follows from the detailed history and clinical examination that present symptoms caused to different diseases. The property of cases are shown in Table 1.

Conclusion: It is clearly known that early diagnosis and treatment in wild mushroom poisoning decreases multiorgan failures and mortalities. Despite this, detailed history and clinical examination should be done carefully also in mushroom eating cases. It must be reminded and reviewed that there are other clinical situations and cases that can easily get mixed with mushroom poisoning.

Key words: Mushroom poisoning, intensive care unit, hepatic failure

	Case 1	Case 2
Age/Sex	78/Male	46/Male
Onset of Symptoms	4-5 hour after consumption of mushroom	12-16 hour after consumption of mushroom
Initial Symptom	Nausea Vomiting Abdominal Pain	Nausea Vomiting
AST/ALT	88 U/L/79 U/L	903 U/L/1126 U/L
Other Values	Amylase: 1358 U/L Lypase: 1516 U/L Ultrasound: Edematous pancreas	ECO: EF: 20%, Global left ventricular hypokinesia
Diagnosis	Acute Pancreatitis	Hepatic Congestion Linked Congestive Heart Failure

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Chemical Injury in the Oral Cavity and Oesophageal Tract Caused by Air Conditioner Cleaning Solution

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Introduction: More than 25,000 chemicals are commonly used in the industry, agriculture, house cleaners and others, and many of them have been identified as having the potential to cause burns. This makes chemical burns an important potential risk in the household. The severity of tissue damage depends on the destructive properties of the ingested substance, duration and the extent of its contact with the tissue. Tissue damage can include the oral mucosa, nasal orifice, gastrointestinal tract and respiratory tract. We present a case of chemical injury in the oral cavity and oesophageal tract resulting from the drinking serpantin cleaner for air conditioning.

Case: A 24-year-old man who has mental retardation, had presented to the Emergency Department via ambulance approximately 30 minutes after drinking serpantin cleaner for air conditioning at his home. Ulcerations all throughout the mouth were noted at the time of the first examination (Figure 1). The patient was lethargic and was not able to respond to sound. The physical examination findings were hypersalivation and dyspnea. Patient was intubated. He admitted to intensive care unit (ICU) for monitoring and treatment. Endoscopy was planned on 24. hours the hospital day. Endoscopic evaluation in the ICU revealed edema and erythema of the superficial mucosa on superior oesophageal area and in the gastric fundus (Figure 2). General supportive treatment was given. Peripheral parenteral nutrition was supplied for seven days. The patient was extubated on the fifth hospital day.

Discussion: Serpantin cleaner for air conditioning include bases material. Alkalis severe tissue injury through liquefaction necrosis. Liquefaction loosens tissue planes and allows deeper penetration of the agent so that alkali burns tend to be more severe than acid burns. In conclusion, a chemical burn should be carefully managed and may require a team of experts.

Key words: Burns, chemical, endoscopy, intensive care units



Figure 1. Ulcerations all throughout the mouth

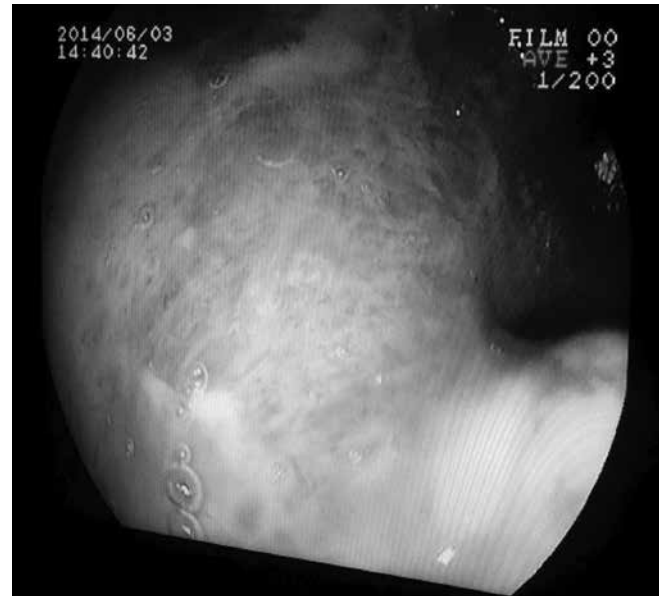


Figure 2. Endoscopic evaluation in the ICU

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The Application of APRV Mode in COPD Exacerbation of Morbidly Obese Patient

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Introduction: Airway pressure release ventilation (APRV) was introduced to clinical practice about two decades ago as an alternative mode for mechanical ventilation. This mode is an effective, safe alternative for patients with acute respiratory distress syndrome.

Case: 78-years-old, 145 kg, 152 cm morbidly obese female patient had previously diagnosed hypertension and COPD was admitted to emergency department with dyspnea and cyanosis. She had acute renal failure and pneumonia, was intubated and admitted to the intensive care unit. Patient's first blood test results were; BUN: 123 mg/dl, creatinin: 3.2 mg/dl, WBC: 18400, pH: 7.069, PO₂: 56 mmHg, PCO₂: 124 mmHg. She was oriented, cooperated, HR: 118/min, BP: 180/105 mmHg, SpO₂: 89%, had tachypnea, pretibial edema (+/+) and low urine output. There were significant cardiomegaly, pneumonic infiltrates on chest radiograph. There were crackles in the middle and lower zones of the right lung. PCO₂ decreased to 50-60 mmHg. In the next few days she was on spontaneous mode and T-tube trial. She had fever and blood-catheter-TA cultures showed *Acinetobacter Baumannii*. General condition was deteriorating and hemodiafiltration was started. She was on P-SIMV mode. Venous blood gas test results pH: 7.34, PCO₂: 55 mmHg, PO₂: 28 mmHg, SpO₂: 57%. SpO₂ decreased progressively and there was bilateral ground-glass opacities on chest radiograph. ARDS was considered. PSIMV mode failed to provide adequate oxygenation and changed to APRV mode (tlow: 0.8, thigh: 4, Plow: 10 cmH₂O, Phigh: 35 cmH₂O). SpO₂ increased from 30% to 60% in the first minute and PO₂ was 42 mmHg. SpO₂ increased to 80-85% during the day. Patient with bad general condition was hypothermic, normotensive, tachycardic, arrhythmic. She was followed five days on APRV mode and hemodiafiltration continued during this period. She was arrested on the 20th day and did not respond to resuscitation.

Conclusion: APRV is a simple, safe and effective ventilatory method for patients with ARDS. However, there is no strong evidence to suggest its superiority above other ventilatory methods in regard to regional blood flow, patient comfort and length of mechanical ventilation.

Key words: Obese patient, COPD, airway pressure release ventilation

P-206

The Myasthenia Gravis Patient who Had Previously Received Anti-Cancer Treatment Monitored in Intensive Care Unit

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Introduction: Myasthenia gravis (MG) is an autoimmune disease due to the decrease in the number of neuromuscular post-synaptic membrane acetylcholine receptors. It is often characterized by muscle weakness and the involvement of bulbar and extremity muscles. Throughout the clinical process with remissions and attacks, respiratory failure might develop due to the weakening of laryngeal, respiratory and diaphragm muscles. We aimed to present an MG case of a patient, who previously received anti-cancer treatment, encountered in our intensive care unit (ICU).

Case: A 37-years-old woman was accepted to the ICU with respiratory failure and pneumonia. Previously, she had taken both radiotherapy and chemotherapy. During the chemotherapy, she had been diagnosed to have MG and identified for using pridostigmin bromide and methylprednisolone. Non-invasive mechanical ventilation followed by an intubation with a subsequent mechanical ventilation was required. Infection symptoms regressed in 5 days with antibiotic treatment, but increased secretions and continued respiratory failure were accepted as a cholinergic crisis. Consequently, the dosage of pridostigmin bromide was reduced. In the 7th day of her admission to the ICU, she was extubated.

Conclusion: Paraneoplastic neurological syndromes (PNS) are rare and occur as a remote effect of anti-tumor treatment. The MG occurred during the chemotherapy in this case created the impression of such a PNS. On the other hand, the attack triggered by the infection seemed like an MG crisis. However, the absence of the regression of MG symptoms despite the responsive infection treatment brought about the possibility of a cholinergic crisis. When the anticholinesterase dosage was reduced and the MG symptoms gradually ameliorated, our diagnosis was confirmed. In this case, we pointed out the apparition of particular neurological symptoms during cancer treatment. In addition, we also concluded that a dynamic treatment process in ICU for MG occurred as a PNS is necessary.

Key words: Myasthenia gravis, paraneoplastic neurological syndromes, cholinergic crisis, cancer, intensive care unit

P-207

A Survival Case of Attempted Suicide with Amlodipine, Doxazosine and Losartan

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Introduction: We presented an uncommon case of 21-year-old female attempted suicide with amlodipine, doxazosin mesylate and losartan which resulted in total recovery. Hemodiafiltration is a useful toxicity-limiting or even life-saving therapeutic modality in conjunction with conventional therapy in cases of severe intoxications.

Case: The patient attempted suicide by ingesting 300 mg of amlodipine besylate, 80 mg of doxazosin mesylate and 1400 mg losartan/350mg hydrochlorothiazide. After six hours from a syncope attack, she had taken to our hospital. Although gastric lavage, fluid replacement, inotrope (dopamine 20-40 µg/kg/min), calcium gluconate used for medication, the patient's respiratory and hemodynamic status deteriorated at the emergency service and she admitted to the intensive care unit with respiratory failure and cardiogenic shock (MBP 46 mmHg) accompanying ischemia and arrhythmia on the electrocardiogram. Additionally hyperinsulinemic euglycemia and glucagon therapy, mechanical ventilation, other inotropes [adrenalin (1 µg/kg/min), noradrenalin (1 µg/kg/min)] and several bolus injections of epinephrine (0.01 mg-0,05 mg) were insufficient to treat persistent hypotension (MBP 36 mmHg). Despite of furosemide infusion, the patient remained oligo-anuric. In order to treat the immediate problem of hyperkalemia, pulmonary edema, lactic acidosis according to hypoperfusion of organs and tissues, the hemodiafiltration decision had taken on the 36 hours of the arrival to the hospital. Because of recorded bleeding from nose and increased coagulation parameters, she received continue venovenous hemodiafiltration with citrate dialysis fluid for 6 days. After 48 hours from the initiating hemodiafiltration treatment, ventilatory and inotrope requirement decreased significantly. After recovery of multiorgan failure, she weaned from ventilator on the fifth day in ICU, transported to the internal medicine service after psychiatric consultation on the tenth day.

Conclusion: Continue venovenous hemodiafiltration should be considered as life saving for the management of respiratory failure and refractory shock in the setting of fatal intoxication of multi anti-hypertensive drugs when medical therapies are insufficient.

Key words: Doxazosin, losartan, amlodipine, hemodiafiltration, intoxication, glucagon

P-208

Post Traumatic Diaphragm Rupture with Multiple Complications

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Introduction: Diaphragmatic ruptures mostly occur as a result of blunt or penetrating or spontaneous trauma. Incidence is 1-7% after blunt trauma (1,2). Sudden pleuoperitoneal pressure gradient causes kinetical energy transmission to diaphragm then rupture and herniation of intraabdominal organs to thorax has seen (3). Hemodinamical and ventilation problems occur following the ruptures and herniation. Ventricular end-diastolic filling, ejection fraction and cardiac output decreases (4). Press on lung and ischemia, necroze, perforation, contamination on hernied intraabdominal organs can be seen (5). We aimed to share a fact that posttraumatic diaphragm rupture with multiple complications.

Case: 19 year-old, male, no systemic disease before, car accident (blunt trauma). Glaskow coma score was 15, had ventilation distress. Tomography showed that left diaphragm was elevated and abdominal organ inside left thoracal area. Stomach was displaced into abdomen then primer surgical repair was done on 10 santimetered left diaphragm and tupe was placed. After surgery he was transfered to intensive care unit as entubated. At postoperative 3rd day ventricular fibrillation occured, patient defibrilated but hemodynamical stabilization couldn't be provided. New thorax tomography showed damage on left surgical repair area. Omentum and stomach placed in abdomen and diaphragm was repaired. It was seen 1/4 of stomach (fundus and corpus at long curvature side) was necrotised. After rezection of necrotic parts, abdomen was closed by Bogato bag. Periodical surgical washing of abdomen for 28 times and continuous vacuum drainage (VAC) was done. He had took antibiotherapy for sepsis. On 17th day patient was extubated. On 73th day, after hemodynamic stabilization patient was transfered to general surgery service. He had muscle atrophy due to immobilization and left hemiplegia and unconsciousness period during surgery service follow-up on 25th day. Right cerebellar and parietal acute multiple infarcts was seen at MRI. He is stil at surgery service, no neurological defisite and still having physiotherapy.

Conclusion: Diaphragm ruptures causes multiple complications and required prolonged follow-up and treatment.

Key words: Blunt trauma, complication, diaphragm rupture

P-209

Dress Syndrome: A Drug Rash That Can Threaten Life

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Introduction: Drug reaction with eosinophilia and systemic symptoms (DRESS) is a rare, potentially life-threatening, drug-induced hypersensitivity reaction that includes skin eruption, hematologic abnormalities (eosinophilia, atypical lymphocytosis), lymphadenopathy, and internal organ involvement (liver, kidney, lung). A case with late diagnosis was presented.

54 years old woman who has been under antituberculous therapy (Isoniaside, ethambutol, rifampisin, pyrazinamide) for tuberculosis peritonitis for 52 days developed itchy maculopapillous lesions mostly on the lower extremities and admitted to the hospital. She had fever and mild elevation in liver enzymes besides splenomegaly. The punch biopsy reported as "small vessel vasculitis".

Case: On the 3th day she developed oliguria and respiratory distress,

transferred to the intensive care unit. The rash became widespread to a diffuse, confluent, and infiltrated erythema with follicular accentuation as well as vesicles, tension blisters. The face and upper part of the trunk and extremities were involved. Erythematous facial edema with mucosal involvement was developed. She was entubated, hemodiafiltration was initiated.

Laboratory findings showed leukocytosis (22.000/mm³) eosinophil and lymphocyt counts were normal; AST: 2066U/L, ALT: 668U/L; lactate 14.7, BUN: 39mg/dl, creatinine: 2.8 mg/dl, INR: 2.5; procalcitonin: 58ng/m. The morbilliform eruption became more confluent and progressed to exfoliative dermatitis. Prednol 100 mgr/day and plasmaferesis were initiated. The second biopsy reported as toxic epidermal necrolysis (TEN). Dermatologic diagnosis was Dress syndrome, as the disease was severe, the centrum of some lesions were necrotic mimicing TEN. Laboratory levels and her clinical condition did not respond to the therapy, immunoglobulin therapy was planned but the patient died on the 6th day.

Conclusion: Retrospective studies have reported a mortality rate for DRESS of 5 to 10 percent. Death is most often during the acute phase of the disease and the main causes are acute liver failure, multiorgan failure, fulminant myocarditis, or hemophagocytosis.

Key words: Dress, ICU, organ dysfunction



Figure 1.



Figure 2.

P-210

Adult-Onset Still's Disease Complicated with Hemophagocytic Syndrome Due To Hepatitis A Infection

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Introduction: Here we present a case with two different diseases overlap in the same patient which resulted in a difficulty of the diagnosis.

Case: 31 year-old woman had fever, common flu, weakness, fatigue, jaundice, itching, nausea and vomiting starting two months before the admission. On laboratory examination liver function tests, bilirubin and ferritin level were found to be elevated and with a suspicion of Adult-onset Still disease (ASD), 1 mg/kg/day methylprednisolone was administered by the primary care physician. During steroid treatment she had fever therefore, methylprednisone was proceeded to 250 mg day-1 and IVIG was added to the treatment. Hepatitis A virus (HAV) IgM was

found to be positive during the etiological evaluation of the patient. The other causes of an increase liver function test were excluded. Because her liver functions levels were steadily elevated and on worsening of her clinical symptoms and radiological findings, she was referred to our ICU department (Figure 1, 2). Just after the admission respiratory failure progressed, mechanical ventilation was instituted. Methylprednisolone 2 mg/kg/day was administered with the diagnoses of ASD, ARDS, hepatic and septic encephalopathies during seven days. Broad spectrum antibiotics were also added to the treatment protocol. During the follow up, the onset of pancytopenia on CBC and peripheral smear necessitated bone marrow biopsy. Hemophagocytosis was detected on examination. CMV DNA was also positive and Ganciclovir was added to therapy. We decided plasmapheresis during the next six days. After the plasmapheresis her clinical symptoms were recovered by a decrease in the laboratory tests. Also the radiological findings were regressed (Figure 3). Then she was discharged and followed by outpatient controls.

Conclusion: Hemophagocytic syndrome (HPS) and ASD are different clinical entities but both are triggered by viral infection. In this case, after HAV infection ASD was complicated and also HPS findings were seen together.

Key words: Adult-onset Still's disease, Hemophagocytic syndrome, hepatitis A infection



Figure 1. Chest X-ray

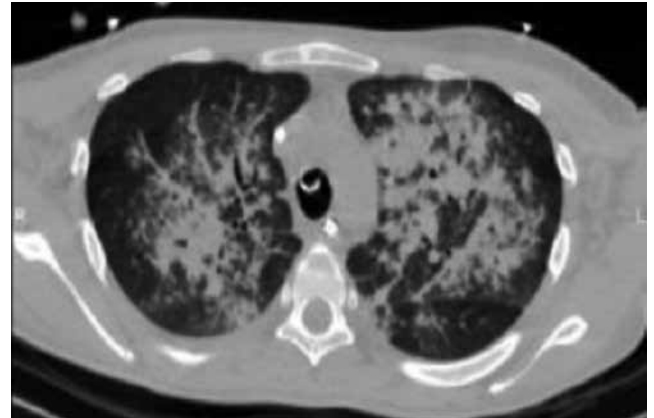


Figure 2. Control chest X-ray



Figure 3. Control chest X-ray

P-211

The Importance of Multidisciplinary Approach in: Intensive Care Unit: Conservative Therapy to the Grade 4 Splenic Trauma Patients, A Case Report

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Introduction: Multidisciplinary approach to patients in intensive care units increases the quality of service provided by reducing the incidence of mortality and morbidity. In recent years, advances in imaging techniques and increased quality of services in intensive care units results with nonoperative treatment to splenic trauma patients which are hemodynamically stable. In this case report, conservative treatment to patients with splenic injury grade 4 was presented.

Case: A 24-years-old male patient was evaluated in the emergency department following traffic accident. Clinical examination didn't reveal any problems except tenderness in abdominal region. In computerized tomography; a wide hypodense area that attributes to a devascularization in the inferoanterior of the spleen. was observed and it was interpreted to a grade 4 splenic injury. Conservative treatment was planned to the hemodynamically stable patient by anesthesiologist and general surgeon. The patient was discharged after 72 hours follow up in the intensive care unit and five days in general surgery department.

Conclusion: Protective approaches to the splenic injury with nonoperative treatment has gained importance in recent years. Unnecessary splenectomies can be avoided by a non-operative, conservative therapy to the patients who are hemodinamically stable. The cooperation of different departments and multidisciplinary approaches increases the quality of care provided in intensive care units and decreases the mortality and morbidity.

Key words: Splenic travma, multidisciplinary, intensive care unit

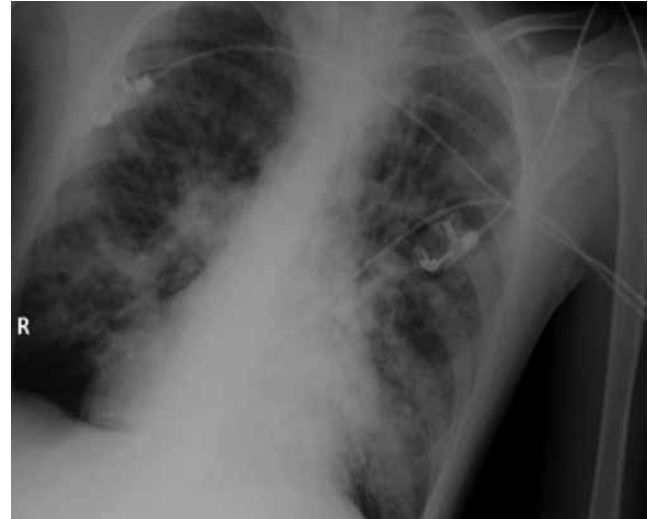


Figure 1. Plain chest radiograph shows diffuse infiltrates

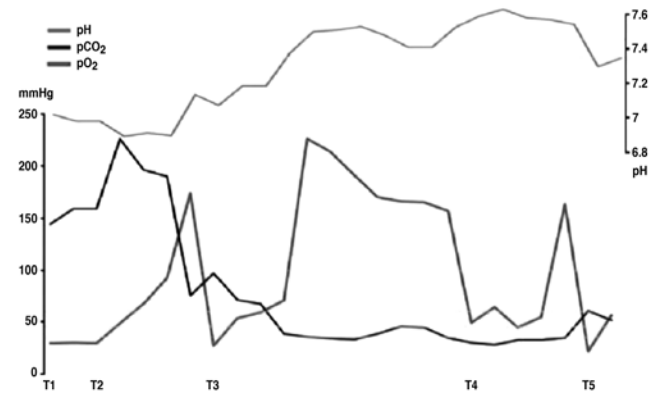


Figure 2. Arterial blood gas values of the patient. T1; admission to the ICU, T2; start of ECMO treatment, T3, T4 ve T5; hypotensive episodes

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ECMO Treatment for ARDS Complicated with Common Variable Immunodeficiency

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Introduction: We present a case of acute respiratory distress syndrome due to viral pneumonia and common variable immunodeficiency syndrome. Following initiation of extracorporeal membrane oxygenation, blood gas and hemodynamic findings improved, diuresis started, and the patient regained his consciousness. We discussed the veno-arterial extracorporeal membranous oxygenation treatment and its prognostic value in acute respiratory distress syndrome accompanied by cardiogenic shock.

Case: Seventeen-year old male presented with respiratory insufficiency and confusion. He had a history of common variable immunodeficiency syndrome since age of 7, frequent bouts of pneumonia, and pulmonary hypertension since the last 2 years. During the physical examination, cardiac arrest occurred, and he was taken to the ICU following return of spontaneous circulation. He was hypotensive, hypoxic and anuric, had bilateral rales on auscultation. Echocardiography showed normal LV function and dilated RV (PAP: 60 mmHg). He was diagnosed with severe ARDS, and put on lung protective mechanical ventilation. Due to recurring episodes of cardiac arrest, we decided to use venoarterial ECMO.

At the 6th hour of ECMO, he regained consciousness, and urinated 500 ml. There was a brief episode of hypotension following the urine output, however we were able to decrease the inotropic support after adequate IV hydration. At the 24th hour of ECMO, another hypotensive episode following a diuresis of 600 ml was followed by cardiac arrest and the patient died.

Venoarterial ECMO is not indicated in ARDS with isolated respiratory insufficiency. However we preferred venoarterial ECMO due to recurring episodes of cardiac arrest and cardiogenic shock. We observed two episodes of hypotension following gross diuresis.

Conclusion: We conclude that venoarterial ECMO is useful for ARDS cases with cardiogenic shock. However, hypovolemia is a major risk factor for hemodynamic instability. Therefore fluid therapy should be closely monitored.

Key words: Acute Respiratory Distress syndrome, extracorporeal membrane oxygenation, Common Variable Immunodeficiency syndrome

P-213

Hemodialysis to a Patient with Amitriptyline Intoxication

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Introduction: Tricyclic antidepressants (TCA) poisoning is one of the most common causes of drug poisoning requiring treatment in emergency medicine department. Among these, the most common drug is amitriptyline. Especially, when more than 1 gram, amitriptyline intake is a life threatening condition. Deaths occurs in the first few hours after taking the drug. In this study, it is aimed to present the follow-up and use of hemodialysis for the management of amitriptyline intoxication.

Case: A 35-years-old male patient with a history of two suicide attempts admitted to the emergency department after taking 35 tablets of amitriptyline (Laroxyl 25 mg). In his clinical examination, the patient was unconscious, there was no orientation and cooperation and his Glasgow coma score (GCS) was seven. His blood pressure and pulse were 100/50 mmHg, 147/min, respectively. Gastric lavage and activated charcoal were administered. Due to high dose of amitriptyline hemodialysis was planned. Following the right femoral vein cannulation, hemodialysis was applied to patient for 4 hours. After hemodialysis, electrocardiogram findings improved and the patient was conscious. On the 48th hour the patient was discharged.

Conclusion: Amitriptyline poisoning's serious complications may occur within first 6-8 hours. The most frequently affected systems are central nervous and cardiovascular system. Some studies reported that patients with deep coma, cardiovascular findings after high-dose amitriptyline intake were fully recovered and discharged with hemoperfusion. Seizures and respiratory depression are especially seen in large dose intakes, bicarbonate and fluid therapies still remain their importance, and if acidosis and hypotension persist for a long time may increase mortality rate. Hemodialysis and hemoperfusion use is a controversial topic but they should be kept in mind for severe cases.

Key words: Amitriptyline intoxication, tricyclic antidepressant, hemodialysis

P-214

Emphysematous Gastritis: A Case Report

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Introduction: Gastric pneumatosis is the presence of gas in the stomach wall which a rare finding seen in various clinical situations. Emphysematous gastritis is extremely rare variant of gastric pneumatosis and it is a potentially fatal disease. We presented a case of emphysematous gastritis following in ICU.

Case: We present a 66-year-old male with history of hypertension, chronic renal failure. Patient presented to the emergency room with swallowing dysfunction, and hospitalized due to acute renal failure. During follow up the patient developed microangiopathic hemolytic anemia and thrombocytopenia. Atypical hemolytic uremic syndrome was diagnosed, plasmapheresis and steroid was performed. As disorientation and respiratory distress developed, patient was intubated and admitted to ICU. The treatment including plasmapheresis, hemodialysis, and steroid was continued in ICU. During septic shock treatment cardiac arrest developed on the 21. day Succesfull Cardiopulmonary Resuscitation (CPR) performed. Computed tomography (CT) of the lung was obtained due to suspicion of pulmonary embolism which showed pleural effusion. We performed pleuracane and then cardiac arrest developed, succesfull CPR was performed. Gas in the stomach wall identified on the lung CT scan, EG was diagnosed. Conservative treatment maintained because of clinical instability. Patient died 2 days post-resuscitation caused by multiple organ failure.

Conclusion: Emphysematous gastritis is a rare clinical condition. The mechanism of EG is unclear and likely multifactorial. A variety of comorbid conditions including immunosuppression, recent surgery, dialysis, and diabetes mellitus have been proposed as potential risk factors. Clinical manifestations are usually nonspecific. The patient may have symptoms of abdominal pain, peritoneal sings, elevated WBC, often resulting in a fulminant clinical course. In cases which have potential risk factors, EG should be considered and it is important to provide prompt diagnostic imaging (including CT) and early appropriate treatment in order to improve prognosis.

Key words: Emphysematous gastritis, gastric pneumatosis

P-215

Meningoencephalitis Secondary to Odontogenic Infection in the Third Trimester of Pregnancy

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Introduction: Odontogenic infections rarely spread intracranially to cause complications such as meningitis, encephalitis¹. Meningitis may derive from metastatic spread or it may be due to nearby thrombophlebitis¹. We present a case in which meningoencephalitis occurred in the third trimester of pregnancy secondary to odontogenic infection.

Case: 35 year old woman at 35 2/7 weeks of gestation presented with mental status changes, fever, fatigue, tooth ache, head ache, nausea and vomiting to emergency department. Cesarian delivery was performed. After alive fetus birth, the patient was admitted to the intensive care unit with the diagnosis of acute meningoencephalitis. A few days prior to the admission to intensive care unit (ICU), the patient was suffering from toothache, head ache and eye pain. In her history there was not any specific findings for diagnosis. On admission to ICU, her vital signs were blood pressure 70/30 mmHg, pulse 130 beats/min, respiratory rate 25/min with 38. OC fever. Glasgow coma scale was 6. A complete blood count revealed a white blood cell count of 10,110/ μ L with 92.8% neutrophils, erythrocyte sedimentation rate (ESR) of 89 mm/h and C-reactive protein of 215.2 mg/L. Leukocyt count was 23 103 in cerebrospinal fluid (CSF). 1 mg/kg vancomycin twice a day, meronem 2 gr, acyclovir 750 mg three times a day were administered immediately. A CSF culture was sent to laboratory to identify the bacterial menengitis. Cranial computed tomography (CT) showed that hiperdensity at frontal, sphenoid, ethmoidal sinuses and widespread cerebral edema. On day 15, cardiopulmonary arrest was occurred and ressussitation was unsuccessful.

Conclusion: Odontogenic infections arise from the teeth themselves or from periodontal tissue and odontogenic infections rarely spread intracranially to cause complications such as thrombosis of the cavernous sinus, abscess, or meningitis². Pregnant women should not be denied dental care, especially in the setting of periodontal disease.

Key words: Encephalitis, meningitis, focal infection, dental

P-216

A Dramatical Loss After Chemotherapy

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Introduction: Hodgkin disease is a lymphoproliferative disease with an incidence rate of 2.7-2.8 per 100.000 individuals. ABVD protocol is routinely used in the treatment. This protocol is considered as less toxic than other chemotherapeutic schemes.

Case: A 3 years old female patient with a diagnosed classical histological type Hodgkin lymphoma was hospitalized to administer ABVD protocol. Three days after from procedure patient was discharged with stable vital and laboratory results.

Three days later patient appealed to hospital with fever, weakness and anemia. Antipyretic use and intraabdominal pathology were the initial diagnoses. An abdominal ultrasonography detected a suspicious intestinal invagination. Abdominal tomography detected no pathology. She was transferred to intensive care unit with epileptic seizure, loss of consciousness and respiratory failure. Glasgow coma score was measured as 3 and pupil reflex wasn't detected. The patient has also suffered hypothermia and seizures continued occasionally. anti-edema therapy was initiated after detection of severe brain edema in brain tomography. Patient died in the 13th day of intensive care unit observation and treatment.

Chemotherapeutics which are used for malignant tumors have lots of known or unknown side effects. Sepsis and tumor lysis syndrome were the first suspicious clinical considerations. Gastrointestinal bleeding considered as side effects of antipyretics and steroids. Seizure and loss of consciousness considered as other side effects of chemotherapeutics. Patients' clinical situation evaluated as sepsis related to chymotherapeutics.

Conclusion: Because of side effects of chemotherapeutics, especially in pediatric patients, it is important to monitorize patients closely and observations should be performed frequently. In addition, seminars related to side effects of chemotherapy can be given to the families of the patients. We believe that patient losses due to the side effects of chemotherapy can be reduced in this way.

Key words: Brain edema, chemotherapy, Hodgkin disease

P-217

Sepsis Treatment of Cerebral Palsy Patient in the ICU

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Introduction: Cerebral Palsy (CP) is an emerging or infant brain disorder that causes non-progressive activity limitation due to posture damage. Although advances in neonatal care in recent years caused a reduction of neonatal mortality, it increased infants and children suffering from CP. In this presentation, we aimed to provide a patient with CP whom we cared in intensive care unit for 110 days because of aspiration pneumonia. Eighteen years old, 19 kg, male, CP patient, were considered to our intensive care unit (ICU) with impaired general condition and respiratory failure. GCS was 7 and the patient was awareness. The Patient was intubated and mechanical ventilator mode was adjusted as SIMV mode. Bilateral crackles and rhonchi were detected on auscultation of the chest. Epilepsy was present as neurological disease too. Vital signs at ICU admission; HR: 117, SpO₂: 88% BP: 85/35 mmHg. Laboratory values were remarkable for Na⁺ 161 mEq/L, creatinine 2.1 mg/dL, BUN 164 mg/dL. ABG pH 7.32, PaCO₂ 73 mmHg, PaO₂ 40 mmHg. While endotracheal tube aspiration, food residues and heavy secretions were aspirated. Empirical antibiotic therapy was started. Blood, urine and sputum cultures were determined. Pseudomonas aeruginosa identified on blood and urine cultures, also candida albicans identified on urine culture. His chest X-ray showed bilateral infiltrate areas. The patient extubation was attempted twice with T-tube. After two unsuccessful attempts of extubation, on the 12th day of intubation tracheostomy was performed. Inotropic support was started because of hypotension which did not answer the fluid resuscitation. Inotropic support was interrupted after the normalization of blood pressure. Antibiotic treatment was discontinued after the infection treated, tracheostomy was closed and epileptic seizures were controlled. After 110 days in the ICU, the patient was transferred to the neurology service. It is very difficult to treat pneumonia or sepsis in intensive care units patients with CP. Such patients requires well coordinated and hard working with specialties.

Key words: Cerebral palsy, sepsis, intensive care unit

P-218

Tracheobronchial Barium Aspiration in A Geriatric Patient

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Introduction: Barium sulphate is accepted safe because it is not absorbed from mucosa and it is widely used. Accidental aspiration of barium is frequently seen and its clinics is silent.

Case: 74 years old male ASA II patient who had increasing hoarseness for 3 months came for total thyroidectomy operation. After the operation he was extubated but because of respiratory problems he was transferred into intensive care unit (ICU). In first examination he was conscious, TA: 126/78 mmHg, pulse 84/min, SpO₂: 94% respiratory rate: 15/min. Continuous positive airway pressure (CPAP) with f: 14/min, PEEP: 5 cmH₂O PSV: 15 mmHg ventilation parameters was started. During ICU follow up severe cough was observed after oral intake and then barium esophagography was performed and bronchial escape of barium was observed (Figure 1). At flexible bronchoscopy the larynx was highly deformed and no tracheoesophageal fistula formation was observed. No invasion or damage was seen at esophagogastroduodenoscopy. Arterial blood gas examinations indicated respiratory problems and mechanical ventilation at SIMV-VC mode with FiO₂: 50%, PEEP: 5 cmH₂O, TV: 6 ml/kg, PIP: 25 mmHg parameters. Quick excretion of the foreign material is maintained with aspiration, bronchodilator and mucolytic agent usage. No pathological complications like ARDS, bacterial or chemical pneumonia were observed. At 6th day of ICU follow up he was extubated and transported to surgery service.

Accidental aspiration of little amount of barium sulphate into airways or lungs is frequently seen in clinics (1). This little amount of aspiration

of barium sulphate can be tolerated but greater amounts of barium sulphate can reach to lungs rarely and this situation can result with inflammation and death.

Conclusion: We think the tracheal aspiration of this barium is a result of decrease in swallowing reflex. In geriatric patients this situation should be kept in mind and it should be clinically evaluated.

Key words: Tracheobronchial aspiration, barium aspiration, geriatric patients, intensive care unit

Reference

1. Signa Vitae 2007;2:25-8.



Figure 1. Barium aspiration

P-219

Herpes Simplex Encephalitis Associated with 9th Cranial Nerve Palsy: A Case Report

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Introduction: Herpes simplex virus encephalitis (HSE) is among the most commonly and has high mortality and morbidity in humans. The typical presentation of HSE consists of psychotic behavioral disorders, seizures, hemiplegia, speech disorders, amnesia, stupor and coma. The aim of this study was to describe the dysphagia and taste disorders with a case of herpetic encephalitis.

Case: A 27-year-old woman with oral intake, inability to swallow saliva and generalized weakness, decreased appetite for 2 days. Physical

examination on admission reported fever. Magnetic resonance imaging (MRI) of the brain showed bilateral temporal hypodensity. Acyclovir and seftriakson were started, but was without benefit. Her cerebrospinal fluid demonstrated a transparent color and CSF samples were sent for quantitative real-time polymerase chain reaction (PCR) assay which showed presence of herpes simplex virus DNA. The patient received intravenous acyclovir therapy for three weeks. The gag reflex was reduced with a positive curtain sign on the soft palate palsy. The patient exhibited a nasal voice, difficulty in swallowing, taste disorders, dysphagia and regurgitation of consumed liquids into the nasal cavity. We diagnosed the patient with glossopharyngeal nerve palsy associated with herpes simplex encephalitis. At 1 month the patient had to. Brain MRI showed lesions in right frontal and occipital regions.

Conclusion: Herpes simplex encephalitis may a possible cause of glossopharyngeal nerve palsy and that it is therefore important for clinicians to pay close attention to their patients.

Key words: Herpes simplex virus, encephalitis, cranial nerve palsy

P-220

Intrathecal Morphine Treatment in the Patient with the Pain After Chest Trauma: A Case Report

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Introduction: Pain is a normal response to the actual or potential tissue damage. Pain is not only associated with unpleasant emotion, it also activates the neuroendocrine stress response that results with the catecholamine releasing from the adrenal medulla. Acute pain can affect functions of all body systems and lead to increased risk of the mortality and morbidity. The pain after the chest trauma may lead to reduction on the forced expiratory volume in 1 second (FEV1), functional residual capacity (FRC) and atelectasis. In this case report, we aimed to present intrathecal morphine treatment in the patient with the pain after chest trauma.

Case: Seventy eight years old male patient with the chest trauma was hospitalized and endotracheal tube was inserted due to the respiratory distress. Radiological evaluation revealed that the fractures of the second to sixth costa, left hemothorax, right pneumothorax. The patient was transferred to the intensive care unit and received four boluses tramadol 100 mg intravenous and four boluses paracetamol 1000 mg intravenous per day. Because of continuing the pain the morphine 5 mg four doses per day was supplied to the treatment. In the second day, the patient's pain decreased, spontaneous breathing became adequate and so the patient was extubated. The patient visual analog scale score (VAS) was above 5, in the short time after the extubation respiratory failure and hypercapnia was occurred. The patient was re-intubated. In the sitting position, morphine 400 mcg administered intrathecally. Extubation provided after the patient's VAS was below 3. After the extubation the patient respiratory dynamics were adequate.

Conclusion: Opioids are the most potent analgesic drugs that act centrally. Administration of intrathecal opioids are widely accepted technique in the post operative pain management. Morphine via spinal route can provide excellent analgesia for a long duration and may be the alternative analgesic option in the intensive care unit.

Key words: Injections, spinal, morphine, pain

P-221

Malposition of Central Venous Catheter: A Case Report

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Introduction: The central venous catheter (CVC) interventions have recently become very important as a small surgery intervention. It has frequently been used in intensive care units for medicine and blood production infusion, central venous pressure observation, urgent dialysis access pathway, parenteral nutrition, infusion of chemotherapy drugs and in complicated cases which require long term follow-up and a wide vein passage.

This procedure performs commonly on bad side with local anesthesia. In spite of minor surgical procedure, it can cause serious complications due to technical mistakes. The malposition is the most common complication.

Case: A 55 year old female patient with the diagnosis of pancreatic ca was accepted to intensive care unit for planned total parenteral nutrition; CVC was inserted into the right subclavian vein. The P-A chest radiography showed that inserted subclavian catheter malpositioned in left subclavian vein through the innominate vein (Figure 1).

Conclusion: The procedure was repeated and the catheter was inserted into its intended correct location Vena cava superior.

We aimed at stressing the importance PA lung graphy in early detection of CVC malposition, one of the complications encountered with the increase in frequency of usage.

Key words: Central venous catheter, malposition, posterior-anterior lung graphy



Figure 1. Table should take place at the end of the summary

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Adalimumab Induced ARDS in a Patient with Crohn's Disease

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Introduction: Adalimumab (Humira®) is a monoclonal antibody against tumour necrosis factor-alpha (TNF α) that is increasingly used for inflammatory and autoimmune diseases such as Crohn's disease (CD). Anti-TNF medications have been associated with an increased risk of developing other autoimmune diseases and interstitial lung disease (ILD). We report here a case of adalimumab induced acute respiratory distress syndrome (ARDS) in a patient with CD and ankylosing spondylitis, without a history of ILD.

Case: A 58-year-old man with a past medical history of CD and ankylosing spondylitis was started on adalimumab because of the CD process



Figure 1. Chest X-ray reveals bilateral diffuse infiltrates

persisted, after chest X-ray showed no evidence of previous tuberculosis and intradermal test for tuberculosis (PPD) was negative. Five days after receiving the third dose of adalimumab (40 mg subcutaneously, weekly) the patient developed progressive dyspnea, tachypnea and fatigue. On examination he had bilateral diffuse rales and hypoxemia with PaO₂: 47.1 mmHg (PaO₂/FIO₂: 157). Chest radiography revealed bilateral diffuse infiltrates with no cardiomegaly, computed tomography showed diffuse ground-glass opacities in both lungs and bilateral pleural effusion (Figure 1, 2). The patient was admitted to intensive care unit because of acute respiratory failure, a presumptive diagnosis of ARDS due to viral infection in an immunosuppressive patient was made. Adalimumab was discontinued and put on noninvasive mechanical ventilation. Empirical antiviral started initially was stopped after three days as the sputum smear, culture and Cytomegalovirus antigenemia assay were all negative. Therefore we diagnosed adalimumab-associated ARDS. After one week of the therapy the patient showed progressive reduction in dyspnea, arterial blood gas values and chest radiography improved remarkably.

Conclusion: Causation of lung injury resulting from anti-TNF drugs therapy should always be considered, after rulling out other causes of pulmonary diseases. The clinical improvement after therapy stopped strongly supports the diagnosis.

Key words: Adalimumab, ARDS, Crohn's disease



Figure 2. Chest computed tomography showing pulmonary ground-glass opacities and bilateral pleural effusion

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Acute Respiratory Distress Syndrome Treated with Lung Protective Ventilation

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Introduction: Acute respiratory distress syndrome (ARDS) is the process that is characterized by severe hypoxemia and increases mortality, morbidity and the cost in intensive care unit (ICU). In this report, a patient with ARDS followed in the ICU with protective lung ventilation strategy was evaluated.

Case: 62-year-old female patient with respiratory failure was brought by 112 to emergency department. She had an history of chronic obstructive pulmonary disease and severe mitral valve regurgitation (MVR). She was intubated in the emergency room then admitted to our ICU. She was unconscious with a glasgow coma scale (GCS) of 3. Her arterial blood pressure was 105/68 mmHg, heart rate: 125/minute, temperature: 36.4 and rhonchi were heard bilaterally. Her white blood cells were 21.000/mm³. Synchronized intermittent mandatory ventilation (SIMV) mode with a tidal volume (TV) of 6 ml/minute, frequency: 18/minute, positive-end-expiratory pressure (PEEP): 5 cmH₂O, FIO₂: 0.90 was initiated. Her arterial blood gas values were; PH: 7.07, PO₂: 71.8 mmHg, HCO₃: 13.7, PCO₂: 54 mmHg, laktat: 60, at the same time. Severe MVR was determined by a cardiologist via an echocardiography and cardiogenic pulmonary edema was not considered. Due to the presence of bilateral infiltrates in lung and PaO₂/FIO₂ ratio is <200, ARDS was considered as a diagnosis (Figure 1). Antibiotherapy, nutrition, sedation was initiated and PEEP was increased step by step for adequate oxygenation. Lung protective ventilation strategy with TV of 6ml/kg, respiratory rate: 16-18/minute, PEEP: 8-12 cmH₂O, FIO₂: 0.90-0.40 was applied for ten days. Sedation was stopped at 11th day of hospitalization and her GKS was 11. Then CPAP-SIMV mode was used intermittently and she was extubated at 16th day and transferred to service with hemodynamically stable status.

Conclusion: Diagnosis and treatment approaches are the most important factors affecting the morbidity and mortality of the patients with ARDS. Lung protective ventilation with optimal PEEP is effective in improving oxygenation.

Key words: ARDS, low tidal volume, PEEP



Figure 1. Bilateral pulmonary infiltrates

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Muscle Strength Assessment and Respiratory Rehabilitation with Hypnotherapy in a Case with Guillain-Barre Syndrome in the Intensive Care Unit

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Introduction: Guillain-Barre syndrome (GBS) is an acute inflammatory demyelinating polyradiculoneuropathy which affects nerve roots, cranial and peripheral nerves. There may be such symptoms as symmetric numbness in the extremities, dyspnea and orthostatic hypotension. Patients with GBS may develop quadriparesis and become ventilator-dependent.

This case report aims to present the use of hypnosis as adjuvant therapy for GBS patients followed in the intensive care unit.

Case: A 26-year-old male patient was hospitalised in the neurology unit with a preliminary diagnosis of GBS when the symptoms increased three days after the onset of numbness. Muscle strength of the extremities was 2/5 tetraparesis. Deep tendon reflexes were absent. He had a high cerebrospinal fluid protein level (53mg/dl). 15 days after the completion of IVIG treatment (0.4 g / kg / day) for 5 days, which coincided with the third week of the hospitalisation, the patient was taken to the ICU due to respiratory distress and aspiration. Hypercapnia and respiratory acidosis were present in the arterial blood gas. The patient was intubated and mechanically ventilated. The patient was extubated on the fifth day. After extubation, SpO₂ was approximately 89-90%. 8-minute hypnosis was administered on the second day of extubation. During the hypnosis session, suggestions about relaxation, serenity, confidence, health and increased lung capacity were given. The patient was taught self-hypnosis. During the hypnosis session, SpO₂ increased to 98%. After 24 hours, muscle strength of the upper and lower extremities was 3/5. A second hypnosis session was made 2 days later. The patient was discharged to the neurology unit 7 days later.

Conclusion: In neurological cases with impaired overall condition such as GBS requiring intensive care, hypnotherapy is a safe and effective method for respiratory rehabilitation, increased muscle strength and physiotherapy.

Key words: Gullian Barre Syndrome, hypnosis, intensive care unit, muscle strength

P-225

Methyl Alcohol Intoxication and Early Hemodialysis in Intensive Care Unit

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Introduction: Methyl alcohol is a colourless substance in solvents, varnishes, antifreeze and cologne. Its oral ingestion, inhalation or transdermal exposure may lead to central nervous system depression. Headache, nausea, vomiting, weakness and loss of vision may be seen in methyl alcohol intoxication. This may lead to coma and even to death. This case report aims to present an effective and successful treatment with supportive therapy and hemodialysis in a case of methyl alcohol intoxication.

Case: A 44-year-old male patient called for help by phone as he felt bad after drinking cologne. The patient found unconscious at home was admitted to a hospital. He had agitation and blurred consciousness. After 2 mg midazolam was injected, he was taken to the intensive care unit (ICU). When admitted to the ICU, he was unconscious, his pupils were dilated. He had respiratory rate of 24 breaths per minute and SpO₂ was 95%. When he was given 4 L/min oxygen with a mask, the blood gas test indicated pH: 7.32, pCO₂: 43, pO₂: 131, HCO₃: 21.5 BE: -3.1. As an antidote treatment, the patient received an intravenous loading dose of 10% ethyl alcohol 10 mL/kg for 15 minutes and a subsequently continuous infusion of 1.5 mL/kg/h. He was also given intravenous B vitamins.

At the third hour of his stay in the ICU, he had blurred consciousness. The blood gas values were pH: 7.25, pCO₂: 48.6, pO₂: 182, HCO₃: 17, BE: -8 and serum osmolality was 306 mmol/kg. Due to the continuation of the coma, hemodialysis was planned. Near the end of the hemodialysis of two hours, the patient regained consciousness. After the hemodialysis, he was conscious and cooperative. The patient reported that he had clearer vision. 72 hours later, the patient was discharged to home without any complaint.

Conclusion: Early diagnosis, accurate, and fast treatment are crucial in patients with suspected methyl alcohol poisoning.

Key words: Methanol intoxication, ethanol, hemodialysis

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The Extended (65 and 75 days) Use of Central Venous Catheters in Two Patients in Intensive Care Unit

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Introduction: Central venous catheters (CVCs) allow long-term venous access and are indispensable in modern-day medical practice, particularly in intensive care units (ICUs). Main complication of intravascular catheters in critically ill patients is catheter-related bloodstream infections (CRBI) and this have been reported to occur in 3 to 8% of inserted catheters and are the first cause of nosocomial bloodstream infection in ICUs. The use of care protocols; experienced personnel involved in catheter changing and care; use of biomaterials that inhibit microorganism growth and adhesion; proper hand hygiene, skin disinfection and manipulation of the vascular line; preference for the subclavian vein route, using full-barrier precautions; and removal of unnecessary catheters.

Case: By strictly adhering to these preventive measures and having the literature information that catheter replacement over a guide wire has become an accepted technique for replacing a malfunctioning catheter and has significantly lower rate of mechanical complications than are those percutaneously inserted at a new site, we left the CVCs of our two selected ICU patients 65 and 75 days consequently, both of whom has been effected from debilitating advanced stage of Alzheimers disease. Both catheters were non-tunneled type CVCs. In both patients, the signs that suggested infection has never seen.

Conclusion: The distal 5 cm of the CVC was collected aseptically in a sterile tube and transported immediately to the laboratory for culture. The microbiologic procedure as Maki et al. defined, the semi-quantitative culture of catheter tip was rolled back and forth on 5% Sheep-Blood agar plate. The plate was incubated for 72 hours at 5% CO₂ and no growth were seen.

In conclusion, routine replacement of full functioning CVCs without local or systemic complications is not obligatory and has no evidence for the period could be extended to longer days like 65 or 75 as in our cases.

Key words: Central venous catheters, catheter infection, extended use

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Bilateral Carotid Artery Dissection Following Blunt Head Trauma

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Introduction: The incidence of internal carotid artery dissection (ICAD) caused by blunt trauma has been reported to be 0.67%. Traumatic ICAD is often accompanied by thrombosis, resulting in permanent neurological deficits and carrying a mortality rate of up to 40%. Initial recognition by clinicians is often difficult because of the diverse clinical manifestations, the delay in presentation of symptoms, and the associated multi-organ system injuries that accompany carotid injury.

Case: We report a case with delayed diagnosis of traumatic bilateral carotid dissection in a 36-year-old male who had a car accident. The patient was intubated in our emergency room because he was unconscious and had a Glasgow Coma Score of 7. There was only a mild cerebral edema on the first cerebral computerized tomography (CT) which did not necessitate any surgical intervention. On the second CT which was taken at the second day of admission severe cerebral edema and midline shift (10 mm) was reported and decompressive craniectomy was performed. The third CT was taken on the 7th day of admission due to neurological deterioration, and a massive cerebral infarction was diagnosed in the right cerebral hemisphere. Carotid doppler ultrasound and cerebral digital subtraction angiography (DSA) showed totally occlusion of the right internal carotid artery (ICA) and pseudoaneurysm in the left ICA which caused 50% occlusion. Invasive intervention was not suggested by radiologist and neurosurgeon. Anti-coagulant therapy and other conventional therapies were given.

Discussion: Traumatic ICAD is a rare and serious cause of embolic stroke. Its diagnosis can be easily missed or delayed especially in patients who are in a comatose condition due to severe head trauma. A high index of suspicion is necessary to avoid delay in diagnosis and initiating appropriate treatment. This delay may result in long-term neurologic sequelae or death.

Key words: Head trauma, carotid dissection, cerebral infarction

P-228

The Importance Of Candida Score In Starting Early Empirical Antifungal Treatment (A Case Report)

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Introduction: Invasive Candida Infections (ICI) are associated with high mortality, especially in critical patients. Rapid initiation of appropriate antifungal therapy is essential for the control ICI and has been shown to reduce mortality. In this study we report a patient who was treated by using of the Candida Score (CS) before getting the culture results.

Case: A 60 years old male patient with traumatic subarachnoid bleeding, hemopneumothorax was admitted to the intensive care unit. He had also co-morbidities (i.e. diabetes, hypertension).

Anti-edema therapy, mechanical ventilation were started following tube-thoracostomy. Parenteral nutrition was started due to gastro-paresis. On the 9th day of his hospitalization, *Citrobacter koseri* was isolated from blood culture and therefore Meropenem and Tigecycline were started. On the 8th day of the antibiotherapy, 38.7 oC fever and 13000/mm³ leukocytosis were detected. CS was determined as 3, therefore the blood, urine and tracheal cultures were done and antifungal therapy (Fluconazole) was started on the same day without waiting for the culture results. On the 3rd day of the treatment, the patient had 37.3 oC fever, and leukocyte number decreased to 8300/mm³. *Candida albicans* isolated from blood culture. The antifungal treatment was ended 18th day. All the laboratory and clinical parameters became normally and the patient was transferred to neurosurgery clinic on the 38th day of his hospitalization.

Conclusion: The CS was defined by Leon et al. (1). According to CS; our case had >3+ score due to heavy sepsis and parenteral nutrition. When high fever and leukocytosis were appeared on the 8th day of the antibiotic treatment, the deterioration of the situation of the patient was prevented by empirical fluconazole treatment.

We concluded that when there is the suspicion of candidiasis in critical patients, starting early treatment by using of CS has positive effects on mortality and morbidity.

Key words: Candida score, intensive care

Refrence

1. LeonC. Crit Care Med,2006

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Sudden Death After Butane Inhalation

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Introduction: Butane is a gas that exists in two isomers at room temperature. It is highly toxic because it is lipophilic and highly volatile. Butane-induced myocardial infarction is a rare presentation among teenagers. We report on a 16-year-old male who sustained cardiopulmonary arrest after sniffing butane of cigarette light.

Case: A 16 year old junior Upon arrival of the emergency medical team he suffered cardiovascular arrest. He underwent successful cardiopulmonary resuscitation and was stabilized subsequently. Ventricular fibrillation was seen two times but turned to sinus rhythm with defibrillation. Electrocardiography and echocardiography showed no specific abnormality. Left ventricular ejection fraction was 65% and cardiac enzymes were normal.

On admission to intensive care unit (ICU), glasgow coma scale was 4 and thiopental infusion was started for treatment of resistant convulsions. Arterial blood gas analysis was PH: 7.33, PO₂: 129, PCO₂: 26, HCO₃: 20, Sat O₂: 98.6. Computer tomography showed no abnormality on admission to ICU. On day two, he was extubated. Haloperidol 5 mg 2x1 intravenously was administered for persisting agitation, desorientation, confusion. Magnetic resonance imaging was unremarkable and electroencephalogram ruled out any epileptiform activity. On day 7, he was discharged. He complained chest pain 1 month later, holter electrocardiogram was performed and no pathological findings was found.

Conclusion: Lethal intoxication is more accidental than suicidal by causing death through several mechanisms: vagal inhibition, respiratory depression and "sudden-sniffing death syndrome" following cardiac arrhythmia^{1,2}. Brain edema has been described after butane intoxication, but details of its development remain unclear. In addition to direct toxic effects may be observed disintegration of grey matter and increasing cerebral atrophy on MRI 3 weeks after butane intoxication has been found in a survivor of an acute intoxication³. Brain edema could have been the result of not only the direct toxic effect of butane but also of brain ischemia due to cardiovascular arrest.

Key words: Butane, myocardial infarction, death, sudden

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Treatment of A Late Post-Partum Massive Pulmonary Thromboembolism Case with Factor V Leiden Mutation

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Introduction: Pulmonary thromboembolism (PTE) is a major consequence and risk factor of morbidity in venous thromboembolism cases. Fibrinolytic treatment on these cases is a matter of debate and the potential benefits are unclear. We aimed to discuss a postpartum patient with factor V Leiden (FVL) mutation and massive thromboembolism who treated with Alteplase successfully.

Case: A 30 years old, postpartum patient with known factor V Leiden mutation was applied to lung disease clinic and hospitalized with lateral thoracic pain, coughing and dyspnea. A pulmonary angio CT scan was performed and bilateral subsegmental pulmonary arterial thrombosis was detected. Enoxaparin (2x0.6 u) was administered, unfortunately in the sixth hour of hospitalization, patients' oxygen deficiency and dyspnea has gone further, and transferred to our intensive care unit with a unconscious state. She was hypotensive and Glasgow Coma Score (GCS) was assessed as 3 points. In the cardiac echocardiography; right ventricular dilatation was observed, pulmonary arterial pressure was 35 mmHg. Enoxaparin therapy was stopped and Alteplase 100 mg infusion therapy was administered in 2 hours. Arterial blood pressure rose up to 110/55 in the first hour of Alteplase therapy and had a steady state dramatically. At the end of the fibrinolytic therapy she was extubated and was transferred to lung diseases clinic.

Pregnancy, puerperium and oral contraceptive treatment are potential risk factors for venous thromboembolism (VTE). Also FVL is a major risk factor for VTE and increases VTE incidence in patients who has another procoagulant disease/situation.

Conclusion: In patients with coagulation disorders who had a sudden respiratory and cardiac deficiency, pulmonary thromboembolism should be considered in differential diagnosis and treatment should be planned immediately. Although fibrinolytic therapy is not the first choice, it should be considered as an alternative treatment.

Key words: Factor V Leiden mutation, post-partum pulmonary thromboembolism

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Modafinil for the Treatment of Fatigue in Critically Ill Patients: Two Case Reports

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Introduction: Critically ill patients are at risk of long term neurological complications in intensive care unit (ICU). Early mobilization of these patients has become the standard of care. Psychostimulants such as modafinil show a rapid onset of antidepressant activity and a benign side effect profile. This report evaluated the efficacy of modafinil tablets in critically ill patients who are fatigued, somnolent and weakened. Modafinil have been shown to reduce these symptoms in various patient populations. We present a case series of 2 patients in postoperative intensive care unit.

Case: Two difficult-to-wean patients who have fatigue, somnolence and weakened with prolonged stay of ICU were discussed. First patient (77 years old, male) had multi organ injury due to car accident; second patient (82 years old, female) had gastrointestinal bleeding and Alzheimer disease. Their physical activity is limited because of their diseases and prevented them from participating in physical therapy. The patients were given 200 mg of modafinil every morning and 100 mg of modafinil every afternoon for four weeks. Over the following few days; patient wakefulness increased, their participation to rehabilitation encouraged, and enable a more restful sleep during the night. Although the drug wasn't the only reason why our patients became more active, the temporal relationship between starting the drug and our patients' clinical improvement makes it likely that it contributed.

Conclusion: Modafinil might be a rapidly effective, safe and well tolerated. It may improve functional outcomes, decreased ICU length of stay. Prospective, randomized, clinical case controlled trials are necessary to study for future research for critically ill patients.

Key words: Critical ill patient, modafinil, neurorecovery

P-232

Cardiac Arrest Following Butane Inhalation

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Introduction: Butane is frequently misused and a cause of intoxication. We present a case, who had a syncope and persistent ventricular fibrillation during the course of resuscitation. We discussed the management of this case in the intensive care unit and the accompanying difficulties in the light of the current literature.

Case: An eighteen-year-old male was brought to emergency ward following resuscitation for >1 hour, and was still in VF. He was on dopamine infusion, normotensive, tachycardic. Cranial CT and chest radiography showed mild edema. Echocardiography showed global hypokinesia. We started prophylaxis for VF. While we were planning for further tests to rule out a channelopathy or cardiomyopathy, some of his co-workers mentioned that the patient sniffed some lighter fluid before he fell unconscious. We continued to treat the cerebral oedema and heart failure. The patient's status improved. The next day, his glasgow coma score was 13, and he was spontaneously respirating at a rate of 16/min. He was put on assisted breathing support mode, and extubated eight hours later. On the third day, he was disoriented and uncooperative. Dopamine infusion and mannitol therapy were stopped, and the patient was started on enteral nutrition via a nasogastric tube. In the following days, his cooperation gradually improved, with frequent periods of agitation and disorientation. Cranial diffusion and venography MRI showed two subacute ischemic infarct zones. On the sixth day, the patient was cooperative, but disoriented. He was discharged to the neurology ward. After three months of rehabilitation, he started to work as a dozer operator.

Conclusion: Butane is frequently used for recreational purposes. As it is inhaled, butane rapidly reaches central nervous system. It causes hypoxia via ventilator depression. If resulting cardiac arrest is treated timely and adequately, the patient will suffer minimal neurological sequela.

Key words: Butane intoxication, heart arrest, brain hypoxia

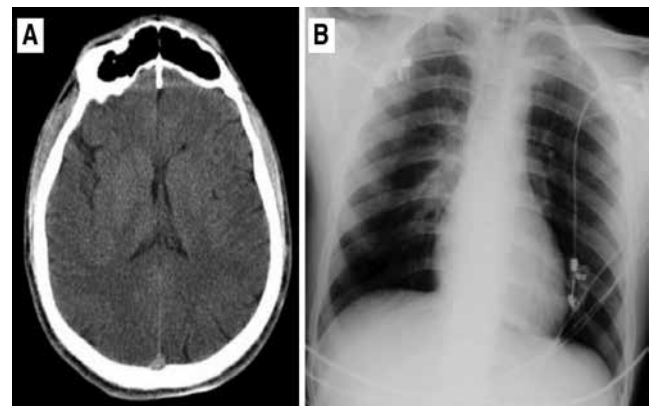


Figure 1. (A) Axial computerized tomography of the brain shows mild cerebral edema with effacement of cerebral sulci, (B) Plain chest radiography of the patient shows mild congestion

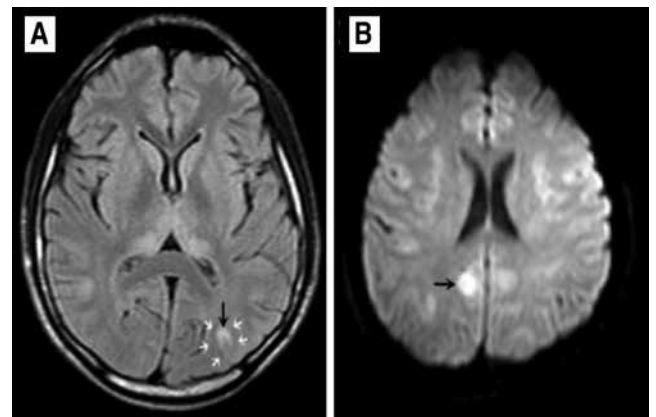


Figure 2. Axial magnetic resonance images show subacute ischemic infarction. (A) long, black arrow shows hyperintensity on T1-weighted image in left occipital lobe; short, white arrows show surrounding edema, (B) black arrow shows almost homogeneously hyperintense area on diffusion-weighted image in right occipital lobe

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Ankylosing Spondylitis Patients with Respiratory Distress

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Introduction: Ankylosing spondylitis (AS) is a chronic inflammatory condition that usually affects sacroiliac joints, axial skeleton and large peripheral joints. Upper airway obstruction may occur when cricoarytenoid joint involvement appeared (1). We aimed to present respiratory distress causes with a patient diagnosed a for 20 years who was followed up as chronic obstructive pulmonary disease (COPD) attack in emergency department.

Case: A 86 year old male was admitted to emergency department with shortness of breath with a history of AS and COPD (for 10 years). After a while, respiratory failure was occurred and it was decided to performed tracheal intubation for mechanical ventilation support, but it wasn't succeeded. So percutaneous tracheostomy was done and he was transferred to intensive care unit (ICU). He recovered rapidly in ICU and according to blood gas analyses and clinical status, T-tube weaning was applied successfully. Computed tomography (CT) evaluation showed that vertebral fusion, syndesmophytes (bamboospine), anterior longitudinal posterior interspinous ligament calcifications, emphysema areas, bilateral pleural effusion and tracheomegaly (anteroposterior diameter >30 mm) were existed. When the patient no longer needed mechanical ventilation without suspicion, silver tracheostomy cannula was placed. Direct laryngoscope examination was performed because of swallowing problems. Mouth opening measurement was normal. But, food materials going down directly to larynx was observed, and he discharged from hospital after percutaneous endoscopic gastrostomy procedure.

Conclusion: Chest wall restriction, interstitial lung disease and upper air way obstruction from involvement of cricoarytenoid joint, may found as pulmonary manifestations of AS. Padley et al. was presented a case of tracheobronchomegaly seen in association with AS (2). According to CT report in our case, tracheomegaly was discovered. At this point, we supposed that tracheomegaly and upper air way obstruction can lead to expiratory collapse, so the patient had been misdiagnosed as having COPD.

Key words: Ankylosing spondylitis, respiratory distress, chronic obstructive pulmonary disease

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Bilateral Vocal Cord Paralysis After a Suicide Attempt by Hanging

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Introduction: Hanging is a particularly lethal method of suicide with an estimated fatality rate of over 70%. The main causes of death amongst those reaching hospital alive are bronchopneumonia, pulmonary oedema and adult respiratory distress syndrome.

Purpose: We report 67-year-old man attempted suicide by hanging himself. A 67-year-old man presented with bilateral vocal cord paralysis after a suicide attempt by hanging.

Case: A 67-year-old man (height, 1.70 m; weight, 70 kg) had been sentenced to death by complete hanging and was executed in Isparta, Turkey. He was hanged by the neck and was fully suspended for 5 minutes. He recognized by his relatives. He had a score of 14 on the Glasgow coma scale (GCS). CT scan showed C2-C3 spinous process fracture, and there are no signs of motor and sensory nerves defects, hyoid fracture, subcutaneous emphysema, thorax CT scan showed pneumomediastinum. Bilateral vocal cord paralysis and oedema was shown in endoscopic laryngeal examination. He had respiratory insufficiency because of this tracheotomy accessed. On the 20th day after hanging pneumomediastinum disappeared. Patient was transferred to ward.

Conclusion: The majority of injuries appear to be secondary to compression of the internal jugular veins and the carotid arteries, resulting in cerebral hypoxia, and airway compression, resulting in global hypoxia.

The main causes of death amongst those reaching hospital alive are bronchopneumonia, pulmonary oedema, and adult respiratory distress syndrome. On the other hand rare complications like pneumomediastinum, vocal cord paralysis can cause morbidity in ICU. GCS is known as an independent predictor of the mortality of the near hanging cases at the arrival.

Conclusion; Our patient's GCS Scale at the arrival was also 14, he had no neurologic dysfunction but respiratory problems and vocal cord paralysis caused prolonged time stay in ICU.

Key words: Vocal cord paralysis, suicide, hanging, glasgow coma scale

P-235

Baclofen Intoxication

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Baclofen is an oral and injectable medication that relaxes skeletal muscles. Chemically, baclofen is related to gamma-aminobutyric acid (GABA), a naturally-occurring neurotransmitter in the brain. This drug is used for symptomatic relief of skeletal muscle spasm and spasticity. Overdose of this drug can cause profound central nervous system depression, including coma, hypotonia, respiratory depression, seizures, and cardiovascular effects. In this paper, we reported a case of 17 year-old female with suicidal baclofen overdose (200 mg) presenting to the emergency department with confusion and respiratory depression. She recovered and discharged after supportive care including mechanical ventilation and intermittant hemodialysis. The prognosis is good if full supportive care is administered properly in baclofen intoxication.

Key words: Baclofen, intoxication

P-236

Burkholderia Cepacia Pneumonia in a Long-time Hospitalized Intensive Care Patient

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Burkholderia cepacia is a low virulent gram negative and aerobic bacteria, usually found colonized in aqueous solutions. It is frequently a colonizing bacillus, but may cause nosocomial infections like catheter related bacteriuria, urosepsis, intra-venous line infections in patients with immune deficiency. *B. cepacia* is also an extremely rare reason of nosocomial respiratory tract infections. These infections can be seen in patients with cystic fibrosis and patients who have been treated with ceftazidime or fluoroquinolons. We aim to pay attention to this unusual cause of nosocomial pneumonia.

A 81 years old diabetic woman who hospitalized approximately 3 months ago for acute ischemic cerebro vascular disease had been treated in Intensive Care Unit (ICU) for 18 days. Then she was transferred to neurology clinic. After the end of the 20th day in neurology clinic, she had dyspnea, increased sputum and became lethargic. Hence, she was transferred to ICU again. *Klebsiella pneumoniae* was isolated from sputum sample. Piperacillin/tazobactam (4*4.5 g, iv) treatment was administrated. On the 14th day of antibiotherapy, she had subacute fever, dyspnea, and increased sticky mucous secretions. Leucocyte count was 9500/mm³. Chest x-ray showed infiltrates in right lung lower segments. *B. cepacia* was isolated from sputum culture. It was resistant to Piperacillin/tazobactam. Antibiotic therapy switched to Imipenem (4*500 mg, iv). On the fifth day of imipenem therapy, she was intubated and ventilated mechanically. Two days after intubation, she died from nosocomial pneumonia.

B. cepacia can be found on hands of health workers, respiratory equipments, iv lines, antiseptic soaps or hand lotions. Prior use of ceftazidime or fluoroquinolons facilitates nosocomial pneumonia. Our patient wasn't treated with these agents but long time hospitalization, co-morbidities and chronic illness made her target for opportunistic infections. In conclusion, *B.cepacia* is a rare but mortal infection which must be kept in mind as a cause of nosocomial pneumonia in ICU.

Key words: Burkholderia cepacia, nosocomial infections, pneumonia

P-237

Catheter Malposition into Contralateral Subclavian Vein: Two Consequent Cases

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Introduction: Subclavian vein catheterization is one of the essential procedures of intensive care units (ICU) which has many advantages including lower infection risk and higher patient comfort in terms of head and neck movement. Despite many benefits of this procedure its complications which may cause serious problems cannot be ignored. These complications may increase the morbidity and length of stay in ICU. We report two subclavian vein catheter malposition into contralateral subclavian vein.

Case 1: 23 years old female patient admitted to ICU with severe carbonmonoxide intoxication. She was found in coma situation in her house and immediately resuscitated by 112 team. On ICU admission her GCS was 4, she was hypotensive and tachycardic. Insertion of right subclavian catheter was performed by anesthesiologist with Seldinger technique. A 7.5 F triple lumen CVP catheter used under aseptic precautions. Guide movement was free during insertion and after placement of catheter, channels were aspirated with blood and fixed at 12 cm. A chest radiograph which performed to confirm the position of catheter revealed the C shaped malposition pattern into contralateral subclavian vein. Right subclavian CVC was removed and a new one was placed by Seldinger technique.

Case 2: 20 years old male patient with cerebral palsy admitted to ICU because of aspiration pneumonia. He was cachectic with signs of sepsis. His peripheral veins were invisible and very fragile. Because of the difficulties to find peripheral access, we inserted 7 F triple lumen CVC from right subclavian vein with Seldinger technique. Cannulation was performed without any difficulty and fixed at 13 cm after all channels were aspirated for blood. Before using the CVC chest X ray performed to confirm the catheter position which was depicting right subclavian vein catheter into contralateral subclavian vein. Subclavian CVC was removed and replaced with a new one.

Key words: Catheter, malposition, subclavian



Figure 1. Case 1

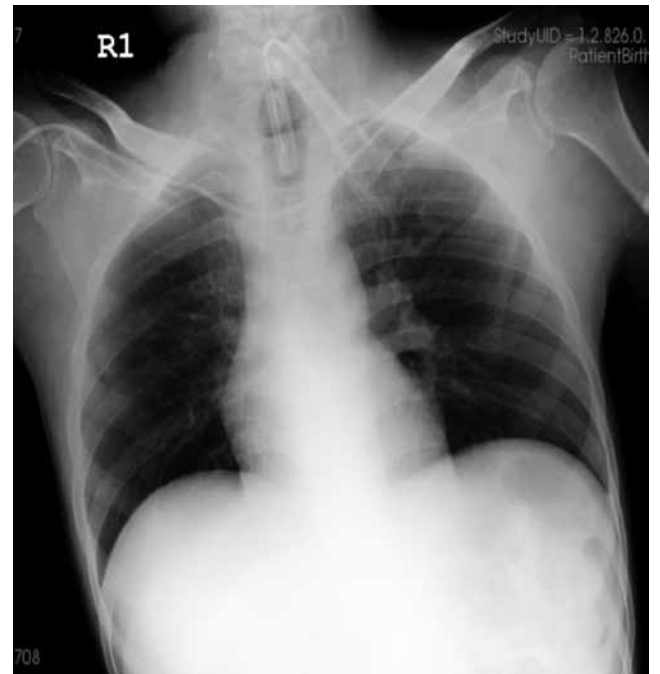


Figure 2. Case 2

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A Case with Diabetic Foot Infection, Acute Infective Endocarditis and Spondylodiscitis Caused by Methicillin-Resistant Staphylococcus Aureus

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Methicillin-resistant staphylococcus aureus may be isolated as the causative agent in cutaneous and soft tissue infections, pneumonia, osteomyelitis, endocarditis. Infective endocarditis may be associated with osteomyelitis and spondylodiscitis. In this paper, we presented a case with MRSA-associated spondylodiscitis and natural valve endocarditis in a 57-year-old patient with diabetic foot infection.

The main cause of increased methicillin-resistant staphylococcus aureus (MRSA) infections is inadequate hygiene conditions in hospitals and unnecessary antibiotic use. MRSA may be isolated as the causative agent mainly in cutaneous and soft tissue infections, pneumonia, osteomyelitis, endocarditis.

A 57-year-old male patient who had a purulent foot wound in the sole for 9 years was admitted to our outpatient clinic with complaints of fever elevating with shivering, low back pain hindering his movements and walking, widespread musculoskeletal pain, fatigue, loss of appetite. Thoracolumbar MRI obtained for low back pain revealed paravertebral abscess in corpus of T10-11 spines, in right anterolateral of T10-11 disc, hypointense images in T1 W series, hyperintense and contrasting images in T2W series consistent with spondylodiscitis. The patient was started piperacillin/tazobactam and daptomycin treatment with prediagnoses of diabetic foot infection and spondylodiscitis accompanied by systemic findings and threaten the extremity and as he had previously used various antibiotics. E. Coli (susceptible to piperacillin/tazobactam) and MRSA grew in smear culture and MRSA grew in blood culture. Left ventricle walls were concentric hypertrophic, 4-5 verrus with diameter of 0.3-0.6 cm were detected on atrial surface of mitral valve leaflets and moderate mitral insufficiency were detected on echocardiography and the patient was diagnosed with endocarditis. The patient was followed up in intensive care unit, fever was controlled, infection parameters improved on day 6 however cardiac failure findings deteriorated. The patient was evaluated by cardiovascular surgeons and he underwent operation. Antibiotic therapy continued postoperatively.

Key words: Spondylodiscitis, osteomyelitis, diabetes mellitus, MRSA, infective endocarditis

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Airway Management of Upper Airway Obstruction due to Giant Tumor in Intensive Care Unit

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Introduction: The continuity of vital functions depends on the preservation of the airway patency. Bulky tumors in the oral cavity and formations that cause external compression make it difficult to provide airway patency.

Purpose: To provide the most appropriate method to ensure airway patency in patients with dyspnea and respiratory failure. Also to highlight the implementation of alternative methods.

Case: 72-years old, unconscious female patient, whose general condition was poor has a bulk bigger than about 15x10 cm that covers the entire left cheek and oral cavity (malignant mesenchymal tumor). Her routine laboratory values were normal. The patient was in an unoperative stage. Because of development of respiratory distress due to upper airway obstruction, tracheostomy was planned.

Discussion: In patients with high probability of difficult mask ventilation, difficult laryngoscopy and difficult tracheal intubation and in cases of severe airway obstruction, it is important to avoid hemodynamic changes depending on hypoxemia and hypercarbia. In oral cavity lesions, that are bulky as in our patient, maintaining of airway patency is difficult even with minimal sedation. Insertion of nasopharyngeal airway can be life-saving as in our case. In management of these patients during tracheostomy process, maintaining spontaneous ventilation, oxygenation and sedoanalgesia is crucial.

Conclusion: The main responsibility of the physician is to protect and maintain airway patency. The best way to secure the airway is endotracheal intubation. However, in cases of difficult ventilation or intubation, supraglottic airway devices can be used. Because of the difficulty in placing due to intraoral bulk and its inability to prevent gastric regurgitation and aspiration, supraglottic airway devices are contraindicated in these patients. Therefore, the best method in these patients is tracheostomy. Alternative methods that can be applied in intensive care will increase the chances of successful airway management in difficult intubation.

Key words: Difficult airway management, giant oral tumor, tracheostomy

P-240

Our Experience on Two Cases with Lafora Disease at Intensive Care Unit and Anesthesia

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Introduction: Lafora disease (LD) is a form of progressive myoclonic epilepsy which is quite rare, adolescent-onset and autosomal recessive hereditary. In this report we aim to share our experience about general anesthesia practice and intensive care follow up of two brothers in our clinic.

Case 1: 17-year-old male patient was performed axillary skin biopsy because of generalized myoclonic seizures and hallucinations, diagnosed with Lafora disease. The patient's epilepsy attacks can not be prevented despite of arranging medical treatment and the disease advanced continuously. 25-year-old bedridden patient were admitted to hospital because of respiratory distress. Following this event, it was planned to open tracheotomy, tracheotomy was opened under midazolam and fentanyl sedation. The patient whose condition is stable, was discharged to home after his care. When he was 30 year old, propofol, fentanyl, rocuronium was administered for cataract surgery. Maintenance was provided by propofol and remifentanyl infusion. No complication developed after the surgery, the patient was discharged to home.

Case 2: 16 year old male patient diagnosed with LD because of generalized myoclonic seizures and antiepileptics were started. He presented to our emergency department with myoclonic status epilepticus and the prolonged clinical course of refractory seizures. Patient was admitted to our ICU to control prolonged seizures and for mechanical ventilation support. Despite the infusion of midazolam then thiopental respectively seizures didn't stop. After intravenous administration of propofol, fentanyl and rocuronium tracheotomy procedure was performed. We observed reduction in seizure after we ensure him a quite and dimly lit, fed with enteral solutions include carbohydrate. After 31 days of following up at hospital, charged with household ventilator.

Conclusion: During anesthesia procedures for any reason, to avoid applying etomidate and ketamine is important. Also consider that antiepileptic drugs like phenytoin, carbamazepine and vigabatrin should increase the frequent of myoclonic seizures.

Key words: Lafora disease, intensive care unit, anesthesia

P-241

ICU Follow-up on Wilson's Patient Who Had Fallen from a High Place During a Suicide Attempt

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Introduction: Wilson's disease (WD) is an autosomal recessive disorder developing in childhood and young adulthood as a result of copper metabolism disorder. We aim to present ICU experience regarding a case with neuropsychiatric disorder who had fallen from a high place during a suicide attempt.

Case: Upon falling from a high place, the 24-year-old female patient was transferred to the ICU. According to the anamnesis obtained from the relatives of the patient, it is understood that the patient was diagnosed with WD 15 years ago and that due to her increasing neuropsychological disorders, she made suicide attempts. In the physical examination, it was observed that the general condition was bad, that the patient was unconscious, GCS: 5/15, respiratory sound had decreased in the bilaterally, BP: 90/60 mmHg, HR: 120/min, SpO₂: 88%. Mandible and maxilla fractures, hemopneumothorax in the right lung, chest contusion, grade 3 splenic laceration, solid abdominal free fluid and L2 vertebra fracture. Hb: 5 g/dL. Splenectomy was conducted, underwater drainage was applied by right chest tube. In perioperative period, 5 units of ES and 5 units of FFP transfusion was made. In ICU, mechanical ventilator support was enabled. In the physical examination on the postoperative second day, flapping tremor, choreiform movements, dystonia, akinesia in rigidity. Since the patient had had agitations, she was sedated. The weaning surgery was tried two times on the postoperative 5th and 7th day without success. Tracheostomy was opened in the postoperative 10th day. Mandibular and maxillary fracture repair was made. Olanzapine 5 mg/day and quetiapine 25 mg/day treatments were initiated. On the postoperative 20th day, ventilator support was finished. On the postoperative 38th day, tracheostomy decannulation was enabled for the patient and she was transferred to the ward.

Conclusion: When anxiety in ICU is added to the neuropsychiatric symptom aggravation of a patient with WD, control and procedures in ICU become problematic in these patients. Care organization of WD patients should be planned carefully, that the team should demonstrate patience, and that it is possible to bring the patient back to life.

Key words: Wilson's disease, ICU, neuropsychiatric, trauma

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Intracranial Hemorrhage in Herpes Simplex Encephalitis: An Unusual Progress

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Herpes simplex virus encephalitis (HSE) is the most frequent viral encephalitis, as a rule with the starting point and centre within the temporal lobe. If untreated, HSE is usually fatal. Large intracerebral hemorrhages are occasionally described with systemic herpes infection, but it is a rare and fatal complication.

70 years old male patient admitted to intensive care unit (ICU) from the neurological department with the deterioration of the consciousness and respiratory insufficiency following speech disturbance. He had fever, neck stiffness and convulsions. Acyclovir 3*10 mg/kg was started. Cranial MR showed isointense heterogenous diffusion limitation in the gray and subcortical white matter regions of bilateral temporal areas, mostly on the left side. T2 and FLAIR signals, and suggested encephalitis. CSF was clear, white cell count: 200/mm³; CSF/blood glucose: 108/255 mg/dl; protein: 87mg/dl, HSV type 1 DNA PCR was positive in CSF examinations.

His clinical and neurological status was slowly improved in 10 days until he showed clinical and neurological deterioration and had another MRI showing widening of the lesions, hyperintensity in accordance with large haemorrhagic areas besides cerebral edema. He had complex partial epileptic episodes, EEG showed repeating slow wave activity. Prognosis was poor with tracheostomy and renal insufficiency requiring dialysis and death was followed.

Mortality ranges dramatically depending on how early treatment is instituted in HCV encephalitis. Even in patients who are young and otherwise well, and only lethargic still have a mortality of 25%. Older patients or those comatose at the time treatment is started invariably have a much poorer outcome. Overall mortality is over 70%; only 2.5% of affected patients show full recovery.

Haemorrhagia is rare in neonates, comparably common in older patients. The anti-viral treatment has initiated on the 5th day of the symptoms in our patient, that may be accepted relatively late, that might have contributed the worsening of the condition and haemorrhagic transformation of the lesion.

Key words: Meningoencephalitis, herpes simplex, hemorrhagia

P-243

A case of Bilateral Pneumothoraces, Pneumomediastinum, Pneumoperitoneum, and Pneumoretroperitoneum After Percutaneous Tracheostomy

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Percutaneous tracheostomy was first described in 1955. Ciaglia developed the conic dilational tracheostomy, the Blue Rhino technique, fast and smooth concentric dilatation. We report a case who developed complications after a percutaneous dilatational tracheostomy.

32-year-old patient was admitted to the epicentral due to outside vehicle traffic accident at 2 months ago. She was referred to our hospital to be a subarachnoid hemorrhage and caroticoavernous fistula. General condition of the patient was worse, consciousness closed and intubated. Glasgow coma scale 4E (E1M3VE). Her vital signs were blood pressure, 105/60 mmHg; pulse rate, 105 beats/minute; respiratory rate, 28/minute; temperature, 36.8 °C; and oxygen saturation, 99% at mechanical ventilator while FiO₂ 0.3. Patients were evaluated as hypoxic ischemic encephalopathy. Neurosurgery was not planned operation on subarachnoid hemorrhage because of it limiting itself. We planned percutaneous tracheostomy due to prolonged mechanical ventilatory support. After preparation percutaneous tracheostomy was performed under sterile conditions and deep sedation. Patient ventilated with the mechanical ventilator after the operation. Falling peripheral oxygen saturation and occurred subcutaneous emphysema symptoms, we ventilated the patient with balloon mask method. AP chest radiograph were obtained at the bedside immediately. Chest radiograph showed bilateral pneumothorax, pneumomediastinum, subcutaneous emphysema and free air under the diaphragm. We have re-intubated the patient. Afterwards, we took to the radiology department for computerized tomography. The CT images showed subcutaneous emphysema, bilateral pneumothorax, pneumomediastinum, pneumoperitoneum, and pneumoretroperitoneum. After that bilaterally tube thoracostomy was performed. Then her vital signs were blood pressure, 110/70 mmHg; pulse rate, 90 beats/minute; respiratory rate, 20/minute; temperature, 37.8 °C; and oxygen saturation, 98% at mechanical ventilator while FiO₂ 0.3. 5 days later bilateral lungs were expanded and subcutaneous emphysema, pneumomediastinum, pneumoperitoneum and pneumoretroperitoneum were decreased.

Percutaneous tracheostomy is a safe and efficient alternative for open tracheostomy. But it can be several complications, from mild to life-threatening.

Key words: Pneumothoraces, pneumomediastinum, pneumoperitoneum, pneumoretroperitoneum, percutaneous tracheostomy

P-244

Ovarian Hyperstimulation Syndrome Complicated by Acute Respiratory Distress Syndrome: A Case Report

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Introduction: Ovarian hyperstimulation syndrome (OHSS) is a complication of controlled ovarian stimulation. The basis of the clinical picture is over production of ovarian hormones and vasoactive substances, which contribute to an increase in vascular permeability and excess release of liquid into the third space. In severe cases renal failure, thromboembolic events and acute respiratory distress syndrome (ARDS) may develop. Here, we present a case of OHSS which was admitted to intensive care unit with respiratory failure.

Case: A 26-year-old woman undergoing in vitro fertilization treatment was transferred to intensive care unit. Her medical history revealed that she started having abdominal distension and respiratory distress 15 days ago, just 24 hours after oocyte retrieval. Embryo transfer could not be done and she was diagnosed as mild OHSS. Although treatment was started for hypoproteinemia, hyponatremia and deranged coagulation profile, her clinical symptoms worsened and she was consulted intensivists.

On arrival, her blood pressure (BP), heart rate (HR) and respiratory rate (RR) were 120/80 mmHg, 120/min, 30/min respectively. Blood gas analysis revealed a severe hypoxia (pH 7.49, pCO₂ 47.4 mmHg, pO₂ 38.3 mmHg, PaO₂/FiO₂ <200). Laboratory investigation showed no remarkable finding other than a mildly elevated leukocyte count. Enlarged ovarias and ascites were noted in abdominal ultrasonography. Chest computed tomography and radiography confirmed bilateral pleural effusions and diffuse ground glass opacities compatible with ARDS (Figure 1 and 2). She was intubated and ventilated using lung protective ventilation strategies.

Abdominal and pleural fluids were drained; albumin, low molecular weight heparin and Gabercoline, a potent vascular endothelial growth factor inhibitor, were started. Her respiratory parameters improved and ventilatory support was decreased gradually. She was discharged on the sixth day of her arrival.

Conclusion: ARDS is a rare but serious complication of OHSS. Gynecologists and intensivists must be aware of the diagnosis because of the widely used reproductive techniques.

Key words: Ovarian hyperstimulation syndrome, complication, ARDS



Figure 1. Chest radiography

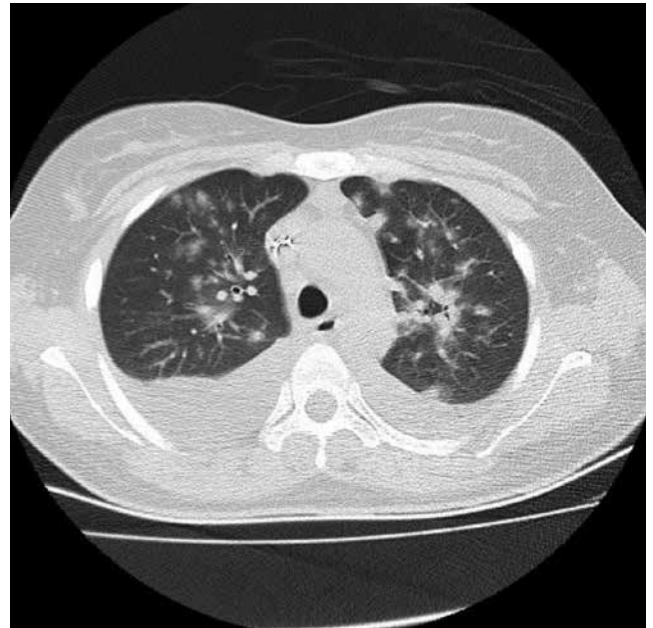


Figure 2. Chest computed tomography

P-245

Unilateral Non-Response Cause in a Head Trauma Case: The Neglect Syndrome (Case Presentation)

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Introduction: The Neglect syndrome (NS) is defined as the unresponsiveness to a stimulus in the opposite side of the cerebral lesion that cannot be explained with sensory or motor loss. In this presentation, the Neglect syndrome, which developed in a patient who suffered parietal subdural hematoma (SDH) is discussed.

Case: 60 year-old male patient (GCS-6) who had SDH was admitted to the ICU. On the 25th day motor response obeyed to bilateral commands with verbal eye opening. So the patient was extubated. On the 4th Day of extubation, the right side obeyed the commands, but unresponsiveness to the pain was detected in the left side. After obtaining MRI the clinical findings of patient was consulted to the neurology and neurosurgery specialists. By considering the possibility of plegia causing parietal subdural bleeding, the patient was diagnosed with the NS. Therefore no additional treatment was started for the patient, and it was detected that on the 6th day motor response were weak on the left side. However, on the following two days, a motor unresponsiveness was detected on the left side. On the ninth day, non-localized response was detected on the left side; and on the 10th day, the patient responded to all commands.

Conclusion: In the NS, which may frequently develop in the parietal lobule, it is important that the history and activities of the patient are observed closely. In this case, a pathological situation, which was not previously detected, was observed in the patient on the 25th day of treatment. There is no specific treatment for such cases, and the clinical manifestation becomes better with re-learning (1). In our case, the muscle power returned spontaneously in time. The NS must be considered in patients with unexplained unilateral loss of strength with intracranial case.

Key words: Neglect syndrome, head trauma, intensive care

Reference

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Clinical Observation and Medical Sense is Superior to CT-Scan to Diagnose Increased ICP: A Case Report

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Introduction: Increased intracranial pressure (ICP) is a life threatening complication following craniotomy. Intracranial hemorrhage, hydrocephalus, and cerebral edema are most common causes of increased ICP postoperatively. Cranial CT scanning is an imaging method, which can quickly show the cause of elevated ICP.

In this report, we describe a patient with restlessness related to increased ICP without a change in the CT-scan, 18 hours after the craniotomy for corpus callosum tumor resection.

Case: A 63 year-old female admitted to the ICU with Glasgow Coma Scale (GCS) 15 following elective craniotomy. During the ICU follow-up, she was clinically stable. 18 hours after the surgery, she was started to describe restlessness without neurological and laboratory findings. 30 minutes later, while her GCS was 13, CT-scan was performed, and there were no pathology, however she was getting sleepier. After she was transferred to ICU, while her GCS was 13, neurosurgeon decided to put external ventricular drainage, than reported severely elevated ICP. Four days later, drainage was removed, and she was fully recovered.

Conclusion: Signs and symptoms of increased ICP depend on the cause, location of the lesion, and the degree of intracranial compensation and include deterioration in level of consciousness.

Cranial CT-scan has assumed a critical role in the practice of emergency medicine for evaluation of intracranial emergencies such as increased ICP. There is no fact that, technology will improve health care efficiency, quality, and safety. However, technology may also introduce errors and adverse events. Despite imaging technology is very sensitive for cranial pathologies; we could not report real-time correlation between CT-scan and clinical signs. If the drainage insertion was delayed, patient's mortality and morbidity could have been higher. As we report here, clinical observation and medical sense is still superior to technology.

Key words: Increased ICP, craniotomy

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Complication of Femoral Venous Catheterization in Patient with Hypoxic Ischemic Encephalopathy

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Introduction: The choice of location for central venous catheterization may vary among practitioners and centers. The most commonly preferred tracts are internal jugular vein (IJV), subclavian vein (SV) and femoral vein (FV). The mechanical complications in FV preferences (in the femoral region or retroperitoneal hematoma) can be seen more frequently (1-3%) and were reported to be associated with a higher risk of infection compared to the subclavian roads.

Case: A thirty two-years-old male patient with multiple trauma of in-car traffic accident was admitted to the intensive care unit from the emergency department. Ischemic encephalopathy and diffuse axonal injury was revealed in control brain magnetic resonance (MR). During follow-up, regular maintenance and regular catheter changes were done. In the case which has spastic paralysis of the upper and lower extremities, disrupted venous drainage of the right leg during the right PV catheterization and thrombus causing partly occlusion of the femoral vein were detected by femoral vein doppler USG. By removing right IJV catheterization right PV catheter was done. Beginning with the bempir for the treatment of venous thromboembolism (2x1, 7500) the right leg venous drainage decreased within the following 2-3 days.

Conclusion: FV catheterization is a preferred way by inexperienced people because of the small risk of serious complications. FV catheterization; Deep vein thrombosis are not recommended for long-term use because of the risk of contamination or infection of the perineum. However long FV catheterization in patients receiving intensive care treatment can be applied in situations such as that used in other central veins. FV catheter inserted in the cases that require long periods of time must be made taking into account the close monitoring of the complications of this localization.

As a result; It is very crucial to be constantly vigilant with the long-term patients hospitalized in intensive care and mandatory central venous catheterization in terms of possible complications and it should be kept in mind to get started the treatment earlier may reduce morbidity and mortality.

Key words: Femoral vein, catheterization, thrombus

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Gama Butyrolactone Intoxication

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Introduction: Gamma Butyrolactone (GBL) acts as a CNS depressant. It is metabolized endogenously to Gamma Hydroxy Butrate (GHB), and it is rapidly distributed across blood brain barrier. GBL causes CNS and respiratory depression, GI upset, bradycardia, myoclonus and hypothermia. We present a GBL intoxication case of a male patient.

Case: The patient was male, 32 years old and had a weight of 85 kg. The patient was delivered to the emergency room in an unconscious state with a GKS of 3, papillae were isochoric, LR +/+. He had tachycardia (HR > 110/min). BP was 125/90 mmHg. He had bilateral rhonchi with fingertip SpO₂: 88%. In his arterial blood gas, there was respiratory acidosis. The patient had no sign of physical abuse. He was intubated and mechanically ventilated. In the laboratory tests Ethanol was negative, and there was no pathological sign in cranial BT. Arterial blood gas showed hypoxemia. Biochemical tests were normal. According to the account of the patient relatives, the patient had been abusing GBL occasionally and taking steroids for body building. He was internated to the ICU, and he was administered supportive therapy. He was extubated at the 20th hour when the ABG was in normal range and with a GKS of 15. He was internated to the infectious diseases service for the treatment of aspiration pneumonia. Psychiatry consultation for drug abuse was requested.

Conclusion: GBL is also known as liquid ecstasy. It is freely available as a sleep medicine and nutritional support. GBL in liquid form is odorless and tasteless, and it acts as a CNS depressant. For the successful management of intoxicated patients, it is imperative for the physician to realize GBL's toxicity. For this reason when taking the history of the patient, it is important to ask and think about possible GBL abuse.

Key words: Gama butyrolactone, intoxication, GBH

P-249

Fulminant Respiratory Arrest and Attack After Infusion of Tramadol

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Introduction: Tramadol, is a central acting analgesic known as a secure medicine used prevalently in postoperative pain treatment. In our study, we aimed at presenting the patient having convulsion with anisocoria, sudden loss of consciousness and respiratory arrest after tramadol injection performed with infusion in half an hour and the patient being conscious after 30 minutes and extubated in 3 hours.

Case: 84 years old ASA2 female patient, after having a scar debridement under general anesthesia, was then extubated and taken into intensive care unit for postoperative follow-up.

On the 1st day, the patient experienced sudden loss of consciousness, anisocoria (left>right), respiratory arrest and had a generalize seizure just on the 1st minute, after the tramadol infusion in 100ml fluid, which was delivered in 30 minutes.

She was intubated and had a brain CT scan. The CT was evaluated as normal. Then, the patient was taken into mechanical ventilator. The patient began to be conscious after 30 minutes and her respiratory parameters got better on the 3rd hour and then she was extubated.

The following day, the patient was not needing ICU anymore was directed to service.

The patient and relatives was informed to be careful about the usage of this medicine.

It is stated that similar symptoms may be encountered in case of overdose and concomitant medications (1).

However, both of the cases were not existent with the patient. Besides, it is stated in the literature that acute respiratory arrest and coma take place after tramadol is delivered in IV speed (2).

This table took place although the tramadol in 100ml fluid was delivered in 30 minutes.

As a result, we recommend, though we can't explain the reason definitely, the dose for tramadol should be titrated and applied in slow speed and as diluted. Besides, close observation during applying is also suggested.

Key words: Tramadol, respiratory, arrest, attack

P-250

Sudden Cardiopulmonary Arrest in a Patient with an Unknown Tricuspid Insufficiency

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Introduction: Isolated tricuspid insufficiency is a rare condition. It often occurs as a result of functional failure secondary to mitral or aortic valve pathology. Tricuspid insufficiency is associated with poor prognosis. We aimed to present a case of a sudden cardiopulmonary arrest in a patient with tricuspid insufficiency.

Case: 59 years old male patient was admitted to the urology clinic with a diagnosis of scrotal Fournier's gangrene. The second day, the patient underwent surgery under spinal anesthesia. The second postoperative day during mobilization, general condition of the patient deteriorated and sudden respiratory arrest happened. Patient was intubated and transported to intensive care unit (ICU). His GCS was 6, blood pressure was 60/40 mmHg and heart rate was 170-180/min. A trial tachycardia was present in ECG. Patient was extubated after two days. After extubation, patient was stable and transferred to urology clinic. During the transfer, cardiopulmonary arrest occurred. After successful cardiopulmonary resuscitation (CPR) he was taken back to the ICU and sent for a CT-angiogram test. However, during the transfer into CT-table, cardiac arrest occurred following a respiratory arrest. The patient who underwent successful CPR was taken to ICU without getting CT-angiography. Echocardiography revealed severe tricuspid insufficiency. However, cardiopulmonary arrest occurred again and the patient did not respond to CPR for 45 minutes and died.

Conclusion: Conditions that creates anatomic disorders in tricuspid valve (primary or organic failure) include rheumatic heart disease, carcinoid syndrome, infective endocarditis etc. Condition where the tricuspid valve is anatomically normal (secondary or functional failure causes) is the pulmonary hypertension (secondary to pulmonary venous hypertension, chronic thromboembolic pulmonary hypertension). We considered that our patient may have developed pulmonary embolism due to sudden respiratory arrest. However, CT-angiography could not be performed. It should be considered that the patients with tricuspid insufficiency may develop sudden cardiopulmonary arrest.

Key words: Tricuspid insufficiency, cardiopulmonary arrest

P-251

Fat Embolism Syndrome after Trauma: A Case Report

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Introduction: Fat embolism is a syndrome which is caused by oil particles introduce into the systemic circulation and consists of respiratory distress, altered consciousness and petechial rashes. It may occur following traumatic, surgical and non-traumatic clinical conditions. The clinical spektrum of syndrome may vary from slightly condition to respiratory failure and coma.

Case: A 17-year-old girl had multiple fracture after falled from hight. Right collum femoris fracture was operated with cannulated screws under spinal anesthesia. On the morning of postoperative day, since the patient developed confusion, delirium emergency neurology consultation and emergency tomography was requested. Tomography was normal. Respiratory distress is present and intermittent CPAP has been applied patients. Because of the saturation was falled.

On the third day of the trauma, patient had cardioapulmonar arrest. Patients admitted to the intensive care unit for treatment. At the time of admision, It was GCS: 5, breath: 30 min-1, pulse rate 140 min-1, SpO2: 30%. Blood gas analysis showed that pH: 7.11, pCO2: 42 mmHg, PO2 25 mmHg, BE: -16.1 HCO3: 12.8. Chest X-ray revealed diffuse bilateral infiltrates, minimal skin emphysema on right side and minimal pleural effusion on the axillary region. Petechial rash was present on the skin and mucous membranes. Patient was connected to mechanical ventilator with APRV mode (Plow: 10 cm H 2 O, Phigh 23 cmH2O, P support 15 cmH2O, FiO2 100% before- 50% after). Also, patient has been given methylprednisolone 0.5 g / day IV, inhaler budesonide, salbutamol sulfate and ipratropium bromide, CleXaNe 0.6 and albumin 10 g / day. On the 10th of day after admission to the intensive care patients was dead.

Conclusion: To prevention of fat embolism, early fixation of the fracture is very important. The management of fat embolism is supportive therapy.

Key words: Fat embolicm, intensive care unit

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Nasoendoscopic Image Prevents Bad Surprise

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Introduction: Larynx cancer patients are admitted to the hospitals for fatigue and organ dysfunction. Upper airway obstruction is the primary mechanical emergency of the respiratory system in these patients. Difficult airway incidence 50-60% in glottis cancers. Successful emergency tracheal intubation on the first attempt is of great importance in larynx cancer patients who develops rapidly and marked desaturation with each maneuvers. External physical examinations for airway assessments include mouth opening, neck mobility, prominent teeth and mallampati score. These assessments allow evaluating the structures until soft palate, anterior and posterior tonsillar pillars and uvula. But, it is required to see below these structures in larynx cancer patients. Nasoendoscopic image which is taken by routinely by Ear, Nose, and Throat Specialists provide information on airway diameter, tumor size, nature, mobility and potential airway obstruction.

Case: We present a case of larynx cancer patient developed in respiratory distress requiring emergency tracheal intubation. Intubation strategy was determined by examining the nasoendoscopic image and patient was intubated on the first attempt smoothly.

Conclusion: Repeated emergency tracheal intubation attempts in case of difficult airway leads to hypoxia, aspiration, and edema and bleeding. Nasoendoscopic image help to perform tracheal intubation at first attempt by decreasing glottic view orientation, reducing laryngoscopy duration, number of attempts and emergency situations of a lost airway. Therefore, we think that it would be beneficial for the patients admitted to the intensive care that their nasoendoscopic image made by ENT doctors previously take place in the patients chart.

Key words: Nasoendoscopic image, difficult intubation, larynx cancer

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Vena Cava Superior Syndrome: A Patient with Anaplastic Thyroid Carcinoma

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Introduction: Anaplastic thyroid cancer (ATC) is a rare usually lethal malignancy of older adults. Superior vena cava (SVC) syndrome due to direct invasion from a primary thyroid malignancy is a rare phenomenon. We present a unique case of anaplastic thyroid carcinoma with superior vena cava syndrome.

Case: A 75-year-old male presented with sudden swelling of neck associated with dyspnea. On physical examination, there was jugular venous distension and swelling of bilateral upper extremity without swelling of face or neck (Figure 1). Neck and chest computed tomography (CT) showed thyroid mass causing tracheal deviation and spreading into the mediastinum causing extrinsic compression lead to narrowing of the major venous system in the chest. Biopsy of thyroid mass showed anaplastic thyroid carcinoma. His pulse rate was 120 beats/min, blood pressure was 90/60 mmHg and respiratory rate was 35/min. He had decreased breath sounds in lower chest bilaterally. Tracheotomy was performed for respiratory distress developed due to compression of trachea. He was admitted to our intensive care unit because of sepsis and mechanical ventilation need. He was diagnosed with SVC syndrome secondary to a thyroid mass spreading into mediastinum, demonstrated best by computed tomography (CT). Patient died three weeks after admitting our intensive care unit.

Conclusion: ATC typically presents with a rapidly growing neck mass and local invasion and compression of adjacent structure is common. The patient with anaplastic thyroid carcinoma may have a compromised airway and airway problems may develop and progress. Acute dyspnea may develop due to compression of trachea. Tracheotomy may be considered for impending acute airway distress. Clinician should be awake to acute airway problems. SVC syndrome in a patient is very rare and malignancy is an important cause of SVC syndrome. ATC could be a cause of this condition.

Key words: Anaplastic thyroid cancer, Superior vena cava syndrome



Figure 1. View of patient: swelling of bilateral upper extremity and jugular venous distention

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Acute Respiratory and Renal Failure due to Hypermagnesemia induced by Counter Laxatives in Elderly Man

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Introduction: Hypermagnesemia is a rare and generally an iatrogenic condition. The elderly and patients with bowel disorders or renal insufficiency are at a high risk. Cardiovascular and neuromuscular effects can be observed in patients with hypermagnesemia. The treatment of hypermagnesemia includes discontinuing the magnesium use, gastrointestinal decontamination, and magnesium removal from the serum by Hemodialysis. We report a patient in whom severe hypermagnesemia was induced by a magnesium product taken for treatment of chronic constipation and who was saved after Continuous veno-venous hemodialysis (CVVHD).

Case: A 70-year-old man presented with constipation, chest tightness and dyspnea, which was progressively getting worse over the past three days. He had a history of chronic obstructive pulmonary disease, chronic kidney failure and diabetes mellitus. Contrast enema was planned on the first hospital day. The patient was lethargic and was able to respond to sound after two days. The patient developed abdominal pain and distended non-tender abdomen with decreased bowel sounds. The neurological examination showed a symmetric decrease in muscle tone. The deep tendon reflexes were also decreased. Patient was intubated. The blood chemistry study showed the following: magnesium, 9.07 (1.3-2.1) mEq/L; calcium, 7.78 (7.9-9.9) mEq/L, sodium, 143 (134-148) mEq/L; potassium, 5.5 (3.6-5.0) mEq/L; creatine, 3.85 (0.4-1.0) mg/dL; blood urine nitrogen, 202.5 (6-21) mg/dL; Emergency CVVHD for hypermagnesemia was performed and continued during 48 hours. Final Mg level at two day after CVVHD, magnesium level was normalized (2.0 mEq/L) and the patient was extubated.

Conclusion: Special the elderly are at a risk of magnesium toxicity as the kidney function declines with age. The shown relationship between hypermagnesemia and laxative/antacid use should induce physicians to pay more attention to abuse of these drugs. After diagnosed, treatment with rapid supportive measures and urgent CVVHD is highly effective in preventing significant morbidity and mortality.

Key words: Hypermagnesemia, continuous veno-venous hemodialysis, cathartic, constipation

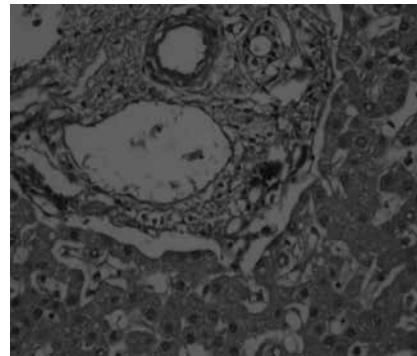


Figure 1. Liver biopsy

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Adult Reye's Syndrome: A Case Report

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Introduction: Reye's Syndrome, first described in 1963, is a life-threatening disease characterized by acute noninflammatory encephalopathy and fatty degenerative liver failure. Although it is affecting mainly children and patients younger than 35, older cases are also reported.

We describe a 63 years old male admitted to our intensive care unit presented with coma and liver failure and died after one week despite supportive therapy.

Case: A 63-year old, previously healthy male, admitted to the Emergency Department with hematemesis, melena and altered consciousness. His history revealed salicylate ingestion because of headache. Laboratory data revealed elevated liver enzymes, prolonged prothrombin time, and high blood ammonia levels. The blood ammonia concentration reached high levels early in the course of the disease up to 5027 µg/dl. A lumbar puncture was performed and CSF examination showed 7 lymphocytes per mm³, normal glucose and protein levels and negative culture. Serologic tests for CMV, EBV, HSV, VZV were negative. Magnetic Resonance Imaging revealed diffusion restriction in pons, mesencephalon, bilateral thalami and frontoocipitoparietal cortex. The patient was intubated because of respiratory failure and transferred to the intensive care unit. Mechanical ventilation, appropriate hemodynamic management and mannitol infusion have been started. The patient developed seizures, did not respond to midazolam and thiopental given. The patient deteriorated rapidly, with a Glasgow coma score of 3 and unresponsive pupils on day 4. He died on the 7th day after admission in the ICU. Postmortem liver biopsy revealed microvesicular steatosis which was considered to be consistent with Reye syndrome (Figure 1).

Conclusion: Reye's syndrome is rarely seen in adult patients but should be considered in patients with encephalopathy and elevated liver enzymes who had recently a viral illness and salicylate ingestion.

Key words: Reye's syndrome, liver failure, salicylate

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Convulsions Due to Ingestion of Energy Drinks: A Case Report

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Introduction: Lactic acidosis is the cause of metabolic acidosis (MA). This condition could be seen as a result of many conditions in intensive care patients. We are presenting a case who had been playing playstation for a week with empty stomach, drinking Redbull, resulted in epileptic seizures and MAÇ.

Case: A 20 years old man brought to the emergency for mimic muscle abnormalities. In his story, he stated that he had played playstation for seven days after the exams and drunk Redbull with empty stomach. He hadn't defined other medical condition. He had epileptic seizure in his medical history three years ago and he had taken anticonvulsant medication for three months. In his first physical evaluation made by the emergency staff he was found to be confused, producing nonsense sounds. Laboratory findings and blood gases were as follows; pH: 6.85, PaCO₂: 29.1 mmHg, PaO₂: 75.8 mmHg, Lac: 14.34 mmol/l, Base excess: -28.6 mmol/l, HCO₃: 7.3 mmol/l, According to cranial CT findings there wasn't seen any gross pathology in cranium. During evaluation he had seizures, 3 mg Midazolam was applied. He was admitted to ICU for hydration and seizure control. 3500 ml of electrolyte solution (Isolyte) infused in 5 hours. He mentally became clear and cooperated, then underwent cranial MRI and EEG which did not report any pathological findings. The laboratory findings were pH 7.32, PaCO₂ 40 mmHg, Lac 1.81 mmol/l, Base excess -5 mmol/l, HCO₃ 20.1 mmol/l.

The energy drinks are acidic in pH. The patients having nutritional defects and consuming energy drinks are exposed to caffeine. Consuming high caffeine causes MA. As stated before, under stress consuming high amounts of caffeine is related to diminished cerebral blood flow causing seizures.

Conclusion: Proper fluid replacement therapy is the key to re-stabilize acid-base condition in the treatment of MA caused by hypovolemic lactic acidosis

Key words: Metabolic acidosis, energy drink, epileptic seizure

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Syntetic Cannabinoid Intoxication: Case Report

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Introduction: Synthetic cannabinoid receptor agonists have become popular recreational drugs during past few years. After development of synthetic cannabinoids in 1960's it has quickly got in market by the names "Spice", "K2" and for the last two decades it gains popularity among young people in Turkey by the name "Bonsai". Most people exposed to synthetic cannabinoids only minimal symptoms occur or not, agitation, anxiety, nausea, vomiting, hallucinations, psychosis, tachycardia, loss of consciousness, and pancreatitis may occur. In this case report, the diagnosis and treatment of a 20 year old patient with loss of consciousness after usage of synthetic cannabinoid are presented.

Case: A 20-year-old male patient was brought to the emergency department with altered consciousness. He had altered consciousness for about 3 hours before admitting to the emergency department. He had a medical history of bonzai usage and 4 hours before admitting to emergency department, he used bonsai cigarettes. He was lethargic, had positive pupillary and corneal reflexes. No pathology was detected on cranial tomography. The patient's biochemical tests within normal limits. The electrocardiogram rhythm was sinus tachycardia, had no conduction abnormalities and no evidence to the ischemic changes. The patient was admitted to Intensive Care Unit (ICU) with the prediagnosis of synthetic cannabinoid intoxication. Cardiac monitoring was done to the patient. His lethargic condition was turned to normal state in 8 hours of admission. During ICU stay no arrhythmia, renal failure, nausea, vomiting, hypertension, hypotension, tachycardia and chest pain was detected. The patient was discharged from the intensive care after 36 hours with hemodynamically stable, conscious and cooperative.

Results: As a result, patients with a history of drug usage admitted with altered consciousness to the intensive care should have been considered synthetic cannabinoid intoxication.

Key words: Syntetic cannabinoids, letargy, overdose

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A History of a Long Term Intensive Care Unit Stay due to Prolonged Weaning Complicated by Tracheal Stenosis in a Case of Myasthenia Gravis

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Introduction: There are insufficient data about weaning, tracheostomy needs and long-term outcomes in cases of respiratory failure due to myasthenia gravis (MG). Here we report a case of MG and prolonged weaning whose long intensive care unit (ICU) stay and resultant problems due to tracheal stenosis were successfully managed.

Case: A 44-years-old female diagnosed as MG and intubated due to respiratory failure was admitted to the ICU. She had prolonged weaning and tracheostomy and received steroids, cyclosporine and mestinon apart from plasmapheresis and IVIG for the treatment of MG. Daily attempts of weaning continued and active physiotherapy was offered to overcome muscle weakness. Respiratory failure and difficulty in swallowing improved. On the 115th day of ICU stay, the tracheostomy cannula was removed and nasal oxygen was administered. However, since stridor, difficulty in breathing and hypercapnic respiratory failure appeared, tracheostomy cannula was reinserted. Respiratory failure, improving after tracheostomy, suggested tracheal stenosis. Cervical CT showed stricture at the entrance of tracheostomy. Thoracic surgeons recommended surgery, though without a definite indication. On the 243rd day of her admission, she was discharged with a tracheostomy cannula with a speech valve. However, she presented with respiratory insufficiency on the 5th day after her discharge. Respiratory failure was due to pneumonia and a new myasthenic crisis and required mechanical ventilation. She was admitted to the ICU and administered antibiotics and treatment for myasthenic crisis. She underwent resection for tracheal stenosis and thymectomy. Her ICU stays lasted for a total of 315 days and she was discharged without tracheostomy and respiratory support.

Conclusion: Although a low percentage of ICU patients need a long stay, morbidities including infections, immobilization and critical patient neuropathy due to prolonged stay cause a vicious circle. In the present case, prolonged weaning and resultant tracheal stenosis exemplify this vicious circle.

Key words: Myasthenia gravis, tracheal stenosis, prolonged weaning

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Colistin Neurotoxicity: A Pediatric Case

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Introduction: Colistin is a complex polypeptide type of antibiotic. It is used in treatment of infections of Gr(-) bacteria with multidrug resistance in recent years. We aimed to present the colistin neurotoxicity seen in a pediatric patient who was followed up in our Burn Intensive Care Unit (BICU) for scalding burn.

Case: A 2,5 years of age male patient with 15 kg weight was taken into our BICU with 2-3 rd degree of scalding burn at 40% of body surface area. At first examination Glasgow Coma Scale (GCS) was 14. On 11 st day of admission, hyperthermia (39.2 °C) and hypotension were observed and at blood culture *A. Baumannii* was produced. We started colistin at 5 mg/kg/day dosage. After 30 hours respiratory failure was observed in the patient and he was intubated and mechanical ventilation (MV) was started. On 20 th day of admission spontaneous respiration was proper and MV was terminated but after 18 hours he was reintubated because of respiratory failure and GCS dropped to 7-8 on 30 th day. Colistin dosage was rearranged and no infiltration was found at PA chest X ray examination. General anesthesia was performed to the patient several times either for surgery or washings and dressings and it was thought that multiple weaning trials was unsuccessful because of common muscle weakness due to colistin. On 32nd day of the treatment colistin was terminated. On 35 th day he was extubated but he was incooperable and GCS was 9-10. On 39 th day he was discharged from BICU to a normal service and he was followed up for 17 days there and after this follow up he was discharged from hospital with GSC:15. Especially in patients followed up at ICU with MV, long term colistin usage with higher doses may be responsible from muscle weakness due to neurotoxicity of the drug.

Key words: Colistin, neurotoxicity, pediatric case

P-260

Smoking is Unhealthy, What About Smoking Cessation with Medications? Bupropion Overdose in Intensive Care Unit

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Introduction: Bupropion, is a new-generation monocyclic antidepressant that is increasingly used in depression and smoking cessation. The pharmacologic effect of bupropion is inducing the release and inhibiting the reuptake of dopamine and norepinephrine. It's potential effect on reducing nicotine was accidentally found. Given widespread use of the drug, psychiatric and other undesirable adverse effects are of interest and importance to all prescribing clinicians.

Case: A 21-year-old female patient who took 30-pills of 150 mg bupropion (Wellbutrin-XL), prescribed to her four days ago for smoking cessation, was immediately brought to emergency services with unconsciousness. She had no previous history of psychiatric disorders. The patient was used the drug 150 mg for first three day and 300 mg for fourth day. She had depressive mood, sleep disturbance, heartburn, shakiness, sweating, fainting, dizziness, lightheadedness and auditory hallucination on the fourth day of the drug use. Then she took all of the pills she had accidentally and was found unconscious at home. Activated charcoal was administered in emergency service and she was transferred to critical care unit. She had stable vital signs with a Glasgow Coma Score (GCS) of 9 points. Electrolytes and other biochemical parameters were normal. She had temporary amnesia at first 24 hours following drug intake. The patient had no problems in the follow-up and was discharged at the 36th hour of her hospitalization.

Conclusion: Bupropion has a narrow therapeutic margin. In addition to the symptoms above, it can cause severe seizures and respiratory depression. As with other antidepressants, bupropion has a black box warning related to an increased risk of suicidality in young patients <age 24 during initial treatment. Given frequent use of bupropion in clinical practice, increased vigilance regarding potential psychiatric adversity is recommended.

Key words: Bupropion, overdose, smoking cessation

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Guillain-Barre Syndrome (GBS) in a Patient with Severe Burn Injury

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Introduction: GBS is a kind of idiopathic acute inflammatory demyelinating polyradiculopathy which can be observed in all age groups of patients and which affects nerve roots and cranial nerves. Its incidence is 0.6-1.9/100000.

Case: A 52 years of age female patient was accepted to our Burn Intensive Care Unit (BICU) in a intubated state with 2. degree 60% total body surface area (TBSA) flame burn. During follow up tracheostomy was performed and she was given antibiotherapy several times because of wound infection, emphyema, septicemia. At 97 th day of her BICU follow up she had been taking imipenem (10 days), colistin (2 days), amikasin (2 days). When Glasgow Coma Scale (GCS) of the patient became 10, aminoglycoside treatment was stopped. Creatinin Kinase (CK) increased to 140 mg/dl from 23 mg/dl in 5 days. Severe personality changes, delirium, orthostatic hypotension, pain and paresthesia from distal to proximal, progressive weakness, decrease of tendon reflexes, and dropped foot at left side were observed. Because the respiratory muscles were affected, mechanical ventilation was started. This situation was thought as ICU polyneuropathy or GBS. EMG could not be performed because of burn sequela. Albumino-cytologic dissociation was observed at lumbar puncture. Cerebrospinal fluid protein was 56 mg/dl (N: 4.7 mg/dl). With GBS diagnosis 400 mg/kg/day IVIG treatment was applied for 7 days. At 3rd day of IVIG therapy mechanical ventilation stopped. Respiratory muscle weakness and delirium lasted for 10 days. At 122 nd day of admission GCS was 15 and she was discharged with physical therapy suggestion.

Conclusion: GBS can be seen after acute and severe infections, operations, burns and trauma at ICU follow up. It is possible that a latent myasthenia gravis can be obvious with neuromuscular blocking agents or aminoglycoside group of antibiotics (2). In neuropathy cases observed at ICU, GBS should be kept in mind.

Key words: Guillian-Barre syndrome, burn injury, IVIG

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Toxic Epidermal Necrolysis in a Patient with Terminal Renal Failure

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Introduction: Toxic epidermal necrolysis (TEN) is a life-threatening mucocutaneous disease characterized by extensive epidermal sloughing complicated by multisystem organ dysfunction. The pathophysiology is not well known, although immune mechanisms and altered drug metabolism have been postulated. Epidermal detachment usually progresses during a 3- to 7-day period. Approximately 30% of patients with TEN die of infection or pulmonary complications. High doses of systemic corticosteroids, i.v. immunoglobulins, plasmapheresis (PP) and immunosuppressive drugs have been used in the treatment of TEN with variable success. We aimed to present a case of TEN caused by antibiotics.

Case: A 65 years old female who has end stage renal disease was treated with dialysis in other hospital. Patient in intensive care units was given antibiotics for dialysis catheter infection. These antibiotics was ertapenem, daptomisin, meropenem and metronidazol respectively. TEN was occurred after given these antibiotics. First one facial swelling have started. The patient was referred to our hospital intensive care unit. In physical examination, 38 degrees of fever and respiratory distress was found. The patient rapidly required mechanical ventilation. Lesions were seen especially in the neck and back (Figure 1). Nikolsky sign was positive. The daily maintenance of the skin was carried out by the dermatology department. Plasmapheresis and prednisone 40 mg was designed to treat this patients twice daily for 2 days. But resistant hypotension despite the use of inotropic agents were present. We were unable to use plasmapheresis. She died from septic shock in 4th day of hospitalization.

Conclusion: The pathophysiology of TEN is still unknown, but most hypotheses are based on a specific immunologic reaction against keratinocytes modified by the drug or its metabolites. Multiple antibiotic use in patients with kidney failure can enhance the formation of TEN.

Key words: Toxic epidermal necrolysis, kidney diseases, antibiotic, intensive care unit

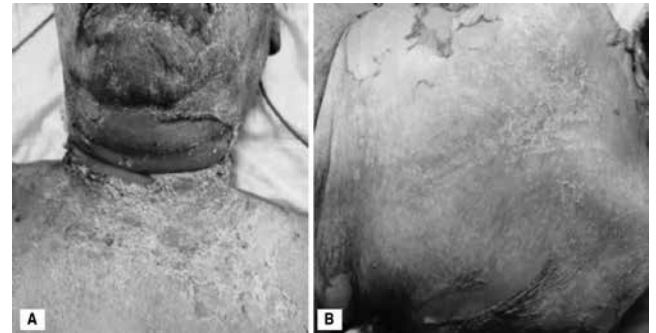


Figure 1. Lesions were seen especially in the neck and back

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Placement of a Gastric Tube Using a Airtraq Laryngoscope

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Introduction: Placement of gastric tubes can be challenging, particularly in patients with dementia, alzheimer as cooperation is difficult. Misplacement can have catastrophic consequences in patients that lack to protect their airway. Techniques to facilitate placement of gastric tubes under direct vision are not well described.

Case: A 78 year old male patient in ward with dementia suspected with crutzfeld Jacob disease was asked to place a nasogastric tube for feeding as he could not swallow and protect his airways. Percutan Endoscopic Gastrostomy was delayed until until a definitive diagnosis of CJD excluded. Several times blind insetion was attempted but was not succesful. So we decided this procedure under direct vision with Airtraq disposable laryngoscope. After minimal sedation with 1 mg midazolam and 4 mg propofol airtraq inserted to patient mouth to guide insertion into the oesophagus. To guide properly we cooled NG tube in freezer. After insertion of NGT, placement also confirmed epigastric listening with stetescope while 30 mL of air injected with 50 mL syringe attached to NGT.

Conclusion: Airtraq can be used in intensive care units for placement of gastric tubes and endotracheal intubation while minimizing transmission and contamination.

Key words: Airtraq, nasogastric tube, Crutzfeld Jacob disease