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E- SÖZLÜ BİLDİRİLER

GÜVENLİ ANESTEZİDE
MONİTÖRİZASYON

Pub No: 0S-01

Effects of Dexmedetomidine Priming on Lidocaine Induced Toxicity in Rats

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Introduction - Purpose: Local anesthetic systemic toxicity is a critical condition that can affect the central nervous system and the cardiovascular system, potentially leading to fatality. This study aims to investigate the pre-treatment effects of dexmedetomidine on lidocaine-induced toxicity and compare it electrophysiologically with midazolam, propofol, and atipamezole. Furthermore, the study aims to examine the impact of these pre-treatments on the cardiovascular and respiratory systems.

Materials and Methods: A total of 48 rats were randomly divided into 6 groups with n=8 in each group, including the penicillin (P), lidocaine (L), midazolam + lidocaine (ML), dexmedetomidine + lidocaine (DL), atipamezole + lidocaine (AL), and propofol + lidocaine (PL) groups. Group P received 500 IU of penicillin intracortically. As a control group, Group L received an intraperitoneal injection of 90 mg/kg of lidocaine. Other pre-treatment groups were administered midazolam (4 mg/kg), dexmedetomidine (100 µg/kg), atipamezole (1 mg/kg), and propofol (40 mg/kg) intraperitoneally. After a 30-minute recording, lidocaine (90 mg/kg) was intraperitoneally administered to induce toxicity in the pre-treatment groups. Recordings of EEG, ECG, and respiratory rate were obtained for a duration of 90 minutes following lidocaine administration.

Results: In Group DL, there were no significant differences in power values of any EEG wave compared to baseline after dexmedetomidine injection and lidocaine injection ($p>0.05$). In Groups ML, AL, and PL, a significant decrease in heart rate was observed following lidocaine injection compared to baseline measurements, while in Group DL, a significant decrease was observed following dexmedetomidine injection compared to baseline ($p<0.05$). In the analysis of respiratory rate, no significant differences were observed in Groups ML, DL, and PL compared to Group L ($p>0.05$).

Discussion - Conclusion: Dexmedetomidine pre-treatment did not demonstrate superiority as an anticonvulsant over midazolam and propofol in lidocaine-induced LAST condition. Hemodynamically, dexmedetomidine pre-treatment exhibited effects similar to those of midazolam and propofol.

Keywords: Lidocaine, convulsion, dexmedetomidine, local anesthetic toxicity, electrocorticogram

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Intraoperative Hypotension: Anaphylaxis or Heart Failure?

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Giriş - Amaç: It is crucial to identify the source of intraoperative hypotension. In this article, we'd like to share a successful case of anaphylaxis diagnosed by transesophageal echocardiography (TEE).

Phenomenon: A patient with known atrial fibrillation, diabetes, hypertension, and complete situs inversus was operated on for incisional hernia repair. Anesthesia was induced with 100g fentanyl, 40mg lidocaine, 200mg propofol, and 50mg rocuronium bromide. Following endotracheal intubation, 1 g cefazolin was given. Approximately 15 minutes after induction, the patient had hypotension and cardiac arrest as peak airway pressures climbed. Cardiopulmonary resuscitation was started, spontaneous circulation was restored in the tenth minute, and TEE indicated hyperdynamic left ventricular functions. Anaphylaxis was suspected, thus adrenaline, noradrenaline infusion, and methylprednisolone were administered. The patient was transported to the critical care unit once hemodynamic stabilization was attained. The serum tryptase level was 32.3ug/L, and it was determined that cardiac failure was caused by anaphylactic shock.

Discussion - Conclusion: Anaphylaxis is a hypersensitivity reaction in which an antigen interacts with IgE, prompting mast cells and basophils to activate and degranulate. Anaphylactic responses are uncommon during surgery, with a mortality rate of 3.5-4.7% despite adequate treatment[1]. Neuromuscular blockers cause 60-70% of responses, although antibiotics, hypnotic drugs, opioids, local anesthetics, nonsteroidal anti-inflammatories, and colloids can also cause reactions[2, 3]. Tryptase levels more than 25ug/L are significantly predictive of anaphylaxis, with a positive predictive value of more than 90% [2, 3]. Intraoperatively, it is difficult to distinguish between hypotension caused by anaphylaxis and cardiogenic shock. Both disorders are characterized by severe shock, elevated airway pressures, pulmonary congestion, and cardiac collapse. TEE can distinguish between allergy and cardiogenic shock; in anaphylaxis, higher stroke volume and ejection fraction are detected due to hyperdynamic responses.

Keywords: Hypotension, Anaphylaxis, TEE, Tryptase

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Ultrasonography-Guided Adductor Canal Block and Popliteal Nerve Block for Non-Cardiac Surgery in a Patient with Left Ventricular Assist Device

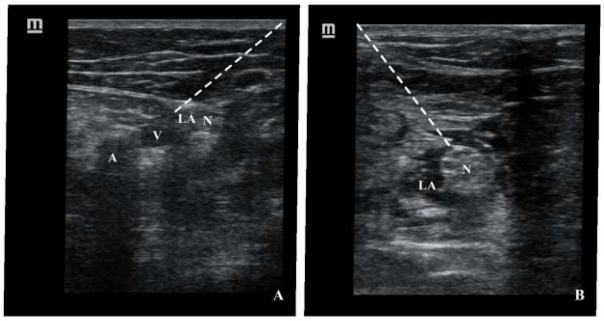
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Giriş - Amaç: Left ventricular assist devices (LVADs) are used for short-term support in the hope of improving the myocardium and/or for long-term support as a 'bridge' to heart transplantation and a permanent solution to end-stage heart failure (HF). With the increasing survival rate of end-stage HF patients, there has been an increase in the need for non-cardiac surgical procedures. However, perioperative anesthesia management of LVADs patients for non-cardiac surgery presents a number of challenges. In this report, we aimed to present our successful peripheral nerve block application for non-cardiac surgery in LVADs patient.

Phenomenon: A 59-year-old male patient with end-stage HF, LVADs-support, %10 ejection-fraction, and co-morbidities was scheduled for lower-extremity amputation secondary to ischaemic changes. The patient had a history of DM, HT, CABG, and lower-extremity amputation. Preoperative antithrombotic/anticoagulant treatments were arranged. Following routine anesthesia, invasive hamodynamic, cerebral-oximetry (NIRS), and perfusion index (PI) monitoring, ultrasound-guided (USG) adductor canal block (in-plane/10 mL/0.5% bupivacaine) and popliteal nerve block (in-plane/15 mL/0.5% bupivacaine) were performed. The surgery duration was 90 min. Intraoperatively, the patient was hemodynamically stable. No additional analgesic, and vasopressor, and/or inotropic agents were required. Postoperatively, the patient was taken to the ICU. The patient was discharged on the 3rd hospitalization day. Written and verbal consent was obtained.

Figure 1. Sonogram of the needle position and spread of local anesthetics of adductor canal block (A) and popliteal nerve block (B)



A artery, LA local anesthetic, N nerve, V vein

Discussion - Conclusion: In non-cardiac surgery, challenges of successful perioperative anesthetic management of LVADs patients include management of afterload sensitivity and preload dependence, non-pulsatility, coagulation regulation, bleeding, and thrombosis risk, and the need for invasive monitoring. Intraoperatively, maintenance of hamodynamic stability, anticoagulation management, and avoidance of hypovolemia, hypoxia, hypercarbia, and acidosis are essential. The surgical procedure is often performed under general-anesthesia. It has been reported that neuraxial-anesthesia may also be appropriate in rare-cases. Furthermore, sympathetic blockade is a relative-contraindication for LVADs patients. However, in selected cases, peripheral nerve blocks may be an alternative to general-anesthesia, taking into account intraoperative anesthetic-goals.

Keywords: left ventricular assist device, end-stage heart failure, adductor canal block, popliteal nerve block, peripheral nerve block

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The Link Between Awake Prone Positioning and Need for Invasive Mechanical Ventilation in COVID-19 Related ARDS

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Introduction - Purpose: To evaluate the relationship between the duration and number of prone position (PP) and the need for invasive mechanical ventilation in awake patients with COVID-19 related ARDS.

Materials and Methods: Methods: This is a study of 32 patients underwent invasive mechanical ventilation (IMV) and matched 33 non-IMV patients with COVID-19 receiving HFNC whose diagnoses were mild/moderate ARDS. Independent variables such as total number and duration of PP, clinical features, and patient characteristics were obtained. In our primary analyses, binomial logistic regression models were used to investigate variables associated with IMV need. Subsequently, models were adjusted for ROX index, APACHE II and SOFA scores, and LOS.

Results: Results: The SOFA score, ROX index at 4 h, and LOS differed between groups. PaO2, SpO2, respiratory rate and ROX index of all patients improved after the first prone position (t = -6,93, p < ,001; t = -7,30, p < ,001; t = 5,35, p < ,001; t = 6,02, p < ,001; respectively). Diagnostic decision-making features of prone number (AUC = 0,690) and duration (AUC = 0,723) in predicting the need for IMV were examined with the ROC curve. We found that total number of prone position (aOR: 0,70; [CI %95: 0,51 - 0,96]; p = 0,026) and duration of prone position (aOR: 0,95; [CI %95: 0,92 - 0,99]; p = 0,22) are associated with decreased risk of undergoing IMV.

Discussion - Conclusion: Conclusion: IMV need is negatively correlated with duration and total number of prone position in the awake patients with C-ARDS receiving HFNC, even after adjusting for possible confounding factors.

Keywords: Covid, Ards, Yüksek akımlı nazal kanül, Prone pozisyon, Prone süresi

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Applying Ultrasound-guided Cervikal Plexus Nerve Block To A High Risk Patient With A Mass In The Neck

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Giriş - Amaç: Cervical plexus block is a nerve block method applied to the area where the C2-C4 nerve roots exit the vertebral foramina and is applied by administering local anesthetic to this area. (1) Thanks to this block, anesthesia of the anterolateral neck and just above the clavicle is provided.This case will emphasize a different and safe anesthesia method in a high risk patient.

Phenomenon: The patient, who had a midline mass in the neck area where the thyroid cartilage is located, underwent surgery for excision of the mass. The female patient was 59 years old and had undergone goiter surgery before. The patient had a short neck and mallampati IV. The mass on his neck was in the midline and was 10 cm in diameter. It was decided to apply ultrasound-guided bilateral cervical plexus block to the patient. Bilateral cervical plexus blockade was performed by applying 8 ml of 5% bupivacaine to each side under ultrasound guidance. Approximately 15 minutes later, pain control was performed and surgery was started. The operation lasted approximately 45 minutes and the patient was taken to the recovery unit without any problems. The patient was sent to the clinical service after 20 minutes without any problems.

Location of the mass in the neck area



Discussion - Conclusion: The cervical plexus block is a block that covers the anterior and lateral aspect of the neck. (2) Anesthesiologists should use the method that is safest and easiest for the patient. It can be performed under ultrasound guidance in patients with high risk or risk of difficult intubation.

Keywords: Cervical Block, Ultrasound, Peripheral Nerve Block

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Effectıveness Of Platelet Markers In Estımatıng The Amount Of Intraoperatıve Bleedıng In Vertebra Surgery

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Introduction - Purpose: One of the most important steps in perioperative bleeding management is the predetermination of the patient at risk. Even if there is no hemostatic abnormality in vertebral surgery, which is a major surgery, major bleeding may be encountered and many perioperative blood transfusions may be required. In this study; we aimed to investigate the effectiveness of preoperative mean platelet volume (MPV), platelet distribution width (PDW), plateletcrit (PCT), mean platelet volume lymphocyte count ratio (MPVLR) and platelet count to lymphocyte count ratio (PLR) values in predicting the amount of intraoperative bleeding in patients who will undergo vertebral surgery.

Materials and Methods: Gender, age, ASA score and body mass index (BMI), preoperative MPV, PDW, PCT, MPVLR and PLR values of the patients planned for vertebra surgery in the neurosurgery clinic were recorded. Surgical duration and levels of vertebral transpedicular screwing and laminectomy as surgical procedures were recorded. The amount of intraoperative bleeding was obtained by making the necessary calculations based on the amount of blood accumulated in the aspirator and the amount of blood in the sponges during the surgery.

Results: Of the 63 patients included in the study, 60.3% (n=38) were female and 39.7% (n=25) were male. The mean age of the patients was 54.7 ± 11 years and the mean BMI was 29.6 ± 4.6. No correlation was found between the amount of bleeding and gender, age, the MPV, PDW, PCT, MPVLR and PLR values. A significantly high correlation was found between amount of bleeding and BMI, duration of surgery, and the number of transpedicular screwing segments.

Discussion - Conclusion: In conclusion; platelet markers do not appear to have an effect on the amount of bleeding. However, as the BMI increases, the duration of surgery prolongs, and the number of transpedicular screw segments increases, the amount of bleeding increases.

Keywords: Mean Platelet Volume, Platelet Distribution Width, Mean Platelet Volume Lymphocyte Ratio, Platelet-Lymphocyte Ratio, amount of bleeding in vertebra surgery

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Pub No: OS-033

Airway management with laryngeal tube during laparoscopic cholecystectomy in a case with tracheal stent

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Giriş - Amaç: Tracheal stenosis is an important complication observed after prolonged endotracheal intubation. Placing a stent to the segment with stenosis is used as a treatment modality to ensure airway patency without performing tracheal resection. However, when a new airway intervention is required, applying endotracheal intubation may result in migration of the stent. In this report, we present the use of a laryngeal tube in a patient with tracheal stent who underwent laparoscopic cholecystectomy.

Phenomenon: A 46-year-old, 172cm, 74kg male planned to undergo laparoscopic cholecystectomy was consulted for preoperative evaluation. Patient's medical history was remarkable except for a history of tracheal stent application 6-months ago as a treatment for tracheal stenosis caused by prolonged intubation due to Covid-19. During the evaluation, he did not report dyspnea and had no stridor. Although tracheal intubation is the most preferred airway management method for the laparoscopic surgeries, this approach brings a significant risk regarding the migration of the stent in a such patient. Considering the insufficient airway protection of a laryngeal mask at high abdominal pressures in terms of aspiration, we decided to use a laryngeal tube counting on the presence of both a pharyngeal and esophageal cuff. After standard monitorization and induction, the laryngeal tube was placed without any complications and the cuffs were inflated through a single balloon that provided pressure control. A gastric tube was also applied via the esophageal line for gastric aspiration. No respiratory complications such as high airway pressures or airway leakage were observed during the operation and laryngeal tube was safely removed at the end of the surgery and under appropriate conditions.

Discussion - Conclusion: Laryngeal tube is a safe alternative device for the airway management when endotracheal intubation is not preferred in patients planned to undergo laparoscopic surgery.

Keywords: Airway management, Tracheal stent, Laringeal tube

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Pub No: OS-034

Immediate Extubation Experiences In Newborns Undergoing Congenital Heart Surgery: Case Series

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Giriş - Amaç: Immediate extubation has become possible with advances in patient management and surgical techniques use of short-acting pharmacological agents. In this case series, we wanted to share our immediate extubation experiences in newborns who underwent congenital heart surgery.

Phenomenon: 55 newborns underwent congenital heart surgery between January 2023 and September 2023. And 33 of them were not extubated, shown in Figure 1. Extubation was attemted in 22 patiens, 7 of them could be extubated. Cross clamp (CC) and cardiopulmonary bypass (CPB) times of the patients are shown in Table 1. All extubated patients were term babies who hadn't needed respiratory support in the preoperative period. 0.01 mg/kg midazolam, 1 mg/kg ketamine, 1mcg/kg fentanyl and 1 mg/kg rocuronium were used for induction. Anesthesia maintenance of patients planned for extubation was provided with 0.3-0.8 MAC sevoflurane inhalation and 0.05-0.2 mcg/kg/min remifentanil infusion, depending on their hemodynamics.For postoperative analgesia, 0.05 mg/kg morphine and 10 mg/kg paracetamol were administered. Drug doses are compared in Table 2. At extubation, 4 mg/kg sugammadex was administered and when sufficient spontaneous breathing (10 ml/kg) and active motor movements were observed, the patients were extubated. After being sure of the safety of patients respiratory status, they were transferred to the intensive care unit (ICU) with O2 mask. One of the extubated patients was reintubated at the ICU admission, then extubated at the 48th hour. All extubated patients were transferred to the ward on average of 6-8 days.

Figure 1- Patient diagram

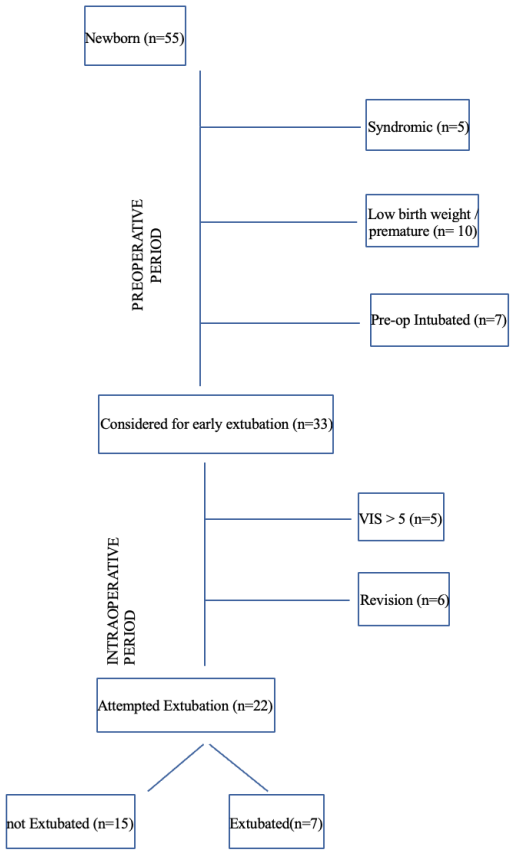


Table 1. Comparison of CPB and CC times of patients who were and were not extubated

	CPB	CPB+CC	without CPB
Not Extubated (n=15)	n=6 Arcus ///// PA recons/	n=9 TAPVD // Arcus reconst+VSD /// TGA // Arcus + ASD / Arcus + AV repair /	n=0
Extubated (n=7)	n=2 Arcus //	n=4 TGA /// Aortic valve repair/	n=1 BPAB /

Table 2. Comparison of administered drug doses

Total drug dose	Fentanyl (mcg)	Midazolam (mg)	Ketamine (mg)
Not Extubated	21,7	1,71	11.3
Extubated	7,5	1,75	5,35

Discussion - Conclusion: Immediate extubation should be considered in the begining of operation, and long-acting medications should be avoided. Drug doses should be adjusted to inadequate opioid metabolism. Immediate extubation can be performed safely in newborns with careful patient selection and multidisciplinary approach. This, could potentially accelerate postoperative recovery, but studies involving larger numbers of patients are needed.

Keywords: Immediate extubation, congenital heart surgery, pediatric anesthesia, newborn

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Pub No: OS-04

Ultrasound-guided Pectoserratus Plane Block Combined With Pectointercostal Fascial Plane Block For Surgical Anesthesia In Breast Cancer Surgery: a case report

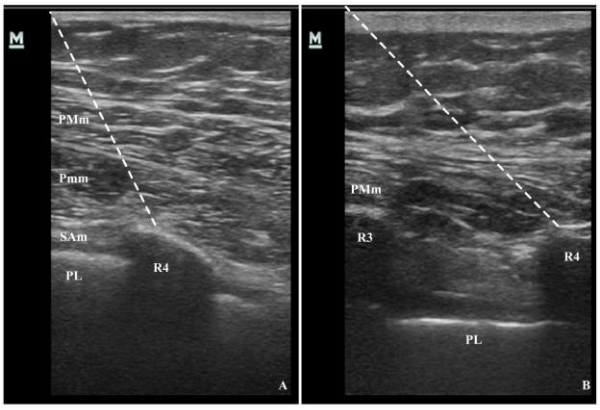
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Giriş - Amaç: Breast cancer is the most common malignancy in women, and most patients require breast cancer surgery (BCS). Regional techniques are successfully used after BCS. However, these techniques frequently aim to reduce acute pain after general-anesthesia. The use of regional techniques for primary anesthesia in breast surgery is limited. In this report, we aimed to present our successful application of pectoserratus plane-block combined with pectointercostal fascial plane-block (PIFB) as a primary anesthetic technique for BCS.

Phenomenon: A fifty three year-old patient was diagnosed as invasive ductal carcinoma, and the surgical team decided for emergency surgery. The patient refused the surgery under general-anesthesia due to recurrent postnasal drainage, so segmental mastectomy and axillary lymph node excision under regional-anesthesia were planned with the surgical team. On physical examination, there was a palpable mass in the medial aspect of the left breast. Following routine anesthesia monitoring, ultrasonography (USG)-guided (linear-probe) pectoserratus plane-block (Pmm-SAm:20mL, PMm-Pmm:10mL) was applied, and followed by a PIFB (10mL) by shifting the USG-probe 2 cm lateral to the sternum was applied. The surgical duration was 60 min. No additional rescue analgesia. Written and verbal consent was obtained.

Figure 1. Ultrasound-guided demostration of the pectoserratus plane block (A) and pectointercostal fascial plane block (B)



PL pleura, Pmm pectoralis minor muscle, PMm pectoralis major muscle, R rib, SAm serratus anterior muscle

Discussion - Conclusion: Due to the complex innervation of the breast, a combination of pectoserratus and PIFB blocks were required for primary anesthesia in BCS in our case. The pectoserratus plane-block has been successfully used to reduce pain after BCS. However, the pectoserratus plane-block cannot block the anterior branches of the intercostal nerves or the entire nipple-areolar complex. Therefore, it alone cannot be sufficient to block the sensory innervation of the medial aspect of the breast. The PIFB is a superficial plane block targeting the anterior cutaneous branches of the intercostal nerves. Therefore, a combination of pectoserratus and PIFB blocks seem to be a valid anesthetic technique for BCS involving the medial aspect of the breast.

Keywords: ultrasound-guided, pectoserratus plane block, pectointercostal fascial plane block, anesthesia, breast cancer surgery

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Pub No: OS-05

Comparison Of Two Different Adrenaline Administration Methods In Rats With An Anaphylactic Shock Model

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Introduction - Purpose: Anaphylaxis is an emergency situation and providing vascular access for resuscitation is crucial during such medical emergencies. The corpus cavernosum contains a large venous sinusoid pool and has an anatomical structure that can be cannulated easily. In the presented thesis, it was aimed to investigate the efficacy of the corpus cavernosum cannulation as an alternative to the intravenous route in rats in which anaphylactic shock model was created.

Materials and Methods: In the study, 32 rats were used and rats were divided into 4 groups as control group, anaphylactic shock group, corpus cavernosum and tail vein group. Anaphylactic shock model was created for the groups other than the control group. Adrenaline was administered to the corpus cavernosum and tail vein groups. Hemodynamic monitoring including respiratory rate, blood pressure and heart rate was performed on all rats included in the experiment, and hemodynamic data were recorded for 60 minutes. İntracardiac blood samples and heart tissues of all subjects were collected.

Results: When the corpus cavernosum group was compared with the anaphylactic shock group, at the 5th, 10th, 15th, 20th, 25th, 50th and 60th minutes blood presure was significantly higher ($p<0.05$). Tissue adrenaline level of the corpus cavernosum group was found to be significantly higher than both the control and anaphylactic shock groups ($p<0.05$). When the serum adrenaline level was compared between the groups, it was found that the serum adrenaline level of the corpus cavernosum group was significantly higher than both the control and anaphylactic shock groups ($p<0.05$).

Discussion - Conclusion: It has been observed that adrenaline administered through the corpus cavernosum provides a significant increase in blood pressure. Significantly higher levels were also detected in serum and tissue adrenaline levels. It has been shown that the intracavernosal route can

be an alternative treatment method in cases where emergency intervention is required and venous access is difficult.

Keywords: adrenaline, corpus cavernosum, anaphylactic shock

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Pub No: OS-07

Combination of Thoracic Paravertebral Block and Erector Spinae Plane Block Applications in the Management of Acute Pain After Sternotomy

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Giriş - Amaç: Inadequate pain control following sternotomy increases postoperative complications (1). The integration of ultrasound into clinical anesthesia has led to an increased utilization of regional anesthesia techniques. Thoracic paravertebral block (TPVB) and erector spinae plane block (ESPB) are commonly employed techniques for acute pain management following sternotomy (2,3). In this case, we aim to share the outcomes of a patient who underwent sternotomy and received a combination of TPVB and ESPB for postoperative analgesia.

Phenomenon: The informed consented patient was a 72-year-old male, classified as ASA II. Monitoring was conducted in accordance with ASA standards. The patient was administered 2 mg of midazolam and 75 mcg of fentanyl for sedation. In the prone position, TPVB (10 mL 0.25% bupivacaine) was performed initially using an 8 mm ultrasound-compatible block needle. Then, the needle was withdrawn about 2 cm, and ESPB (10 mL 0.25% bupivacaine) was performed. The procedure was performed bilaterally. Subsequently, general anesthesia was induced, and surgery commenced. The patient underwent coronary artery bypass grafting(CABG)x5 surgery. The patient, with a surgical duration of 360 minutes, was transferred to the intensive care unit in an intubated and uncomplicated state following surgery. Visual analog scale (VAS) scores were 0 after the extubation, as well as on the first day postoperatively. VAS scores at the drain site were 0 after the extubation, as well as on the first day postoperatively. The patient, who did not require additional analgesia, was transferred to the ward the following day.

Discussion - Conclusion: There are numerous regional anesthesia techniques available for the management of acute pain after sternotomy (4). TPVB and ESPB applications can be utilized individually or combined with a single needle entry for multi-site injection (5,6). This allows for a broader distribution of local anesthetic and can help prevent potential block failure scenarios.

Keywords: Postoperative Pain, Cardiac surgery, Erector spinae plane block, Sternotomy, Thoracic paravertebral block

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Pub No: OS-08

Anesthetic Management of Extremely Low Birth Weight Premature Newborn Weighing 580 Grams With Intestinal Perforation

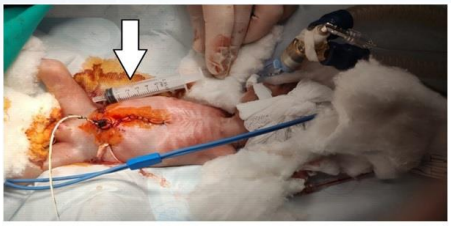
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Giriş - Amaç: Spontaneous intestinal perforation (SIP) causes considerable morbidity and mortality in very low birth weight (VLBW) preterm infants Anesthetic management in the premature newborn is critically important because of low birth weight, hypothermia, concomitant pulmonary diseases, metabolic problems, receptor immaturity, and changes in cerebral blood flow. In this case report, we discuss the anesthetic management of surgery for SIP in an VLBW premature newborn due to lack of agreement on the selection of the appropriate anesthetic agents in the literature.

Phenomenon: An extremely low birth weight (ELBW) male premature newborn weighing 580g, born by cesarean (C)-section due to preeclampsia and fetal distress at a gestational age of 25 weeks at the neonatal intensive care unit, had abdominal distention and abnormal bowel sounds. The operating room temperature was set to 26 °C to prevent hypothermia and the patient's head and extremities were covered with cotton, also a heating blanket was used. Standard monitorisation was done. Vital signs were as follows: rectal temperature 36.6°C, SpO2 96%, and heart rate 158/bpm. Peripheral venous 26 G vascular access was also inserted to patient who had umbilical venous catheter due to the risk of umbilical catheter dysfunction in intra-abdominal surgeries. 5 minute inhalation induction was performed with 3-5% MAC (minimal alveolar concentration) sevoflurane under high fresh gas flow (80% oxygen-20% dry air) using an open pediatric circle system. Fentanyl citrate 1µg / kg was used for intravenous induction of anesthesia. 1-3% MAC sevoflurane in 50% oxygen was administered for maintenance of anesthesia. The surgical procedure lasted for 45 minutes and the patient had 3 ml of bleeding during surgery. 5 µg adrenaline iv and then 3 ml of erythrocyte suspension were given to the patient because of bradycardia (pulse: 108 beats/min) at the thirtieth minute of surgery.

Figure1



The patient in the operating room

Discussion - Conclusion: The surgical procedure was completed with successful intraoperative anesthesia management

Keywords: Extremely Low Birth Weight Preterm, Hypothermia, Intestinal Perforation

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Pub No: OS-09

Use of Isoproterenol in Atrioventricular Block in a Case of Redo Aortic Valve Replacement

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Giriş - Amaç: On exit from cardiopulmonary bypass(CPB), return of cardiac electrical activity may occur in the form of atrioventricular(AV) block or sinus bradycardia. Isoproterenol is a β adrenergic receptor agonist with chronotropic and inotropic effects.It can be used in mild or temporary heart block attacks.With this case, we aimed to share the formation of sinus rhythm with isoproterenol in a patient who developed AV block after CPB.

Phenomenon: A 70-year-old male patient applied to the cardiology outpatient clinic with respiratory distress.It was learned that he had Aortic Valve Replacement(AVR) nineteen years ago in his medical history.Prosthetic aortic valve stenosis was detected in the echocardiography.Preoperative treatment was performed for the patient with pulmonary edema.He was taken into surgery for redoAVR on the 13th day of his hospitalization. Noradrenaline and dobutamine infusion was started to the patient who had AV block after cross-clamping.Pacemaker was applied.However, no active response was received. Isoproterenol infusion(8mcg/min) was started.At the fifth minute of the infusion, the patient entered sinus rhythm.In the intensive care unit, isoproterenol infusion was continued for twenty-four hours and the dose was reduced and stopped.The patient was taken to the ward on the second postoperative day and discharged with full recovery on the eighth day.

PICTURE1:Admission chest radiography of the patient



PICTURE2:Discharge chest radiography of the patient

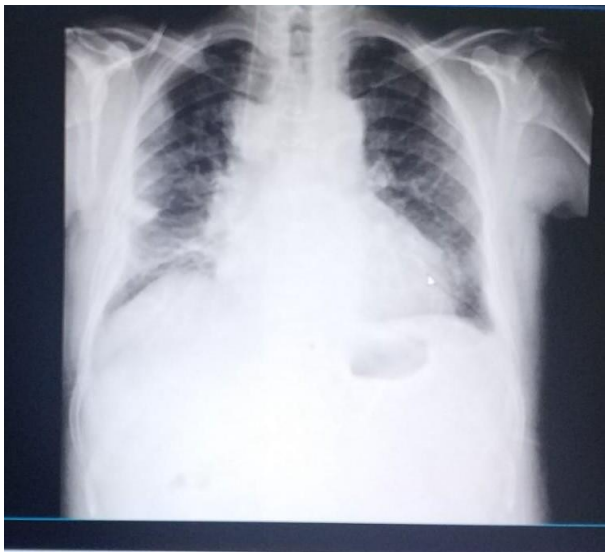


Table 1: Patient's Hemodynamic Data

	MEAN ARTERIEL PRESSURE (mmHg)	PULSE (/dk)	SATURATİON(%)
ENTRANCE	78	60	94
POST INDUCTION	62	55	99
POST CROSS-CLAMP	56	**36**	96

POST ISOPROTERENOL	72	**90**	100
INTENSIVE CARE UNIT	69	93	98
DISCHARGE	96	90	98

Discussion - Conclusion: Isoproterenol can provide sinus rhythm by using it in cases of AV conduction disorder.Choudhary G. et al.used isoproterenol in an 8-year-old patient who developed complete AV block after viral myocarditis and did not respond to atropine(2).Sakata Y. et al., in their study investigating the effects of dobutamine and isoproterenol after open heart surgery in children, stated the chronotropic effect of isoproterenol(3).We used isoproterenol in our patient to eliminate the AV block effect and return him to sinus rhythm.As a result, we believe that the use of isoproterenol may provide a return to sinus rhythm in cases where AV block develops after CPB.

Keywords: Aortic Valve Replacement, Atrioventricular Block, isoproterenol

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Pub No: OS-10

Acute Pancreatitis due to a Suicide Attempt with Olanzapine

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Giriş - Amaç: Acute pancreatitis (AP) is inflammatory process of pancreatic tissue. Gallstones, alcohol, hyperlipidemia, hypercalcemia, trauma, infection and drugs are the etiologies. Antipsychotic drugs can cause AP. It can range from an asymptomatic hyperamylasemia to fatal necrohemorrhagic pancreatitis.

Phenomenon: 18-years-old female patient was referred to our clinic with the preliminary diagnosis of status epilepticus and encephalitis. She was intubated, GCS:6, light reflexes were normal, neck stiffness, kernig and brudzinski were negative. Brain MRI, EEG,Brain CT and LP were normal. The drug panel was negative in blood and urine. Supportive treatment was started. She regained consciousness on the 2nd day and was extubated. With fully consciousness she stated that, she used olanzapine (140 mg) for suicidal purposes. A significant increase was observed in Amylase and Lipase values of the patient with abdominal pain on the 3rd day. (Amylase 118 U/L ◊297U/L Lipase 21 U/L ◊292 U/L). Pancreatic parenchyma was slightly heterogeneous and increased contamination in abdominal USG. Triglyceride and glucose levels remained normal. With the clinic and current imaging results, the diagnosis was AP. Abdominal pain regressed after 4 days of supportive treatment, and laboratory findings returned to normal, and she was discharged with full recovery.

Discussion - Conclusion: Findings related to olanzapine poisoning are; confusion, lethargy, coma, tachycardia, anticholinergic syndrome, myoclonus. Olanzapine-induced pancreatitis has been reported to occur at least 6 months after the treatment. Imaging findings are acute edematous pancreatitis, hemorrhagic pancreatitis, and necrotizing pancreatitis. In our patient, pancreatitis developed after 3 days due to acute use of the drug at high doses. The patient's clinical course was mild, with normal triglyceride and enzyme levels. All examinations should be done in detail in patients who come in coma and have suspected intoxication. Pancreatitis should be considered in patients who are known to take antipsychotics and have GIS symptoms. Otherwise, mortality is inevitable.

Keywords: intoxication, olanzapine, pancreatitis, suicide, coma

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Pub No: OS-11

Bi-level Combined Serratus Anterior Plane Block Application in the Treatment of Acute Pain After Coronary Artery Bypass Grafting: A Series of Three Cases

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Giriş - Amaç: Serratus anterior plane block (SAPB) can be applied both deep and superficially at any level between the second and seventh ribs, and in combined SAPB (C-SAPB) application, it can be administered both deep and superficially with a single needle entry (1,2). Additionally, it can be administered at different rib levels, further enhancing the spread of local anesthetic, in addition to being applicable at a single rib level. In these three cases, we aimed to share the results of a Bi-level C-SAPB application for postoperative analgesia in patients undergoing CABG.

Phenomenon: Informed consent was obtained from the patients, who were male/male/male, 67/71/60 years old, ASA III/III/III. Monitoring was performed according to ASA standards. Subsequently, general anesthesia was administered to the patient. In the supine position, deep SAPB (7.5 mL 0.25% bupivacaine) was performed initially at the level of the third rib. Then, superficial SAPB (7.5 mL 0.25% bupivacaine) was performed over the serratus anterior muscle. The same procedures were then repeated at the level of the sixth rib, bilaterally. The patients underwent CABGx3 surgery. The surgical durations for the patients were 270/360/300 minutes. The patients were transferred to the intensive care unit in an intubated and uncomplicated state following surgery. Pain scores were <4 in post-extubation follow-ups. Patients did not require additional analgesia. Stable patients in follow-ups were transferred to the ward one day later.

Discussion - Conclusion: In the era of rapid recovery, an adequate and effective postoperative analgesia technique enables early extubation, mobilization, and discharge from the intensive care unit (3). In recent years, the frequency of SAPB application, which provides more effective analgesia with increased local anesthetic spread by combining deep and superficial application and by applying it at two levels, has been on the rise (2,4). In these cases, acceptable postoperative analgesia was provided with Bi-level C-SAPB after sternotomy.

Keywords: Acute Pain, Cardiac Surgery, Deep Serratus Anterior Plane Block, Superficial Serratus Anterior Plane Block, Sternotomy

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Pub No: OS-12

Our Experiences with Caudal Epidural and Transversus Abdominis Plan (tap) Block in Pediatric Patiens

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Introduction - Purpose: Caudal block (CB) is achieved by administration of local anesthetics to epidural space via sacral hiatus. As a sole anesthesia method, caudal block has advantages of avoiding volatile anesthetics, neuromuscular blockers, analgesics. For Transversus Abdominis Plan (TAP) block, local anesthetic is administered to area defined as “transversus abdominis plane” between internal oblique muscle in anterolateral region of the abdomen and transversus abdominis muscle. It's been reported that both blocks provide effective intra&postoperative analgesia and reduce the need for additional analgesics. We discussed our caudal and TAP block managements on pediatric surgery patients in Yozgat Bozok University.

Materials and Methods: Caudal block and TAP block were performed between September 2021 -June 2023, 92 pediatric patients were evaluated retrospectively. The patients' age, gender, type of surgery, need for additional analgesics intra&postoperatively, causes of need additional analgesics were recorded. Postoperative pain levels of all patients were evaluated with FLACC&VAS scales.

Results: Of the patients aged 0-17 years, 9 (9.8%) were female, 83 (90.2%) were male. TAP was applied to 19 of them and caudal block to 73. Number of patients and their related cause of surgical interventions were as follows; 11patients-appendicitis,24patients-inguinal hernia,6patients-inguinal hernia+circumcision, 4patients-undescended testis,7patients-undescended testicle+circumcision,3patients-circumcision,1patient-testicular torsion,1patient-urachus malformation,1patient-urethral chord, 1patient-pilonidal sinus,1patient-vaginal atresia.In recovery unit, patients didn't need any additional analgesics.Although there wasn’t high pain score, it was observed that 10mg/kgivparacetamol was administered to 21 patients within thefirst 4 hours postoperatively at ward. All outpatient-surgery patients were discharged at postoperative 3rd hour without problem of oral intake and recovery. There were no unplanned, unexpectedly prolonged hospitalization.

Discussion - Conclusion: Caudal&TAP blocks, which are frequently used in surgical procedures of pediatric patients, were found to be effective in postoperative analgesia. It is accept that additional analgesics were used to relieve the restlessness/agitation rather than pain-relief especially by parents.

Keywords: Caudal Block, Pediatric Analgesis, Regional Anesthesia, Transversus Abdominis Plan Block, Pediatric Anesthesia

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Pub No: OS-13

Use of Tissue Plasminogen Activator and Intensive Care Management in Massive Pulmonary Embolism Causing Cardiac Arrest

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Giriş - Amaç: Tissue plasminogen activator(tPA) is one of the basic components of dissolving blood clots(1). Massive pulmonary embolism(PE) is characterized by severe hemodynamic instability. The use of thrombolytic therapy is indicated in the treatment of. The effectiveness of tPA has been demonstrated in patients with right ventricular dysfunction(2,3). With this case, we aimed to share tPA and the multidisciplinary approach applied to a patient with cardiac arrest after massive PE.

Phenomenon: A sixty-nine-year-old female patient was brought to our emergency department with complaints of sudden vomiting and loss of consciousness. It was learned that she had arthroscopic surgery nine days ago in her medical history. She was admitted to the intensive care unit(ICU) with the diagnosis of bilateral massive pulmonary embolism. The patient, who was tachypneic, tachycardic and hypotensive, was intubated. Cardiopulmonary resuscitation was performed on the patient with cardiac arrest. Noradrenaline, dobutamine, adrenaline and hydrocortisone infusion was started. 100mg tPA was administered intravenously over 2 hours.Omeprazole was started on the patient who developed gastrointestinal bleeding. The patient developed acute renal failure and was taken to dialysis on the 5th day of hospitalization. She entered the polyuric phase on the 9th day. She was extubated on the 18th day. She was discharged with full recovery on the 21st day.

Table1.Parametreleri Hemodynamic Parameters of the Patient

	MEAN ARTERIEL PRESSURE (mmHg)	PULSE (/dk)	RESPIRATION RATE (/dk)	GLASKOW COMA SCORE
ICU ARRIVAL	**39**	**130**	**40**	**8**
AFTER tPA	52	121	28	7
ICU DAY 1	70	108	24	7
AFTER DIALISIS	85	116	22	8

DISCHARGE	78	92	16	15

Table2.Patient's Arterial Blood Gas Parameters

	PH	PCO2 (%)	PO2 (%)	HCO3 (mmol/L)	BE (mmol/L)	LACTATE(mmol/L)
ICU ARRIVAL	**6.83**	**60**	**87**	**7.5**	**-21.5**	**16**
AFTER tPA	7.19	34	94	13.5	-13	12
ICU DAY 1	7.32	36	114	19.3	-6.2	5
AFTER DIALISIS	7.35	42	113	22.9	-1.6	1.7
DISCHARGE	7.48	39	121	32	8.2	1.8

Discussion - Conclusion: The use of tPA as thrombolytic therapy is an effective treatment method in massive PE. Taylor C. Remillard et al., stated that the combination of thrombolytic therapy and aspiration thrombectomy may be an appropriate treatment for complicated massive PE(4). Don Mathew et al., ın their meta-analysis, they stated that the use of tPA provided a significant reduction in mortality(5).We also administered tPA to our patient after the arrest. We observed that clinical parameters improved.As a result, we believe that early use of tPA reduces mortality in cases of massive PE causing cardiac arrest.

Keywords: pulmonary embolism; thrombolytic therapy; tissue plasminogen activator

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Pub No: OS-14

Sudden Cardiac Arrest in a Pediatric Patient with Asd Who Underwent Orchidopexy, a Case Report

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Giriş - Amaç: Intraoperative cardiac arrest is a rare but serious complication of anesthesia in children with an estimated incidence of 1.4-2.9 per ten thousand in non-cardiac surgery and a mortality rate of 2-10.7% (1). In this case report, we will report a case of intraoperative pediatric cardiac arrest of unknown cause and our approach.

Phenomenon: Orchidopexy was planned for a 2-year-old, 12 kg, unoperated male patient with ASD heart defect. There was no remarkable feature in the patient's history. During induction, an I-Gel (No: 2) laryngeal mask was placed with 1 mg midozolam, 10 mcg fentanyl, 50 mg propofol and 5 mg rocuronium. Anesthesia was maintained at MAC 1.3-1.5 with oxygen-air and sevoflurane. 180 mg paracetamol was administered for analgesia. Surgery time was 35 minutes. After the surgical procedure was completed, the inhalation agent was discontinued, 25 mg biridone was administered twice to terminate neuromuscular blockade, and the laryngeal mask was removed after spontaneous breathing began. The patient was expected to recover with an oxygen mask. When laryngospasm developed, 20 mg propofol and manual pressure ventilation were applied. While manual face mask ventilation was continued, sudden cardiac arrest occurred after bradycardia. Adrenaline 0.20 mg IV was administered and cardiopulmonary resuscitation (CPR) was performed with face mask ventilation for approximately 40 seconds. The patient responded to cardiopulmonary resuscitation and had normal sinus rhythm. When bradycardia was observed, 0.2 mg atropine iv was administered. The patient, who had normal sinus rhythm, was transferred to the recovery room.

Discussion - Conclusion: Cardiac arrest in children with cardiac diseases 48% during the maintenanc phase of the anesthetic, compared with 36% and 16% during the presurgical and postsurgical periods (2,3). The keys to successful resuscitation during pediatric intraoperative cardiac arrest are the rapid administration of adrenaline and effective chest compressions.

Keywords: Pediatric anesthesia, Arrest, ASD, orchidopexy

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Pub No: OS-15

Anesthesia Management in a Patient with Klippel-Trénaunay Syndrome

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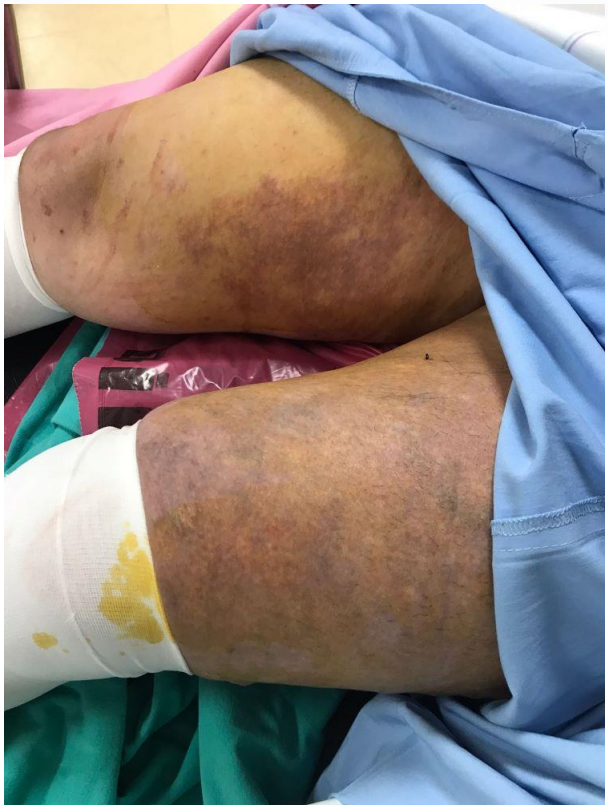
Giriş - Amaç: Klippel-Trénaunay syndrome (KTS) is a congenital malformation with port wine stain/cutaneous hemangiomas, limb asymmetry and soft tissue and bone hypertrophy, occurring in 1/27,500 births. In this case, anesthesia management in a cesarean section patient with CTS is described.

Phenomenon: 28 years old, 82 kg, 38 w pregnant woman with CTS was scheduled for cesarean section.Among the symptoms of CTS, the patient had port wine stain on her face, more diffuse cutaneous hemangiomas on the left side of her body, varicose veins on the left leg, hypertrophy. Standard monitoring (ECG, NIBP, SpO2) was performed. BP:120/60, HR: 90/min, SpO2: 98%. The patient was intubated with 200 mg propofol, 40 mg rocuronium bromide and remifentanil infusion. During surgery, it was observed that there was excessive bleeding at the skin incision and the uterine vessels were large. She bled 750 cc, no transfusion was needed

port wine stain/cutaneous hemangiomas



varicose veins on the left leg



diffuse cutaneous hemangiomas on the left arm



Discussion - Conclusion: Anesthetic management in the CTS patient can be challenging, attention should be paid to airway management, hemodynamic stability, neuraxial vm bleeding. Pregnancy is not recommended in women with CTS due to increased obstetric risk. Airway management in these patients may be difficult, possible hemangiomas in the airway specific to CTS. There was no difficulty in airway management Although general anesthesia is recommended in the literature due to the risk of neuraxial bleeding, regional anesthesia was successfully applied in 2 cases. In a study of 82 patients with CTS, it was reported that contrary to previous reports, no difficulty was encountered in airway management and massive bleeding may occur in the perioperative period. In the same study, it was reported that regional anesthesia can be performed when the risk of trauma to neurovascular malformation with spine imaging is excluded.The anesthesiologist should pay attention to abnormal vascular structures in the airway and lumbar spine.

Keywords: : anesthesia management, cesarean section, Klippel-Trénaunay syndrome

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Pub No: OS-17

A Rare Cause of Atrial Fibrillation: Achalasia

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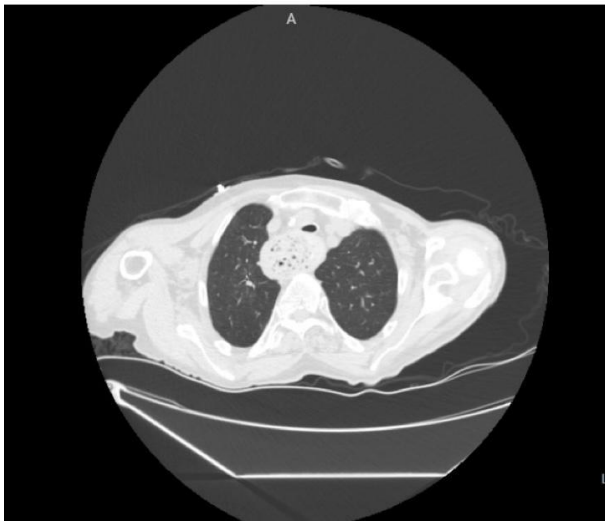
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Giriş - Amaç: Weaimed to present a case ofcardiac arrest that occurred due to inabilityto take oral antiarrhythmicdrugs in achalasia.

Phenomenon: In our case, a 78-year-old female patient applied to the emergency department with complaints of nausea, vomiting and oral intake disorder. The patient had hypertension, chronic atria lfibrillation, coronary artery disease, and cerebrovascular disease. He had pain in the epigastric region for the 6 months. Atrial fibrillation with rapid ventricular response was observed on the ECG of the patient, who was conscious and had a pulse of 140 in the emergency room. Beloc 10 mg IV and diltizem25 mg IV were administered. Rhythm rate returned to normal. Sudden bruising and breathing difficulties occurred after oral ingestionin the emergency room. Cardiopulmonary arrest developed in the patient who developed atrial fibrillation with rapid ventricular response.Spontaneous circulation returned as a result of 8 minutes of effective CPR. Thoracic CT showed esophageal dilatation and the appearance of food debris in the esophageal lumen. The patient was admitted to intensive care. The patient developed atrial fibrillation with rapid ventricular response again. Rate control was achieved with adenosine after cardioversion. Endoscopy revealed that the esophageal lumen was almost completely filled with solid food residues and the lower esophageal sphincter was very narrow and tight (Achalasia?). A nasogastric tube was inserted with the help of endoscopy and enteral feeding and oral treatmentof the patient were started. Later, the arrhythmia resolved and the patient was extubated and transferred to the palliative service.

Esophageal dilatation in thorax CT





Discussion - Conclusion: Achalasia is a rare disorder of the oesophageal smooth muscle characterized by impaired relaxation of the lower oesophageal sphincter and absent or spastic contractions in the oesophageal body(1). Reported global incidence values for achalasia from 0.03 -1.63 per 100,000 persons per year(2). In rare cases, oral intake disorders and inabilityto use oral medications effectively may lead to cardiac arrest.

Keywords: achalasia, atrial fibrillation, cardiac arrest

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Pub No: OS-18

Caudal Analgesia in a Pediatric Patient with Glucose-6-Phosphate Dehydrogenase Deficiency

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Giriş - Amaç: Many agents used in anesthesia can cause hemolysis in patients with glucose-6-phosphate dehydrogenase enzyme deficiency. In this case, we aimed to present the anesthesia management of a child with G6PDH enzyme deficiency who underwent orchidopexy and circumcision.

Phenomenon: Orchidopexy and circumcision surgery was planned for a 4-year-old male patient by the pediatric surgeon. It was learned that he was diagnosed by the pediatric clinic at the age of 2 and that he didn't have a hemolytic crisis. After oral midazolam premedication, he was induced with sevoflurane in the operating room. After intravenous propofol, a laryngeal mask was placed. 1 mL/kg 0.25% bupivacaine was applied to the epidural space. Sevoflurane was used to maintain anesthesia. Intraoperative hypotension, hyperthermia, and hematuria were not observed and there was no need for opioids. After 80 minutes of surgery, no problems were observed in the recovery unit. The patient was stable during follow-up and was discharged on the 2nd postoperative day.

Discussion - Conclusion: G6PDH enzyme deficiency is a serious recessive disease caused by mutation on the X chromosome, resulting in acute hemolysis after exposure to oxidative stress(1). In G6PD deficiency, avoiding situations that may cause oxidative stress and controlling pain are important to prevent acute hemolysis(2).Anesthetic agents such as midazolam, diazepam, ketamine, sevoflurane, and prilocaine have been associated with hemolysis in G6PD deficiency(3). Prilocaine and lidocaine should be avoided in individuals with G6PD deficiency due to the risk of methemoglobinemia(4). Bupivacaine is safe in G6PD deficiency(4). We applied the caudal analgesia technique to our patient for intraoperative analgesia and postoperative pain control. Successful postoperative analgesia was achieved in our patient, who didn't require analgesic for 30 hours postoperatively. We evaluate that caudal analgesia using bupivacaine is a safe and effective method for postoperative analgesia in patients with G6PD enzyme deficiency and who will undergo general anesthesia.

Keywords: Postoperative analgesia, Caudal Analgesia, Pediatric Patient with Glucose-6-Phosphate Dehydrogenase Deficiency

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A Rare-seen Diagnosis In Shoulder Pain: SAPHO Syndrome

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Giriş - Amaç: SAPHO syndrome is a rare-seen inflammatory osteoarticular diseasewhich is presented with Synovitis-Acne- Pustulosis- Hyperostosis- Osteitis. İn this case, SAPHO syndrome is discussed in a choric shoulder pain.

Phenomenon: A female patient aged 42, who had had shoulder pain for 4 months, was directed to Algology clinic. Since a supraspinatus tendinopathy had been detected in the left shoulder MRI of the patient, NSAID was started and 40 mg methyl-prednisolone was injected in the subdeltoid bursa of the patient in PMR clinic. Because of the persistent pain, the patient was directed to our clinic. In the physical examination, the left sternoclavicular joint of the patient was swelled and tender by palpation. The shoulder abduction was limited and the Hawkins test was positive. A left sternoclavicular joint MRI with contast, HLA-B27 test and sacroiliac MRI were planned. Sternoclavicular MRI was reported as SAPHO syndrome? Chronic recurrent multifocal osteomyelitis (CRMO)? HLA-B27 was negative and sacroiliac MRI was normal. Upon this, a bone scintigraphy was planned and an increased activity was detected in the medial upper portion of the right ankle of the patient. The patient was directed to the rheumatology clinic with the prediagnosis of SAPHO syndrome. Sulfasalazine 2 gr/day + indomethacin 3*25 mg treatment was started to the patient by the rheumatology clinic, the NRS score of the patient was dropped to 5 from 8 in the first month control, dropped to 2 in the third month control.

Discussion - Conclusion: There isn't have to be a skin lesion in the SAPHO syndrome. Bone lesions are localised fundamentally on the anterior chest wall, but may include any skeletal segment. In conclusion, in the patients who are referred with shoulder pain, SAPHO syndrome must be kept in mind if hyperosteosis and osteitis are in the foreground.

Keywords: shoulder pain, sapho syndrome, chronic pain

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Management of a Patient Who Developed ARDS Due to a Lightning Strike in the Intensive Care Unit

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Giriş - Amaç: Electrical injuries account for 2% to 5% of admissions to burn centers.The severity of injury and mortality is related to voltage.The highest mortality rate, at 17.6%, is due to lightning strikes(1).Lightning strike is an environmental electric injury with high morbidity and mortality rates. Injuries from lightning strikes are also considered high-voltage injuries(2). Respiratory injuries associated with lightning strikes include pulmonary edema, pulmonary contusion, acute respiratory distress syndrome(ARDS), and pulmonary hemorrhage(3).In this study, we present a patient who developed ARDS as a result of a lightning strike.

Phenomenon: A 35-year-old female with no other known medical conditions was brought to the emergency room after being struck by lightning while working in a field. Her vital signs at admission were: Blood pressure:83/42 mmHg, Heart rate:121 beats/min, Respiratory rate:22/min, SpO2:89%, Glasgow Coma Scale (GCS):13. The patient was admitted to the intensive care unit for monitoring.Her ECG showed sinus tachycardia, and her EF was 30-35%. Eight hours into her ICU stay, her general condition deteriorated, and she was intubated and connected to a mechanical ventilator.She was diagnosed with ARDS and received lung-protective ventilation.She was administered Clarithromycin 2500 mg IV and Methylprednisolone 180 mg IV. On the sixth day of her stay, after her blood gas and mechanical ventilator values stabilized, she was extubated.She was transferred to the ward two days later.

The patient's laboratory values at admission to the intensive care unit and at discharge

Laboratory values	*Intensive care admission*	*Intensive care discharge*
pH	7.31	7.43
PaO_2	46 mmHg	110 mmHg
$PaCO_2$	62 mmHg	40 mmHg
PaO_2/FiO_2	115	520
Hb(gr/dl)	14.3	14.1
Platelet	412000	397000
WBC	11000	5000
AST(U/L)	374	22
ALT(U/L)	320	27
LDH*(U/L)*	734	129
CK*(U/L)*	1243	112
K(mmol/L)	4.1	3.8

Discussion - Conclusion: The blast effect of lightning strikes can cause myocardial injury, lung contusion, and lung parenchymal damage(4).In cases of pulmonary contusion, the lung tissue does not tear or fragment, but blood and other fluids accumulate there due to injury to the alveolar capillaries.Respiratory distress often arises from hypoxia and hypercarbia, usually developing gradually and peaking approximately 72 hours later(5,6).After a lightning strike, symptoms may appear immediately or, as in our case, after some delay.A rapid and multidisciplinary approach can reduce the patient's mortality and morbidity.

Keywords: Lightning Strike, Intensive Care Unit, ARDS

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Percutaneous Tracheostomy Complicated by Pneumothorax, Pneumomediastinum, Subcutaneous Emphysema and Pneumopericardium in Intensive Care Unit: CASE REPORT

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Giriş - Amaç: Percutaneous dilatational tracheotomy(PDT) is one of the most frequently performed invasive bedside procedure for patients in intensive care units(ICU)(1).There are two ways to perform tracheostomy:open surgical tracheostomy and PDT.In this case report, forceps dilation method is used during PDT.We aimed to present our case which is complicated by pneumothorax,pneumomediastinum,subcutaneous emphysema and pneumopericardium.

Phenomenon: A 27-year-old patient was admitted to the ICU after decompression surgery by the neurosurgery clinic after a traffic accident.He was intubated due to poor neurological condition.PDT accompanied by a fiberoptic bronchoscope(FOB) was performed on the 10th day of the ICU stay for our patient, for whom we expected the need for mechanical ventilation to be prolonged.When the visual tracking of the FOB failed, we continued the transaction without visual guidance.After placing the tracheostomy cannula and ventilating the patient, subcutaneous emphysema developed in the patient's thorax and cervical region.The tracheostomy cannula was removed and the patient was intubated again through the oropharyngeal route.The tracheal incision site was covered with a pressure dressing.Thorax and abdomen computered tomographies(CT)were taken,in which we detected bilateral pneumothorax, widespread subcutaneous emphysema,and free air under the right diaphragm.A right thorax tube was inserted into the patient,whose CT revealed pneumomediastinum and bilateral pneumothorax, especially on the right (Figure 1-3).On the 4th day after the procedure,the patient's pneumoperitoneum and pneumothorax regressed and his chest tube was removed.The patient's general condition improved and PDT accompanied by FOB was performed successfully one week after the first procedure.On the 47th day of the ICU, the patient was discharged to the neurosurgery clinic with a home-type mechanical ventilator.

Picture-2



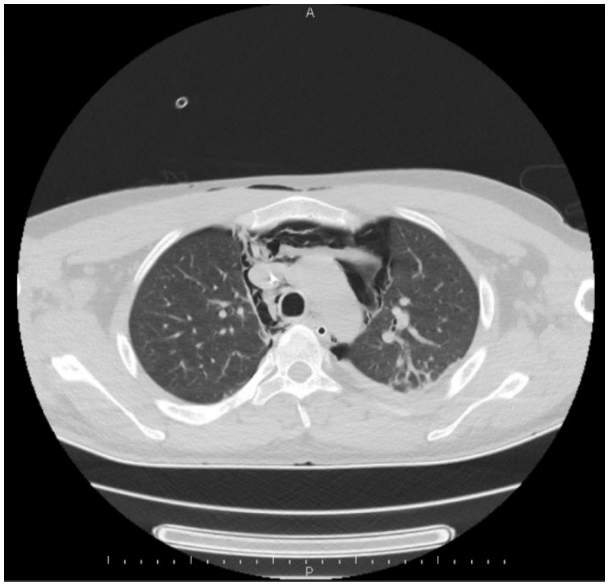
Bilateral Pneumothorax

Picture-3



Pneumoperitoneum,

Picture-1



Pneumomediastinum

Discussion - Conclusion: Although PDT is a very safe procedure, many major and minor complications may develop.While it is recommended that the PDT procedure to be performed with FOB to prevent complications,in case of complications,early diagnosis and appropriate treatment can significantly reduce the mortality rate in patients.

Keywords: Percutaneous tracheostomy, pneumothorax, subcutaneous emphysema, pneumopericardium, pneumomediastinum

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Guillain-Barre Syndrome (GBS)

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Giriş - Amaç: Guillain-Barre Syndrome (GBS) is a rare but dangerous neurological illness that is defined by the immune system incorrectly attacking the peripheral nerves, leading to muscle weakness, paralysis, and potentially life-threatening consequences. And it can progress quite quickly. Infections or other events that provoke an aberrant immune response are typically what set off GBS symptoms in patients

Phenomenon: A 35-year-old male from Mogadishu, with lower socio-economic status, presented with progressive lower limb weakness over a week, along with difficulty speaking and swallowing. The patient had a recent common cold and fever, but then experienced symmetrical lower limb weakness. In the family HBV-related liver disease was noted. He had no history of usag no drug allergies or regular medications. He had no complaints related to bowel or bladder issues, Possible diagnoses considered included Guillain-Barre syndrome (GBS), infectious polyradiculoneuropathy, and periodic paralysis. On examination,). characterized by hypotonia in the lower limbs, intact upper limbs, and an absent gag reflex. The final diagnosis was an ascending type of lower motor neuron weakness, specifically the motor variant (AMAN subtype) of GBS. Treatment involved admission to the ICU, due to hypotension and a need for mechanical ventilation. Furthermore, intravenous immunoglobulin (IVIG) over 5 days, along with supportive therapy and antibiotics used. After 2 weeks he was discharged hemodynamically stable with a tracheotomy from the ICU.

Discussion - Conclusion: DiscussionGuillain-Barré syndrome (GBS) is described as an acute inflammatory polyneuropathy characterized by rapidly evolving ascending weakness, mild sensory loss, and hypo- or areflexia, progressing to a nadir over up to four weeks. Besides the classic presentation of GBS). acute motor axonal neuropathy (AMAN) distinguished from acute inflammatory demyelinating polyneuropathy.Conclusion:Guillain-Barré Syndrome (GBS) is a rare neurological disorder, and each patient's case is unique. Treatment and outcomes can vary widely based on individual factors and the available healthcare resources.

Keywords: gullian barre syndrome, Intensive care unit, Acute motor axonal neuropathy

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The Effect of Colloids Colloids on Coagulopathy and Endothelopathy in Rats with Experimental Hemorrhagic Shock Model

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Introduction - Purpose: Different treatment protocols have been developed for hemorrhagic shock. In the presented thesis, coagulopathy, endothelial damage markers and hemodynamic responses of different colloid fluids were investigated by creating an experimental hemorrhagic shock model.

Materials and Methods: In the study,20 Sprague Dawley rats weighing were used.The rats included in the study were divided into 4 groups: Control group, Hemorrhage group, Hydroxy ethyl starch (HES) group,Gelatin group.Experimental hemorrhagic shock model was created in all groups except the control group, and resuscitation fluids were applied to the HES and gelatin groups for 60 minutes after hemorrhage.Oxidized fibrinogen level in terms of coagulopathy in blood samples taken after resuscitation,Histochemical score (H-score) values showing the syndecan-1 tissue distribution in terms of endothelial damage in lung tissue sections and lung damage score values in lung tissue sections were examined.

Results: Lung damage score values in hemorrhage,HES and gelatin groups were significantly higher than the control group.Lung damage score values in HES and gelatin groups were significantly lower than those in the hemorrhage group. There was no significant difference between the lung injury score values of the HES group and the gelatin group. When the H-scores of the groups were compared, the H-Score values in the hemorrhage,HES and gelatin groups were significantly lower than the control group.H-score values in HES and gelatin groups were significantly higher than those in the hemorrhage group.There was no significant difference between the H-Score values of the HES group and the gelatin group.

Discussion - Conclusion: It has been shown that tissue damage develops in the lung in hemorrhagic shock and tissue damage in the lung is reduced with both gelatin and HES resuscitation.It has been shown that endothelial damage develops in the lung in hemorrhagic shock and that the endothelial damage in the lung is reduced with both gelatin and HES resuscitation.

Keywords: Coagulopathy, endothelial damage, oxidized fibrinogen, syndecan-1

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Can Agitation and Weaning Failure in an Intubated Patient Be a Sign of Non-ST Eleve Myocardial Infarction?

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Giriş - Amaç: Myocardial infarction (MI) is a diagnosis achieved through clinical and laboratory tests.Ischemic symptoms, elevated troponin levels, typical electrocardiogram changes, or imaging methods(1.2).Making the diagnosis is relatively straight forward in conscious patients with noticeable ECG changes.However, diagnosing MI in intubated intensive care patients without ST elevation presents a significant challenge.In this case, we present a scenario where, despite substantial clinical improvement, extubation was hindered due to agitation.Subsequently, the underlying cause was determined to be non-ST elevation myocardial infarction (NSTEMI).

Phenomenon: A 55-year-old male with a history of coronary artery disease, was initially under the care of the general surgery department with a diagnosis of fournier gangrene.However, he developed respiratory distress, necessitating intubation and subsequent transfer to the intensive care unit.The patient exhibited septic shock and bilateral lung infiltrates on chest X-ray. Antıbıotıc treatment has been regulated.Extubation was planned for the fourth day.Nevertheless, upon discontinuation of sedation, agitation and communication difficulties were observed, leading to the postponement of extubation.On the following day, another extubation attempt failed due to agitation.Subsequent diagnostic measures were taken, including a repeat chest X-ray showing mild bilateral sinus blunting, an echocardiogram revealing an ejection fraction (EF) of 20% (compared to the 40% EF at admission), and a troponin test with a result of 1070ng/L., EKG also demonstrated QT prolongation.Cardiology specialists considered an acute non-ST elevation MI (NSTEMI), leading to the initiation of medical treatment.With troponin values gradually decreasing (reaching 472ng/L) and the EF returning to the 40% baseline on a follow-up echocardiogram, sedation was discontinued, and the patient was extubated.After two days of stability, the patient was transferred to a general ward.

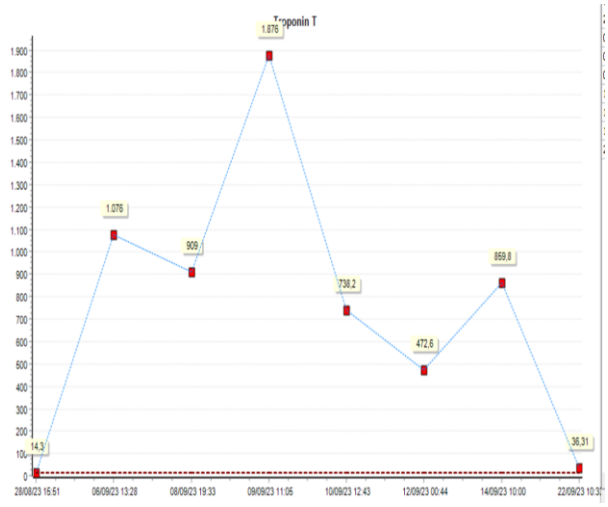
chest x-ray in intensive care (first day)



chest x-ray in intensive care (fourth day)



troponin levels



Discussion - Conclusion: In the intensive care setting, when intubated patients encounter difficulty with extubation and exhibit agitation following the resolution of the underlying issue, it is advisable to investigate the possibility of a cardiac origin for the underlying cause.

Keywords: Intensive care, Non-ST-segment-elevation myocardial infarction, Acute coronary syndromes

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Pub No: OS-26

"From Forest to ICU: Unveiling the Mask of Hallucinogenic Mimicry, Mycetism-Induced Cardiac Complications"

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Giriş - Amaç: Mycetism, is a significant health issue frequently encountered in our country.Although primarily causing gastrointestinal symptoms, mushroom toxins can also lead to various manifestations such as vivid dreams, rhabdomyolysis, necrosis in kidney, liver.

Phenomenon: A-52-year-old male patient presented to the emergency department with complaints of nausea,involuntary extremity movements,confusion. His relatives mentioned about he might have consumed an unknown-type-of-mushroom. Laboratory tests and ECG were evaluated as normal. He was transferred to Intensive Care Unit for observation. The physical examination revealed disorientation,incooperation,visual hallucinations, agitation,aggressive behaviors,involuntary extremity movements. Apart from sinus tachycardia,vital signs were stable. Supportive treatment was administered. At the 48th-hour-of-admission, displaying symptoms of agitation,sweating,hypersalivation, accompanied by tachycardia,hypotension. An ECG was taken when ST changes were noticed on the monitor. Following the observation of ST elevation in the inferior leads and T wave inversion in the anterior leads on the ECG, transthoracic ECHO was performed. The patient was urgently taken to coronary angiography because observing motion disorder in the inferior wall. No stenosis was observed, coronary vasospasm was primarily considered. Cardiac enzymes were increased approximately 14 times. Medical anticoagulation therapy was administered. During follow-up,his agitation decreased, and regained orientation-cooperation. Liver-kidney function tests didn't deteriorate and cardiac enzymes tended to decrease. The patient was transferred to the ward and then discharged without sequels after the 4th day of admission.

Discussion - Conclusion: In cases of Mycetism, toxic effects are generally on kidneys,liver,central nervous system. However,it's been demonstrated in a few cases, cardiac biomarkers increased without myocardial infarction,accompanied by findings such as ST/T abnormalities. It's also been shown coronary vasospasm may accompany findings such as visual hallucination,disorientation in the use of hallucinogenic substances like cocaine,amphetamines. Particularly in local regions with a habit of foraging for mushrooms from the wild,mushroom poisonings can present with a variety of clinical pictures mimicking using hallucinogenic substances; hence,it should be considered in differential diagnoses.

Keywords: mushroom poisining, coronary vasospasm, hallucination

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Evaluation of the Effect of Sevoflurane in a Patient Having Convulsions Under General Anesthesia

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Giriş - Amaç: Although most anesthetics have anticonvulsant activity, there are also agents with proconvulsant effects.There are cases indicating that sevoflurane, an inhalation agent, triggers epileptic activity (1). In this case, we aimed to present possible situations that triggered the seizure in a patient who underwent nephrectomy and had a generalized tonic-clonic seizure in the intraoperative period.

Phenomenon: There was a known diagnosis of epilepsy in the preoperative evaluation of a 40-year-old male patient who was planned for nephrectomy due to RCC. In his medical history, it was learned that an embolization procedure was performed due to aneurysmatic SAH in 2004, and antiepileptic (phenytoin, gabapentin, levetiracetam) treatments were started after he had a seizure in 2005. A successful endotracheal intubation was performed after anesthesia induction with 2mg midazolam, 1mcg/kg fentanyl, 5mg/kg thiopental, and 0.6mg/kg rocuronium. Anesthesia was maintained with a 1:1 oxygen/air mixture, sevoflurane (1-2% MAC) and remifentanil 0.1mcg/kg/min. Approximately 2-3 minutes after the patient was positioned a generalized tonic-clonic seizure lasting approximately 10 seconds was observed in the patient.The patient was treated with midazolam and propofol and the seizure was taken under control. Afterwards, anesthesia was continued with propofol instead of sevoflurane.The patient's hemodynamics remained stable throughout the surgery. After an uneventful extubation, the patient was taken to the PACU.The patient was consulted with neurology in the postoperative period, and his brain imaging and EEG were evaluated as normal.It was evaluated by neurology as a drug-induced seizure.

Discussion - Conclusion: There are studies in which epileptic activity and seizure-like convulsions were observed in the EEG of some children who were used sevoflurane for anesthesia maintenance (2). Considering that the agent that triggered the seizure in our patient might be sevoflurane. In patients undergoing general anesthesia who have a history of controlled seizures it should be kept in mind that sevoflurane may trigger epileptic activity.

Keywords: Anaesthetics, Complications; seizures, Sevoflurane

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https://doi.org/10.1016/j.clinph.2022.08.019

Pub No: OS-28

Management of Local Anesthetic Systemic Toxicity Following Infraclavicular Nerve Block: a Case Report

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Giriş - Amaç: The use of peripheral nerve blocks for anesthesia and analgesia is increasing (1). Although rare, potentially fatal side effects such as local anesthetic systemic toxicity (LAST) may occur. The use of intravenous lipid emulsion in its treatment is widely accepted (2). In this study, we aimed to present the treatment of LAST with intravenous lipid emulsion, which developed in a patient who underwent infraclavicular nerve block due to nerve transection.

Phenomenon: It was decided to apply infraclavicular nerve block to a 20-year-old female patient with no history (ASA I), who was scheduled for surgery due to a nerve transection. Ultrasound-guided, local anesthetic was injected around the axillary artery, vein and cords of the brachial plexus by performing intermittent negative aspiration. After the patient had sufficient sensory block, he was taken to the operating room. Electrocardiogram (ECG), peripheral pulse oximetry (SPO2) and noninvasive blood pressure were monitored. Systemic local anesthesia toxicity was considered when the patient developed symptoms such as agitation, lip numbness, laughing, meaningless speech, high blood pressure and sinus tachycardia while the surgical team was making preparations. The patient was given 20% lipid emulsion, hydration, sedation, nasal oxygen support . Surgery was initiated in the patient whose symptoms subsided. The patient was taken to the intensive care unit for close postoperative monitoring. The patient was discharged in full recovery on the second postoperative day.

Discussion - Conclusion: In peripheral nerve block applications, reasons such as accidental intravascular injection, rapid absorption from areas with high blood flow, and use of high doses of local anesthetic cause LAST. It can occur at clinical levels ranging from tinnitus, numbness around the mouth, seizures, cardiac arrhythmia and arrest (3). For this reason, the risk of developing LAST during and after the procedure should always be taken into consideration and necessary precautions should be taken.

Keywords: Local Anesthetic Systemic Toxicity (LAST), infraclavicular block, lipid emulsion

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Management of 6 Kidney Transplant Patients Followed in the Intensive Care Unit with COVID-19-Related ARDS

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Giriş - Amaç: Numerous studies have demonstrated that acute kidney injury directly impacts mortality in intensive care units(ICU). There is a common belief that kidney transplant recipients have a high risk of infection due to long-term immunosuppression and associated comorbidities (1). In this report, we aimed to present 6 renal transplant patients whom we followed in the ICU with COVID-19-related ARDS.

Phenomenon: Of the 6 patients included in this report, 5 were male, and 1 was female. The patients had an average age of 58.1, and all had received kidney transplants from living donors. Five of the patients were using tacrolimus, mycophenolate mofetil, and prednisone, while one patient was using everolimus instead of tacrolimus. All of the patients had tested positive for Sars-CoV-2 PCR and had presented to the emergency department with symptoms such as cough, shortness of breath, and fever. Following their admission to the ward, mycophenolate mofetil treatment was discontinued, and intravenous prednisolone was initiated in place of prednisone. When the patients were admitted to the ICU due to an increase in oxygen requirements and worsening respiratory distress, other immunosuppressive treatments were also discontinued. None of the patients had acute kidney injury at the time of admission. Five patients required mechanical ventilation, and four of them received hemodialysis or continuous hemodiafiltration treatment. Aspergillus was cultured in the tracheal aspirate of two patients. Only one of the six patients was discharged without requiring intubation, while five patients did not survive (Table 1).

Discussion - Conclusion: It is evident that, similar to other pathogens, coronavirus infection tends to have a more severe course in immunosuppressed patients(2). Transplant patients should be closely monitored and opportunistic infections should be considered, especially in cases of rapid deterioration. Further research is needed to understand the best strategy for managing immunosuppressive treatment, which is known to worsen the course of the disease.

Keywords: Transplantation, coronavirus, intensive care unit

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SÖZLÜ BİLDİRİLER
GÜVENLİ ANESTEZİDE
MONİTÖRİZASYON

Pub No: S-002

Spontaneus Attack Due to Stress in a Case Wıth Chronıc Urtıcarıa: Case Report

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Giriş - Amaç: Chronic urticaria; is a mast cell-derived, non-allergic condition in which symptoms characterized by redness, swelling and itching last longer than 6 weeks (1). It has two forms: spontaneous (CSU) and inducible. In CSU, the etiology is generally unclear (2). Stress, anxiety and depression may play a role in acute attacks (3). In this case, we aimed to remind that acute attacks may occur spontaneously in patients with CSU and that some conditions may exacerbate the clinical picture.

Phenomenon: Esophagogastroduedonoscopy was planned for a 45-year-old female patient with the diagnosis of CSU, due to dyspeptic complaints. The patient's physical examination revealed contact dermatitis only in the right ear and laboratory findings were normal. The patient developed urticarial lesions starting from the neck and spreading to the face during the preparation phase for the procedure. Thereupon, 1 mg/kg diphenhydramine and 1 mg/kg methyl prednisolone were administered intravenously. Hemodynamic parameters and oxygen saturation were not impaired. The patient, whose lesions disappeared after 30 minutes, was re-evaluated and the procedure was completed under sedation. The patient did not experience any problems after the procedure.

Discussion - Conclusion: In our case, the clinical situation that developed spontaneously without drug administration was evaluated as a CSU attack. It was predicted that the cause of the attack might be acute stress caused by the procedure on the basis of H.pylori gastritis. The main cause of acute urticaria associated with induction of anesthesia (IgE-mediated allergic) is drug administration. In CSU, drug administration is not seen as the main cause, but as a side factor that potentiates the existing clinic (4).Because they are life-threatening, allergic and non-allergic diseases should be evaluated well in the preoperative period and a patient-specific anesthesia should be planned.

The patient's rash condition



Photo 1.

Keywords: Chronic urticaria, Esophagogastroduodenoscopy, Allergic reaction.

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Pub No: S-003

Evaluation of Ect Services in the Early and Late Period of the Covid-19 Pandemic

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Introduction - Purpose: The COVID-19 pandemic has had a severe negative impact on healthcare delivery, including electroconvulsive therapy (ECT), worldwide (1,2). Understanding the effects of the COVID-19 pandemic on ECT delivery is crucial for informing planning for future pandemics with evidence-based practice (3). This retrospective study investigated how operational and quarantine strategies during the early and late COVID-19 pandemic affected ECT services at the nation's largest regional mental health hospital.

Materials and Methods: ECT services and patient profile data in the early period (PEP) (20.03.2020–31.12.2020) and late period (20.03.2021-31.12.2021) (PLP) of the COVID-19 pandemic were compared with the pre-pandemic period (PPP) (20.03.2019- 31.12.2019).

Results: 1507 patients were evaluated: 811 patients in the PPP, 255 in the PEP, and 441 in the PLP. The sex distribution was similar in all three periods ($p = 0.475$), but there was a significant age difference ($p = 0.037$). Compared to the PPP, the number of patients receiving ECT during the PEP decreased by 68.5% and in the PLP by 46.2%, while the number of patients receiving ECT between the PEP and the PLP increased by 72.9 %. The number of ECT sessions in the PEP (6.68±3.56) was lower than both the PPP (7.47±2.88) and PLP (7.22±4.70) ($p = 0.009$). The number of patients who underwent ECT for urgent indications in the PEP was higher than the PPP and PLP ($p = 0.027$). The diagnostic profile of ECT patients, their response to ECT treatment, and their clinical outcomes at discharge were no different between the three periods. ($p>0.05$). The duration of hospital stay for ECT patients increased in both pandemic periods ($p < 0.001$).

Discussion - Conclusion: Discussion - Conclusion: This study showed that the negative impact of the COVID-19 pandemic on ECT services significantly decreased in the late period of the epidemic, but ECT services still lagged significantly compared to the pre-pandemic period.

Keywords: COVID-19, Early period, Electroconvulsive therapy, Late Period, Pandemic

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Pub No: S-004

Obturator Block Case Series in Transurethral Bladder Resection

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Giriş - Amaç: Tumors located on the lateral and inferolateral walls of the bladder, stimulation of the obturator nerve causes a serious complication such as bladder perforation due to adductor muscle spasm (1). In this case series, we aimed to present our experience with ultrasound (US)-guided obturator nerve block (ONB) in patients with inferolaterally located lesions planned for transurethral bladder resection.

Phenomenon: Ten patients with inferolaterally located bladder tumors were sedated on the operating table after standard monitoring and spinal anesthesia was performed. Afterwards, a total of 16 ml of 8 ml of local anesthetic injection, including 12.5 mg of 0.5% bupivacaine, 50 mg of arrhythmal and the remaining saline, was injected into the anterior and posterior branches using an inplane technique under US guidance. 63.6% of our patients were male, average age was 65±11.5, BMI was 28.7±6.4, 27.3% were ASA3 patients, anesthesia time was 57.3±18.6 minutes, and operation time was 35.7±20.1 minutes. Tumor size was measured as 3-3.5 cm in five patients, <3 cm in 5 patients, and 4-5 cm in 1 patient. The VI-RADS score of four patients was examined; the score was 3 in 3 patients, 2 in 1 patient, and 5 in 1 patient. There was no limitation in the patients' postoperative adduction movements. In 1 patient, general anesthesia was applied due to the development of reflexes. This patient had a low body mass index and a large tumor size.

Discussion - Conclusion: We noted that effective and safe blockade can be achieved by mixing the medium and long-acting local anesthetic drugs we use for ONB and using lower concentrations.

Keywords: Obturator nerve block, transurethral bladder resection.

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Pub No: S-005

Oxygenization in Reduced Fresh Gas Flows Evaluation According to Oxygen Reserve Index

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Introduction - Purpose: Oxygen reserve index (ORI) provides non-invasive and continuous monitoring of patients' oxygenation. When used with a pulse oximeter, it helps prevent hyperoxemia and hypoxemia. In our study, we aimed to evaluate oxygenation with PaO2, SpO2 and ORI in groups with and without ORI at 1 lt/min and 0.5 lt/min flows.

Materials and Methods: 116 patients who were planned to have gynecology operations under general anesthesia were included in our prospective, observational study. Group 1; 1 lt/min fresh gas flow, Group 2; 0.5 lt/min fresh gas flow, Group 3; those who received 1 lt/min fresh gas flow + ORI monitoring, Group 4; they were determined as those who received 0.5 lt/min fresh gas flow + ORI monitoring. In those without ORI monitoring, FiO2 was increased by 0.1 when FiO2 < 30%, SpO2 < 95% or PaO2 < 100 mmHg. In those with ORI monitoring, FiO2 was increased by 0.1 when FiO2 was <30%, SpO2 was < 95%, and ORI was < 0.24. When ORI was 1, FiO2 was reduced by 0.1.

Results: Among the groups that underwent ORI monitoring, ORI values were found to be significantly higher in Group 3. PaO2 values between groups did not differ significantly in all time periods. A moderate positive correlation was detected between ORI and PaO2 values in Group 3 and Group 4 only at the 30th minute. A positive relationship was found between ORI and SpO2 in Group 3 and Group 4 at different time periods. PaO2 <80 mmHg and PaO2 >200 mmHg values did not show a statistically significant difference between the groups with and without ORI monitoring.

Discussion - Conclusion: ORI may be a valuable parameter in the evaluation of oxygenation. While we fear hypoxemia in low and minimal flow anesthesia, we should not overlook the fact that we may also confront patients with hyperoxemia.

Demographic data,ASA risc class and surgery durations between groups comparison

	Grup-1 (n=28)	Grup-2 (n=29)	Grup-3 (n=30)	Grup-4 (n=29)	P
Age (Years)	52.04 ± 8.78	49.17 ± 3.87	52,13 ± 9,87	52.93 ± 3.79	0.331a
Weight(kg)	161.50 ± 3.87	161.90 ± 5.52	160.10 ± 4.73	161.52 ± 5.06	0.501a

Height (cm)	78.18 ± 9.87	75.90 ± 9.81	75.03 ± 10,73	74.28 ± 12.27	0.550a
BMI (kg/m2)	29.99 ± 3.79	29.12 ± 4.12	29.33 ± 4.44	28,52 ± 4.94	0.645a
Operation duration (min)	100 (90 - 190)	110 (90 - 180)	120 (90 - 220)	120 (90 - 200)	0.439b
Length of stay	3 (2 - 6)	3 (2 - 6)	3 (2 - 6)	3 (2 - 8)	0.177b
Amount of Crystalloid (x1000)	2 (1.3 - 4)	2 (1.4 – 3.5)	2.25 (1 - 4)	2 (1 - 4)	0.959b
ASA-I	0 (0	4 (13.8)	4 (13.3)	4 (13.8)	0.277c
ASA-II	27 (96.4)	24 (82.8	23 (76.7)	24 (82.8)	0.277c
ASA-III	1 (3.6)	1 (3.4)	3 (10.0)	1 (3.4)	0.277c
DM	6 (21.4)	5 (17.2)	2 (6.7)	1 (3.4)	0.118 c
HT	11 (39.3)	11 (37.9)	12 (40.0)	7 (24.1)	0.550 d
CAD	3 (10.7)	1 (3.4)	4 (13.3)	1 (3.4)	0.404c
GOITER	6 (21.4)	0 (0)	3 (10.0)	2 (6.9	0.040c
OTHER	2 (7.1)	1 (3.4)	0 (0)	1 (3.4)	0.374c

Comparison of SpO2, ORİ ve PaO2 between groups

	Grup 1 (n:28)	**Grup 2 (n:29)**	**Grup 3 (n:30)**	**Grup 4 (n:29)**	**P**
PaO2>200mmHg	0 (%0)	3(%10.3)	4(%13.3)	4(%13.8)	0,217 [a]
PaO2>150mmHg	10(%35.7)	14(%48.3)	10(%33.3)	16(%55.2)	0,280c –
PaO2<80mmHg	2 (%7.1)	3 (%10.3)	1 (%3.3)	0 (%0)	0,297 [a]
SpO2<95	2 (%7.1)	1 (%3.4)	1 (%3.3)	2 (%6.9)	0,810 [a]
VEYA>1			1 (%3.3)	5(%17.2)	0,103b –
ORİ<0.24			5 (%16.7)	9 (%31.0)	0,322b –

Keywords: Hyperoxia, Hypoxemia, Oxygenation, General anesthesia, Monitoring

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Evaluation of the Effect of Analgesic Methods on Opioid and Antiemetic Consumption in Cystectomy

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Introduction - Purpose: Recently,regional anesthesia constitutes an important part of successful analgesia strategies and perioperative care of urology surgery.We aimed to investigate theplace of regional anesthesia as an analgesic method in patients undergoing cystectomy and its effect on postoperative opioid and antiemetic consumption by comparing it with other analgesic methods.

Materials and Methods: 189 patients'patients who underwent cystectomy in our hospital between July 2019and August 2023were retrospectively examined.The patients were divided into three as those who underwent intravenous analgesia(Group 1),those who underwent epidural catheter(Group 2)and those who underwent fascial plane block(Group 3).Demographic data,preferred method for postoperative analgesia,opioid consumption in the first 24 hours postoperatively,antiemetic requirement and other analgesic drugs used were recorded.

Results: Intravenous analgesia was applied to 76.7%(n=145)of the patients,epidural catheter was applied to 14.8% (n=28),and fascial plane block was applied to 8.4% (n=16).There was no significant difference between the groups in terms of demographic characteristics of the patients ($p>0.05$).When postoperative opioid consumption was compared between the groups,it was found to be significantly lower in those who received an epidural catheter(Group II)($p<0.05$) (Table 1).Nonsteroidal analgesic drug consumption was significantly lower in Groups II and Group III($p<0.05$)(Table 2).

Table 1. Patients' data

	Group I (n=145)	***Group II (n=28)***	***Group III (n=16)***	***p***
Age (median)	66,00 ±8,06	65,43±10,57	60,08±10,37	>0,05
Gender(n)Male/Female	125 / 20	27 / 1	10 / 6	>0,05
ASA II / III / IV	43 / 85 / 17	11 / 17 / 0	5 / 10 / 1	>0,05
Operation time (min)	305 ±73,5	310 ± 75	332,5 ± 76	>0,05
ICU (n)	59	4	3	**<0,05**

PACU (n)	86	24	13	>0,05
Day of hospitalization (median,min-max)	8,00 (2-34)	8,00 (13-36)	6,5 (3-10)	>0,05

Group I: intravenous analgesics Group II: epidural catheter Group III: fascial plane block

Table 2. Postoperative analgesic and antiemetic consumption

	Group I	**Group II**	**Group III**	**p**
Opioid consumption (% / n)	**86** /125	0 / 0	25 / 4	**<0,001**
Antiemetic consumption (% /n)	26 / 38	7 / 3	18 / 3	>0,05
Paracetamol use (% /n)	58 /85	67 / 28	68 /11	>0,05
Non steroid use (% / n)	33 / 49	**0 / 0**	37 /6	**<0,05**

Group I: intravenous analgesics Group II: epidural catheter Group III: fascial plane block

Discussion - Conclusion: Epidural catheter is the gold standard in postoperative analgesia management in cystectomy.However,due to the comorbidities and drug use of the patient population and anatomical difficulties,intravenous analgesics can be used more frequently by anesthetists instead of epidural.Fascial blocks are an increasing approach due to their popularity.However,in the studies conducted,fascial plane blocks still cannot provide analgesia as effective as the epidural catheter.In our experience, we found that epidural catheters and fascial plane blocks are used at a very low rate.We found that regional anesthesia provides a significant decrease in postoperative opioid and nonsteroidal consumption.We think that with the further development of fascialplane blocks,their importance and applicability in postoperative analgesia management should increase.

Keywords: analgesia, epidural catheter, regional anesthesia, cystectomy, transverse abdominis plane block

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Safe Management of Anesthesia in the Patient with Deep Neck Infection

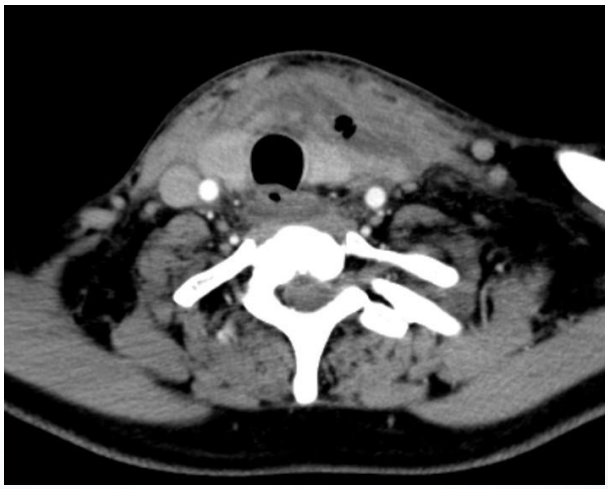
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Giriş - Amaç: Deep neck infection (DNI) means infection in the potential spaces of the mucous membranes of the pharyngeal cavity and the layers of the deep neck cervical fascia(1). The distorted airway anatomy, limited mouth opening, tissue edema, and immobility make it difficult to secure the airway using intubation with direct laryngoscopy(2).We aimed to report the challenging airway management of a patient with deep neck infection.

Phenomenon: 39-year-old male patient, admitted to the emergency room with complaints of sore throat and increasing difficulty in swallowing also breathingit was observed that the base of the tongue was swollen, the larynx was pushed, there was pushing and edema in the pharyngeal structures, and there was diffuse swelling in the neck examination. Computer tomography examination (Figure 1) figured out that air levels extending from parapharyngeal posterior to anterior including prevertebral space. Deep neck infection was diagnosed. Mallampati score was IV, thick, stiff neck, no neck extension. It was evaluated together with ear, nose and throat (ENT) doctors, and it was decided to perform local tracheostomy. Local tracheotomy was initiated by providing 10 L/min nasal O2 support with intravenous 0.5-0.75 mcg/kg/h dexmedetomidine and 20 mg ketamine. The ENT stated that it was difficult to open a tracheostomy during neck exploration. Airway safety was achieved by fiberoptic nasal intubation with 6 mm endotracheal tube while awake. The patient, who underwent neck exploration and tracheostomy, was transferred to the intensive care unit for follow-up.

figure 1



Neck computerized tomography (CT), fluid collection with gas bubble.

Discussion - Conclusion: Patients with deep neck infection when inducing general anesthesia can also be challenging. Although tracheostomy under local anesthesia seems to be the safest method, it cannot be possible in the patient due to changes in the airway anatomy. (3) All patients with deep neck space infection should undergo an assessment for possible airway obstruction. Awake fiberoptic intubation is still gold standart to maintain airway security.

Keywords: deep neck infection, difficult airway, difficult tracheotomy

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Pub No: S-008

Awake Intubation Experience in a Patient with Cervical Fracture

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Giriş - Amaç: Cervical spine trauma encompasses a range of injuries,from minor muscle-strains to life-threatening fractures and dislocations associated with spinal-cord lesions.Hyperextension of the neck can cause spinal-cord injury.Patients who are administered anesthesia and/or muscle relaxants for intubation may experience hypoxic state if first attempts at intubation are unsuccessful(1).Awake intubation provides favorable safety-profile because it maintains spontaneous ventilation and intrinsic airway-tone until the trachea is successfully intubated.This approach ensures securing the airway before the induction of general anesthesia,thus avoiding the risks of difficult airway management in an anesthetized patient(2).This case presents the management of awake intubation in a patient with cervical fracture.

Phenomenon: 67-year-old male patient was evaluated preoperatively by the anesthesia clinic due to cervical fracture(C5-C6).Awake intubation with videolaryngoscope was planned for the patient.The patient was informed about the procedure.In operating room,SPO2%96,HR 83beats/min,blood-pressure 140/80mmHg.The patient received 2min/preoxygenation with 100%oxygen-40L/min through high-flow nasal-cannula(HFNC).1mg/midazolam was administered for anxiolysis.Sedation was initiated with remifentanil infusion 0.1mcg/kg/min.The patients mouth-opening was achieved with verbal commands,and 10%lidocaine(20puffs) was applied.With spontaneous-breathing maintained,the patient was intubated with 7.5mm/spiral-cuffed-tube using videolaryngoscope after 2min infusion.

Videolaryngoscopy



Endotracheal intubation



Discussion - Conclusion: In cases with limited head/neck mobility,preparations should be carried out according to the expected difficult airway algorithm.The use of High-Flow Nasal Cannula(HFNC)for preoxygenation in patients undergoing awake-intubation has been observed increase procedure success by extending the time that the patient can tolerate apnea,reduce the work of breathing,and creating positive end-expiratory pressure(PEEP)(3).In cases where awake intubation is planned,the ideal approach forensuring airway safety to perform awake intubation with mild-sedation without muscle relaxation(4).We provided sedation/analgesia with

combination of midazolam/remifentanil,maintaining spontaneous respiration and hemodynamic stability in a patient for whom awake-intubation with videolaryngoscopy was applied due to the expected difficult airway.The use of awake intubation and videolaryngoscopy in patients with expected difficult airways should be considered as an alternative to fiberoptic bronchoscopy.We believe that increasing clinical experience in this regard is necessary.

Keywords: Cervical fracture, Awake intubation, Videolaryngoscopy, High-flow nasal cannula

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Pub No: S-009

Unexpected Situation; Tetany Under Spinal Anaesthesia: Case Report

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Giriş - Amaç: Tetany can develop due to metabolic disorders (most commonly hypocalcaemia). Hyperventilation syndrome (HVS) associated with spinal anaesthesia causing respiratory alkalosis is less common.1 The aim of this study was to present a patient who developed tetany due to this etiology.

Phenomenon: A male (20 years, 70 kg, ASAI) patient was evaluated for knee arthroscopy after informed written consent obtained. Spinal anaesthesia was performed in sitting position (26 G, L4-L5, single puncture) and block was achieved at T6 level. The patient who was restless and agitated in the 1st hour of the operation started hyperventilating. Carpopedal spasm developed in the arm without TA cuff. Midazolam 1 mg IV was administered for sedation. The patient with respiratory alkalosis in arterial blood gas (pH: 7.48 pCO2: 24.2 mmHg, pO2: 116 mmHg HCO3: 21.8 mmol/L Ca: 1.18 mmol/L) was ventilated with a paper bag; 20 minutes later, AKG pH: 7.39 pCO2: 40.1 mmHg pO2: 87.2 HCO3: 22.8 mmol/L and Ca: 1.19. The patient's carpopedal spasm relieved, he was in stable conditions and admitted to PACU; has been discharged to the ward when Modified Aldrete score was > 9.

Discussion - Conclusion: HVS is a clinical condition that may present with cognitive alterations, dizziness, convulsion and tetany.1 The main cause of HVS is anxiety, tetany due to respiratory alkalosis is common.2 Respiratory alkalosis secondary to hyperventilation is a possible cause of acute hypocalcaemia and this condition can be seen in the perioperative period.3 The cause of hyperventilation due to spinal anaesthesia is not clear; high intercostal paralysis/paresis may cause HVS by feeling of suffocation. In this case, calcium level was normal, and we think that tetany occurred due to hyperventilation caused by anxiety. HVS that may develop in the perioperative period should be considered in young, anxious patients in such cases electrolyte imbalances should be kept in mind.

Keywords: tetany spinal anesthesia respiratory alkalosis

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Pub No: S-011

Anesthesia Management in a Patient with WAGR Syndrome

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Giriş - Amaç: WAGR syndrome is a combination of Wilms tumor, aniridia, genitor-urinary anomalies, growth retardation, mental retardation, and is invariably associated with the 11p13 deletion(1).This deletion involves the PAX6 and WT1 genes, as previously reported in patients with typical WAGR Syndrome. Ocular defects are caused by hemizygosity of the PAX6 gene.Urogenital and renal anomalies and nephroblastoma are associated with hemizygosity of the Wilms Tumor suppressor gene WT1(2).We wanted to present our anesthesia experience in our patient who was operated on due to Wilms tumor.

Phenomenon: Left nephroureterectomy was planned for a 4-year-old, 12-kilogram boy with bilateral Wilms tumor and WAGR syndrome.Biochemical values were within normal range.Ultrasonographic examination revealed 60X43mm soft tissue echogenicity in the middle zone of the left kidney.Consent was obtained from the patient's relatives.After monitoring in the operating room,medication was provided with 3mg/kg propofol, 1mcg/kg fentanyl and 1mg/kg rocuronium.The operation took 2.5 hours; 2-3% sevoflurane was used for maintenance anesthesia,1/3 isodex was administered at 10ml/kg/hour. 0.02mg/kg morphine was administered for analgesia.In the follow-ups, systolic blood pressure was 90-100 mm/Hg, diastolic 50-60mm/Hg,pulse 80-100/minute, saturation O2 was 100%, diuresis was active, but total urine output could not be measured clearly due to the operation.Hourly venous blood gas monitoring was performed, and when hemoglobin decreased after 120cc of bleeding, 10ml/kg erythrocyte suspension and 10ml/kg fresh frozen plasma were replaced.The effect of muscle relaxants was reversed with 3 mg/kg sugammadex. He was extubated after his spontaneous breathing was observed. He was transferred to the pediatric intensive care unit for postoperative monitoring.

Wagr 1



Wagr 2



Discussion - Conclusion: In patients undergoing Wilms tumor surgery,anemia,polycythemia,hypertension,fluid inbalance and electrolyte disorders may be encountered in the preoperative period, and hemodynamic problems that may occur as a result of serious bleeding in the peroperative period.In our patient, despite the size of the tumor, no complications developed with our careful anesthesic management.

Keywords: Aniridia, WAGR syndrome, Wilms tumor, Anesthesia Management

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Pub No: S-012

Comparison of Remifentanil and Dexmedetomidine Infusions in Terms of Intraoperative Hemodynamic Parameters, Postoperative Recovery Time and Postoperative Opioid Need in Laparoscopic Sleeve Gastrectomy Operations

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Introduction - Purpose: This study, it was aimed to compare whether or not if in laparoscopic sleeve gastrectromy(LGS) operations, remifentanil and dexmedetomidine infusion intraoperative hemodynamic parameters, post-operative recovery durations and postoperative analgesic consumption-wise they had a superiority over one another.

Materials and Methods: 60 patients who were ASA score2-3, between 18-65ages, LSG surgery planned, BMI bigger or equal to 35 kg/m2 were included after their written approval was obtained following the ethics committee approval. Patients were grouped. Group1 remifentanil patients, following induction, were applied maintained remifentanil intravenous(IV) between 0.05–0.2mcg/kg/min according to their IBW(Ideal Body Weight Index). Group2 dexmedetomidine patients, after applying 1mcg/kg/10min IV, were applied maintained IV between 0.2–0.7mcg/kg/h according to their IBW.

Results: Comparing the groups during surgery and some post operation phases, patient's heartbeat rate, blood pressure, average arterial blood pressure was significantly higher statistically for remifentanil group. Comparing the patient's saturations based on the groups, before induction period and between the 30th–75th minutes period, saturation values for remifentanil group were significantly higher statistically. Comparing patients' BIS based on the groups, before induction period, after induction period, right after intubation and between 15th–75th minutes period, BIS values for remifentanil group were significantly higher statistically. NRS scores of patient's right after post operation for remifentanil group were significantly higher statistically, no statistical significance was observed for other time periods. Patient's recovery period for dexmedetomidine group, tramadol consumption for remifentanil group were found significantly higher statistically.

Discussion - Conclusion: In our study, it was found that even though dexmedetomidine use in patients of laparoscopic gastrectomy in has a longer recovery time, it does not negatively affect intraoperative hemodynamic parameters, provides satisfactory anesthetical depth and reduced tramadol necessity in the postoperative periods. As a result, we conclude that dexmedetomidine could be an alternative for remifentanil, needs to be utilized more intraoperatively and more controlled, randomized and prospective studies are needed.

Keywords: Laparoscopy, remifentanil, dexmedetomidine, opioid spared anesthesia

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Pub No: S-013

Case of Electric Shock to the Face

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Giriş - Amaç: Electrical burns are among the common traumas in our country.It can generally occur in the form of a home accident or a work accident.(1)And it is seen in our Burn Center in patients who suffered electrical burns while stealing electrical wires.Close follow-up is required in the early stages against the possibility of compartment syndrome in the extremities and cardiac arrhythmia.(2)

Phenomenon: A 30-year-old male patient was brought to the emergency department of Bursa City Hospital by 112.The patient, who had a drug addiction and was wanted by the police, entered an electrical transformer and was electrocuted.The patient, who had widespread burns on the anterior abdominal wall and deep burns on the face and neck, especially on the right side, could not be intubated, so cricothyroidotomy was performed in the emergency room.To the patient admitted to the Burn Center intensive care unit, VAC (Vacuum-Assisted Closure) was applied to the 4th degree burn area in the abdominal region, which caused tissue loss in the rectus abdomenis, after escharotomy and debridement.During follow-up, mucor mycosis was observed in his completely burned right eye.The procedure was continued according to the joint decision of Ophthalmology, Ear Nose and Throat Diseases, NRŞ, PRC and Infectious Diseases.The patient died on the 19th day of hospitalization, not responding to the interventions following sudden, severe rectal bleeding.

electrical burn on face



Discussion - Conclusion: When monitoring electrical burns, it should not be forgotten that they may cause damage not only to the skin but also to all organs and systems, both in the early and long term.

Keywords: Face, Electric Burn, Rectal Bleeding

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Pub No: S-015

Anesthesia Management of a Pediatric Patient with Ohdo Syndrome

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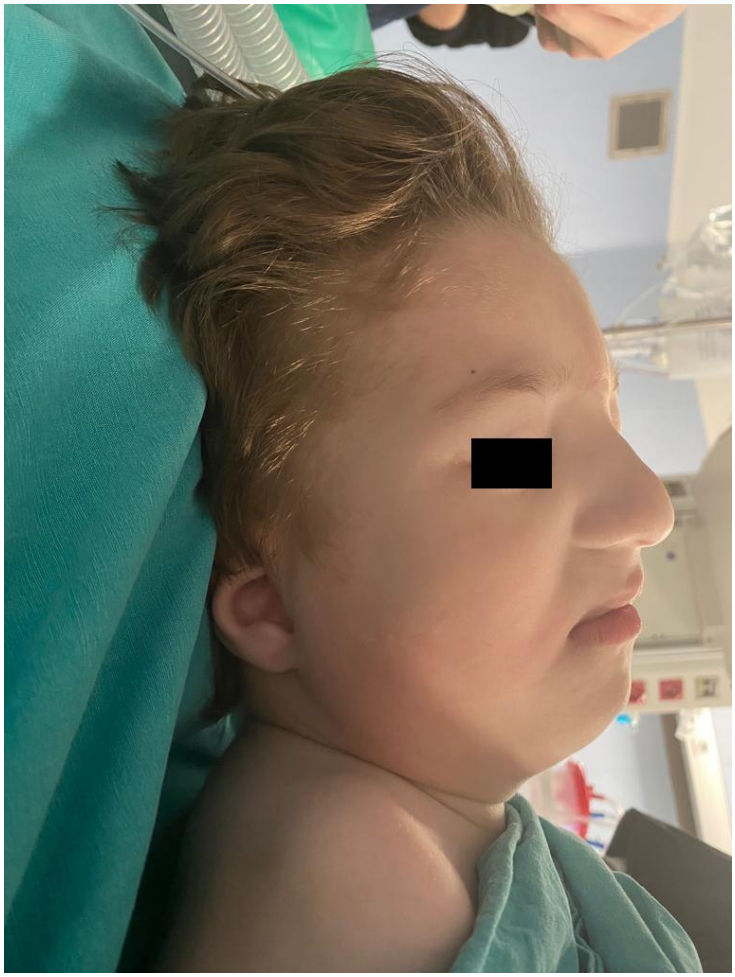
Giriş - Amaç: The Say-Barber-Biesecker-Young-Simpson (SBBYS) variant of Ohdo syndrome is a rare condition characterized by genital abnormalities in men, a missing or underdeveloped kneecap (patellae), intellectual disability, different facial features, and abnormalities affecting other parts of the body. This syndrome is also important in terms of anesthesia management due to hypotonia,facial anomalies and cardiac defects (1). In our case, anesthesia management is offered during the bilateral undescended testicle and hypospadias.

Phenomenon: 3 years old,weighed 13 kg, preoperative evaluation revealed syndromic short stature, retrognathia and micrognathia, and dysmorphic facial appearance.It was anticipated that the patient might have difficult intubation, and preoperative preparations were made for this. After obtaining informed consent, preoperative infective endocarditis prophylaxis, 50 mg/kg/dose Ampicillin was administered intravenously. After standard ASA monitoring, 0.5mg dormicum and 0.1mg Atropine were administered. Anesthesia induction was started with 0.5 mg/kg Aritmal, 1 mcg/kg Fentanyl, 3 mg/kg Propofol. To the patient whose mask ventilation was not difficult, 0.7mg/kg rocuronium was administered as a muscle relaxant, and then LMA number 2 was placed. Anesthesia was maintained with 50% oxygen + air, 2% sevoflurane, and 0.03 mcg/kg/min remifentanyl infusion. After the operation, which lasted 150 minutes, was stable and uncomplicated, the patient was extubated after spontaneous respiration was administered with 25 mg sugmmadex. After being kept under observation in the recovery room for a long time, anticipating that he might have postoperative respiratory problems, the patient was taken to the ward with no postoperative complications.

Picture 1.Ohdo syndrome



Picture 2.Facial anomalies in Ohdo syndrome



Discussion - Conclusion: We think that it is important to obtain the opinion of the relevant departments in the preoperative period in terms of cardiac, endocrine and neurological anomalies in patients with Ohdo syndrome and to make preparations for difficult intubation.

Keywords: Ohdo Syndrome, Cardiac anomaly, Facial anomalies

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Pub No: S-016

A Case of Demyelinating Central Neuropathy (DSN) associated with T-cell NHL

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Giriş - Amaç: DSN occurs in 5–8% of patients with malignant T-cell NHL.They are frequently seen,rapidly progressing,chronic,recurrent conditions.(1)In our case,which we followed in the ICU due to a central demyelinating lesion associated with T-cell NHL,we aimed to present.

Phenomenon: An 18-year-old received chemotherapy and was cured of T-cell NHL originating from the anterior mediastinum.He applied with complaints of difficulty walking,instability,dizziness for six months.7250 mg IV Methylprednisolone with a diagnosis of demyelinating disease in the neurology service.He received treatment and was discharged after his symptoms subsided.He had respiratory problems for the last month.He presented with distress and difficulty swallowing and was bedridden.GKS:E4M5V4,which was non-oriented,non-cooperative,and hypoxemic,was taken to the ICU with the diagnosis of aspiration pneumonia and was intubated during care.His right eye horizontorotatory nystagmus,mydriasis were present, as was +2 effacement at the right lip edge.Deep tendon reflexes, bilateral lower extremity hyperactivity,left-right upper extremity muscle strength were 4/5–1/5.ECG was bundle branch block,ECO-EF 55%,LV dilatation and TR.During follow-up,neutrophilia,hyperglycemia,hyperphosphatemia,an increase in acute phase reactants developed.In autoimmune-rheumatological tests,no pathology was detected in bone marrow aspiration or PET/CT.Without pleocytosis in CSF,an increase in protein was observed.Baseline nodular infiltration on thorax CT and MRI was high in the mesencephalon/perimesencephalic,right cerebellum,posterior pons,right bulb signaled areas were detected.High-dose corticosteroids were administered to the patient due to demyelinating neuropathy,antibiotic therapy and vitamin replacement were given.There was no regression in the neurological condition;the case exitus on the 38th day of hospitalization.

Discussion - Conclusion: The pathogenesis of DSN is associated with T-cell NHL,direct invasion,metabolic-vascular disorders,infection,paraneoplastic process(2).Our case, metastasis,autoimmune diseases,infection,examinations for the differential diagnosis of vitamin deficiencies were normal.Clinical course,examination,imaging studies show that T-cell NHLs are caused by pro-inflammatory cytotoxic molecules.It suggested that demyelinating lesions were formed as a result of the paraneoplastic process caused by the disease.Also,for which we started corticosteroid and IVIG treatment,the disease developed without neurological improvement.The patient exited due to ventilator-associated pneumonia and infections.

Keywords: T-cell NHL, Demyelinating central neuropathy

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Pub No: S-017

Factors Affecting Core Temperature Changes in the Pediatric Catheter Laboratory: Preliminary Results

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Introduction - Purpose: Anesthesia management of children with congenital heart disease in a cold catheter laboratory is challenging. In this study, we investigated core temperature changes in catheter laboratory and the impact of interventions and cardiac defects on core temperatures.

Materials and Methods: In this prospective observational preliminary study (Ref: AEŞH-EK1-2023-392), 100 patients between 0- and 18- years old who underwent diagnostic or interventional cardiac catheterizations were evaluated. Cardiac pathologies, demographic data, ASA physical score, fasting period, temperature and humidity of the catheter laboratory, use of heating blanket, tympanic temperature measurements, anesthesia managements, anesthesia drugs, total intravenous fluid administration, procedures performed, duration of interventions and anesthesia were recorded.

Results: Demographic data and interventions are shown in Table 1.The catheter laboratory's temperature and humidity level were 21.38±2.05 °C and 32.2 % respectively

Table 1. Demographic data and interventions

Demographic data	**Frequency**
Gender	
Female/Male	51 / 49
Age	
Newborn (0-28 days)	18
İnfant (28 days-1y)	18
Preadolescent (2-12 y)	33
Adolescent (12-18 y)	31
ASA physical status	

ASA 2	44
ASA 3	56
Diagnostic intervention	44
İnvasive İntervention	56
EPS	11
Anesthesia	
General	43
Sedation	57

Table 2. Comparison of initial and final core temperatures in acyanotic, cyanotic and EPS groups

	İnitial		Final		p
	Average .±SS.		Average .±SS.		
Acyanotic	36.33 (.81)	36.50 (33.60-37.80)	35.97 (.79)	36.15 (33.30-37.50)	<.001
Cyanotic	36.49 (.60)	36.50 (34.80-37.90)	35.91 (.66)	36.10 (34.30-37.10)	<.001
EPS	36.79 (.50)	36.80 (36.00 - 37.60)	35.81 (.56)	35.80 (34.90-37.00)	<.001
Anesthesia					
General	36.51±.68	36.80 (36.00-37.20)	35.91±.68	35.80 (34.90-37.00)	<.001
Sedation	36.41-3±.52	36.50 (34.80-37.90)	35.98±.61	36.15 (33.30-37.50)	<.001

Table 3. Duration of Interventional processes.

Duration (min.)	**Average ±SS.**
İntervention	
Diagnostic	51.87 ± 6.55
Invasive	51.70 ± 24.70
EPS	76.45 ± 74.31
Anesthesia	
General	70.39 ± 53.03
Sedation	46.11 ± 11.70

Discussion - Conclusion: Our results showed, regardless of the heart defect and type of intervention, core temperatures decreased significantly in the catheter laboratory. The most important factor responsible for hypothermia is cold environment.

Keywords: Pediatric, anesthesia, core temperature, cardiology

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Pub No: S-018

Anesthesia Management in Ankylosing Spondylitis Patient

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Giriş - Amaç: Ankylosing spondylitis(AS) can lead to severe cervical kyphosis, causing problems with swallowing, patient functioning, vision and social appearance(1).Posterior cervical extension osteotomy, a technically demanding procedure that carries the risk of serious neurologic injury, can be performed in cases of extreme disability(2).We share our experience with a35-year-old male patient withAS who underwent surgery forPSEO.

Phenomenon: The patient had severe cervical spine deformity due to AS.During preoperative evaluation,the ear,nose and throat(ENT)physician and anesthesiologist stated that the patient's neck could not be palpated,there was a 50-75%depression in the retrolingual distance,and there was possible subglottic stenosis.The mentum rested on the sternal notch and the Mallampati score was4.In addition,the otolaryngologist explained that a tracheostomy could not be performed.It was planned to perform awake nasal fiberoptic intubation(FOI).Xylocaine spray was applied through the mouth and nose.Dexmedetomidine and remifentanil infusions were started according to the patient's weight.An FOI was attempted at the Ramsey score of 4-5.However,this was not successful due to the closed C-shaped neck anatomy and mobility of the vocal cords.It was decided to perform intubation using videolaryngoscopy. Intravenous induction was carried out with propofol.After successful positive pressure mask ventilation,rocuronium and muscle relaxants were administered.The patient was then intubated using videolaringoscopy with a gum-elastic bougie.The patient,who was kept under inhalation anesthesia,was easily extubated after the operation.

front look- before and after



side look- before and after



Discussion - Conclusion: If the airway is likely to be difficult,fiberoptic endotracheal intubation while awake is the primary option(3).Our patient had limited head and neck mobility and limited mouth opening due to AS.As a first option,awake FOI was attempted.However,it was believed that retrolungal collapse noted on preoperative examination,along with vocal cord mobility,prevented FOI.Therefore,the video laryngoscope was tried as a second option and was successful.We would like to emphasize that in situations where a difficult airway is expected,all difficult airway application methods should always be available.

Keywords: ankylosing spondylitis, difficult airway, awake fiberoptic intubation, videolaryngoscope

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Peroperative Cardiac Arrest in a Child with Chiari Malformation Type-2 During Anesthesia Induction with Sevoflurane: a Case Report

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Giriş - Amaç: The Chiari type II malformation is a complex congenital malformation of the brain(1). Major risk factors for peroperative cardiac arrests(CA) are neonates, children under 1 year with ASA III or poorer physical status, in emergency surgery and general anesthesia(2). Medication-related CA accounted for 28% of anesthesia-related CA in children(2). The predominant mechanism was cardiovascular depression from the inhalation agents (2,3). Epinephrine is currently recommended in pediatric cardiac arrests and early administration associated with increased chance of 24-hour survival and favorable neurological outcome(4).

Phenomenon: The patient is 9months/7kg female, has comorbidities of type 2 chiari malformation, left rib abnormalities, left lung hypoplasıa with tracheostomy. She was being followed up for sepsis and diagnosed with ileus. The parents were informed of the risks associated with general anesthesia. ECG, heart rate(HR), blood pressure(BP), SpO2 and EtCO2 were monitored. We started induction with sevoflurane 3-5% and oxygen inhalation. In the second minute bradycardia and desaturation were suddenly observed. BP could not be obtained. FiO2 was immediately set to 100% and sevoflurane was stopped. Ventilation was normal, there was no change in airway pressures. We administered 10mcg/kg adrenaline intravenously and started chest compressions. In 10-15 seconds HR began to increase and SpO2 began to rise. BP was 118/60 mmHg, HR was:146 beats/min and SpO2:97. The vitals returned to normal and became stable. After the surgery the patient was transferred to ICU. The patient didn't have acidosis based on post-operative blood gas, vitals were stable

Discussion - Conclusion: We described the development and management of CA during induction with sevoflurane of a patient with Chiari type -2 malformation and sepsis. We believe that the CA was triggered by the dysfuntion in autonomic cardiac regulation and sympatic activation; these issues are often observed in patients with high ASA status, urgent surgery, sepsis and after the use of sevoflurane.

Keywords: Cardiac arrest; Ciari Malformation; General anesthesia; Pediatric patient; Sevoflurane.

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Acute Disseminated Encephalomyelitis: Case Report

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Giriş - Amaç: Acute disseminated encephalomyelitis is a rare acute demyelinating disease of the centralnervous system(CNS). It is a diagnosis of exclusion and relies on neuroimaging which maybe normal at the onset. Etiopathogenesis is thought to be immune mediated, because in upto three-fourths of the cases; it follows an antecedent infection or immunization. Currently for ADEM, magnetic resonance imaging(MRI) is the imaging modality of choice to demonstratelesions in white matter of brain. High doses ofmethylprednisolone(HDMP) are currently considered standard of treatment. Plasmapheresis(PE) is typically given in steroid refractory cases.

Phenomenon: We report a 47-year-old female patient who was diagnosed with ADEM in theintensive care unit with a prediagnosis of meningitis due to the development of nuchal rigidityafter a diagnosis of otitis. The patient presented to the emergency department with acuteonset of multifocal CNS symptoms such as severe headache and ear pain, includingencephalopathy, requiring intensive care unit management. The physical examinationfindings were normal except for nuchal rigidity. Streptococcus pneumonia DNA was detectedin the cerebrospinal fluid (CSF)-PCR. On the 10th day of follow-up with pneumococcalmeningitis, GCS:3 was observed and repeated CSF analysis suggested ADEM. ADEM wasdiagnosed after multiple hyperintense areas in the white matter were observed in the T2sequence in the control MRI and LP results. Despite HDMP administration, her clinicalcondition continued to deteriorate. Therefore, PE after HDMP was initiated. A clinicalresponse was obtained after five cycles of PE with this diagnosis.After prolonged intensivecare treatment, she was tracheostomized and percutaneously enterogastrastomized andtransferred to the neurology ward with consciousness.

Discussion - Conclusion: In conclusion, ADEM is a rare demyelinating disease of the CNS and may be confused withintracranial infectious and noninfectious diseases. This case report The aim of this study was to emphasize that ADEM, which can recover after HDMP and PE treatment, should be kept in mind in adult patients presenting with encephalitis clinic.

Keywords: ADEM, acute disseminated encephalomyelitis, encephalopathy, demyelination, magnetic resonance imaging

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Anesthetic Management of Mucormycosis Requiring Surgical Debridment

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Introduction - Purpose: Mucormycosis is an uncommon, progressive and life-threatening fungal infection that occurs in immune-compromised patients (1). During the pandemic, there has been an increase in these cases accompanying COVID infection. In the present retrospective study we aimed to evaluate the perioperative challenges faced in the anaesthetic management of mucormycosis patients who underwent surgery under general anesthesia.

Materials and Methods: Patients over 18 years of age who underwent surgery for mucormycosis within a 3-year period between 01.01.2020 and 31.12.2022 were included in the study. The perioperative records were reviewed and evaluated retrospectively.

Results: During the 3-year period, 25 of 47 cases of mucormycosis were operated. Data from these 25 cases were analyzed for the study. Twelve (48%) patients had a diagnosis of rhinocerebral, 7 (28%) rhino-orbital, 5 (20%) rhino-orbito-cerebral and 1 (4%) rhino-pulmonary mucormycosis. All the patients had co-morbidities. The most common co-morbidities were diabetes mellitus in 20 (80%), followed by hypertension in 12 (48%), acute kidney injury 7 (28%) and coronary artery disease in 5 (20%) patients. Six (24%) patients had history of COVID-19 infection and received steroid treatment. Intubation was difficult in 2 (8%) patients. Two (8%) patients had intraoperative hemodynamic instability and inotrope requirement. 17 (68%) patients, 6 (24%) of whom were intubated, were transferred to ICU for further management and continuous hemodynamic monitoring. The mean length of hospitalization in ICU was 26,71 days, and the total length of hospitalization was 42 days. Eleven (44%) patients required mechanical ventilator and the mean number of days on mechanical ventilator was 15,45 days. Mortality occurred in 12 (48%) patients. The mortality time was 34,55 days.

Discussion - Conclusion: The anesthetic management of surgical debridement in mucormycosis is challenging. Challenges include difficult intubation and renal function impairment. Postoperative follow-up in the ICU is important due to rapid progression and comorbidities.

Keywords: Mucormycosis, COVID-19, anesthetic management

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Our Management of Postoperative Analgesia in a Pediatric Patient Who Underwent Pectus Excavatum Surgery: Serratus Anterior Plane Block and Parasternal Block: Case Report

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Giriş - Amaç: Pectus excavatum (PE) is the most common chest wall abnormality [1,2] Corrective surgery (Nuss surgery) is associated with severe postoperative pain. We presented the management of postoperative analgesia provided by the serrated anterior plane block and the parasternal block that we applied after Nuss surgery in our pediatric patient.

Phenomenon: A Nuss operation was planned for a 14-year-old boy, weighing 47 kg, suffering from pectus excavatum and diagnosed with autism. Routine examinations and preparations were performed, then he was intubated in the anesthesia room. After skin antisepsis, a 22 g 50 mm needle was used to penetrate between the serratus anterior muscle and the intercostal muscles under ultrasound guidance. A Serratus anterior plane block (SAPB) was performed with 20 ml of 0.125% bupivacaine. Then, an ultrasound was placed in the 4th intercostal space 2 cm lateral to the sternum, introduced with a needle, and an injection was performed between the pectoralis major and the intercostal muscles, performing a parasternal block. The procedures were repeated on the other side. At the beginning and the last half hour of the procedure, 1 mg of morphine and 500 mg of paracetamol were administered. During follow-up, his vital signs remained stable and his urine output was 300 ml. No bleeding was observed. The postoperative VAS (visual analog scale) values were 1., 12., 24. (0, 5, 5). 20 mg of intravenous pethidine was sufficient for analgesia at the 12th and 24th postoperative hour.

serratus anterior plane block



serratus anterior plane clock



parasternal block



Discussion - Conclusion: In multimodal analgesia, peripheral nerve blocks are more frequently preferred due to side effects due to opioids. Anesthesiologists are more nervous about regional anesthesia techniques in pediatric patients than in adults. We believe that peripheral nerve blocks, as a multimodal analgesia method, can be applied safely in pediatric patients, contrary to concerns, thanks to the advantages provided by ultrasound.

Keywords: pectus excavatum, serratus anterior plane block, pediatric patient, parasternal block

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Pub No: S-023

Anesthesia Management During Pelvic Osteotomy Surgery of a Patient with Distal Artrogryposis with Improved Proprioception and Touch (daipt) Related to Piezo2 Mutation: Pediatric Case Report

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Giriş - Amaç: PIEZO2 is an ion channel protein discovered in 2010, expressed at high levels in somatosensory neurons. Disease associated with recessive PIEZO2 mutation is characterized by impaired proprioception and touch with distal arthrogryposis (DAIPT), hypotonia, perinatal respiratory distress, delayed motor functions, progressive symptoms of scoliosis. Joint contractures, kyphoscoliosis, many additional anomalies such as mask-like face, blepharophimosis, micrognathia, cleft palate, chest deformities, developmental delay, kidney, brain anomalies can also be observed. With this study we aimed to contribute to the literature on anesthesia management in these cases, thus increasing anesthesia awareness about this new disease.

Phenomenon: A 6.5 year old, 22 kg girl, diagnosed with DAIPT with PIEZO2 mutation had myopathy, scoliosis, bilateral developmental dysplasia (DDH) of the hip. She was planned for surgery due to left DDH. The patient was born at 42 weeks, received respiratory support. In preoperative evaluation developmental delay, mental, motor retardation, loss of muscle strength, slow dysarthric speech, walking difficulty, thoracolumbar scoliosis, hypomimia, high palate, large tongue were recorded. Laboratory values were at normal ranges. Preparation for difficult airway, risk of malignant hyperthermia were made. Bispectral index and temperature monitoring were added to routine monitoring. After induction total intravenous anesthesia (TIVA) was applied. Spinal morphine was administered to her for postoperative analgesia. Surgery time was 210 minutes. VAS was 0 in the recovery room. The first postoperative analgesic requirement occurred at the 20th hour.

OLGUMUZ



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Discussion - Conclusion: It should be kept in mind that the risk of malignant hyperthermia is higher in DAIPT patients with PIEZO2 mutation than in the normal population. Pulmoner function can affected by scoliosis, they can have difficult airway. We avoided using inhalation agents in our anesthesia management and applied TIVA. Anticipating a difficult airway in this type of patient group, we wanted to emphasize the importance of necessary preparations and detailed and close monitoring.

Keywords: PİEZO2, DİSTAL ARTROGRYPOSİS, MALİGNANT HYPERTHERMİA, DİFFİCULT AİRWAY, PEDİATRIC PATİENT

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Anesthesia Management in a Patient with Brown-Vialetto-Van Laere Syndrome

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Giriş - Amaç: The Brown-Vialetto-Van Laere syndrome(BVVL) is a rare neurological disorder characterized by progressive pontobulbar palsy associated with sensorineural deafness.Less than 100 cases of this syndrome have been reported in Europe.(1)The age of onset of the first symptom varies from infancy to the third decade.Approximately 50% of the cases are familial.We aimed to present our anesthesia management experience in a patient with very rare BVVL syndrome who will undergo decubitus wound debridement.

Phenomenon: Decubitus wound debridement was planned to be performed by the plastic and reconstructive surgery clinic on a 16-year-old, 28-kg male patient with BVVL syndrome who was tracheostomized and monitored on room air due to respiratory and cardiac arrest that developed due to aspiration pneumonia.The patient was applied standard anesthesia monitoring,was connected to the anesthesia machine through the tracheostomy,and was set to spontaneous breathing.Induction was performed intravenously with 1mg dormicum ,1m/kg lidocaine,2.5 mg/kg propofol,1 mg/kg fentanyl.In our case, although muscle loss developed centrally, anesthesia was administered in accordance with the malignant hyperthermia protective protocol.Anesthesia was maintained with remifentanil.The patient with lordosis,kyphosis and scoliosis was given lateral decubitus position.At the same time, in our patient with medium chain acyl-CoA dehydrogenase deficiency,the intravenous fluid requirement was met with 10ml/kg 1/3isomix fluid to prevent the development of hypoglycemia.No complications developed during the surgery,which lasted 1 hour. Analgesia was provided with 15mg/kg paracetamol.The patient was transferred to the pediatric intensive care unit with a postoperative tracheostomized mechanical ventilator.

patient's surgical position



patient's surgical position



Discussion - Conclusion: Those with this syndrome are at increased risk of respiratory complications such as marked diaphragmatic weakness (severe reduction in forced vital capacity[FVC]) and aspiration pneumonia.Bilateral deafness may make communication difficult in the perioperative period.Anesthesiologists frequently encounter syndromic patients,and sometimes rare diseases coexist.Even if anesthesia has been applied before, as in our case,these patients need to be managed with all necessary preparations.

Keywords: Brown- Vialetto -Van Laere Syndrome, General anesthesia

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Pub No: S-025

Our Anesthesia Management in Morbid Obese Caesarean Section Patients: Case Series

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Giriş - Amaç: Obesity and pregnancy are groups that anesthesia management is special and difficult. While the incidence of failed intubation is approximately 1:2500 in the general population, this decreases to 1:280 in obstetrics. Addition of obesity to pregnancy, unsuccessful intubation becomes 1:3 with difficult mask ventilation(1).We aimed to share our preferred anesthesia practices in the coexistence of two specific conditions in cesarean patients diagnosed with morbid obesity.

Phenomenon: Eight, ASA 2 elective patients with BMI>38 kg/m2 were included. The fasting periods were appropriate. After routine monitoring, spinal anesthesia applied to all of them under prehydration and sterile conditions. While the spinal procedures of the patients were successful in the 3rd attempt in 3 of them, 2 in the 2nd, and 1 in the first attempt; 2 of them converted to general anesthesia. For spinal anesthesia, 0.5% heavy marcaine 7.5 mg+20 mcg fentanyl was administered intrathecally to all. A total of 2500 ml of iv fluid was given to the patients.Perioperative hypotension was observed in 8 patients; hypotension improved with additional oxygen support, hydration, and 20 mg ephedrine in 6 patients. Deep bradycardia developed in 2 of the patients was therapied with 1 mg atropine iv. Perioperative vomiting was observed in 4 patients. Postoperative respiratory distress seen in 1 patient;1 hour follow-up and hydration was applied due to an increase the level. Postoperatively all patients transferred to the service.

Discussion - Conclusion: Regardless of the last oral time, all obstetric patients should be considered full stomach and caution should be exercised in terms of pulmonary aspiration (2). Perioperative cardiac arrest can occur in many morbidly obese patients, whether pregnant or not (3).Preferring regional anesthesia for anesthesia in morbidly obese pregnant, even if the possibility of failure increases, can reduce possible complications, due to the high risk of aspiration and the possibility of difficult airways.

Keywords: Morbid obesity, pregnancy, spinal anesthesia, aspiration pneumonia

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Management of the Patient Who Developed Optic Neuritis After Coronary Artery Bypass Surgery

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Giriş - Amaç: Ischaemic optic neuropathy(ION) is a rare but serious complication post cardiopulmonary bypass greft(CABG) in cardiac surgery patients. It presents with visual loss either unilaterally or bilaterally, and it can be anterior or posterior in type depending on the segment of the optic nerve involved.We report a case of ION following CABG and review,and management of this rare complication.

Phenomenon: 63-year-old male patient underwent elective CABG. His medical history included ex-smoker,hypercholesterolaemia, non-insulin-dependent diabetes mellitus . His haemoglobin was 11.He had no visual impairment preoperatively.After anesthesia induction,the patients were intubated with double-lumen endotracheal tube for single lung ventilation . Minimally invasive on-pump coronary bypass operation was performed through thoracotomy.CABG were performed for the left anterior descending and 1.obtuse marginal branch arteries. Total CABG time was 255 min with aortic cross clamp time of 58 min and perfüzyon time 108min.The mean arterial pressure before the pump was 96.45 mmHg, and after the pump it was 87.80 mmHg. He was followed up in the postoperative intensive care unit. He was extubated 7 hours later. On extubation, he complained of painless loss of vision in both eyes. Biomicroscopy and fundus examination performed by the ophthalmologist were normal.ION was diagnosed.The visual acuity (VA) of patient with very low vision is classified using the semiquantitative scale “counting fingers” (CF), “hand motion” (HM).) High-dose steroids was started . The patient's VA improved from HM distance measurement to CF at 3 metres.he steroid dose was reduced and discontinued.

Discussion - Conclusion: Risk factors for ION after CABG include prolonged surgery, low haematocrit, high dose inotropic drugs, hypotension and large volume fluid infusions. Apart from the patient's low haemoglobin , we think that the minimally invasive procedure, shorter cross-clamp time and operation time than other ION cases in the literature, and normal mean arterial pressure may be related to the relative improvement of vision.

Keywords: ischaemic optic neuropathy, cardiopulmonary bypass, high-dose steroids, The visual acuity

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Pub No: S-027

Our Anesthesia Experience in “Operation Peace Spring”

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Introduction - Purpose: In case of war,there are too many unknown and unpredictable situations(1).Anesthesia plays a major role in all stages of the injury from the first intervention to discharge. Targeted damage control resuscitation, emergency intravenous intervention, blood transfusion,perioperative management, analgesia and patient monitoring in intensive care unit are the most important issues managed by anesthesiologists in war surgery(2).We aimed to share the cases we encountered during the "Operation Peace Spring" that took place in our country recently, accompanied by literature.

Materials and Methods: 39 patients sent from the first response center were treated at Viranşehir State Hospital.The information of these patients was accessed from computer records and anesthesia charts. The patients' age, gender, type of injury, surgery, blood transfusion, anesthesia method, anesthetic drugs, and whether they needed intensive care were recorded.

Results: The average age of the patients was 26.7. The youngest patient was 11 years old and the oldest was 70. 36 of the patients were men, 1 woman and2 children.14 of the patients were intubated.The interventions are shown in table-1. Orthopedic injuries were the most common, followed by lung and large vascular injuries. 11 patients who were admitted as urgent cases underwent multiple simultaneous operations. All of them had an arterial catheter inserted for invasive arterial monitoring. 6 of the patients came to the operating room receiving blood transfusion. Intraoperatively, blood transfusion was continued and transamine infusion was performed in 4 patients. A double lumen tube was inserted for thoracotomy operation in 6 patients. All patients had a Foley catheter installed to monitor urine output.

Table1-2-3

Injury type	**Number (n)**	**percent (%)**
Pericardial injury	1	2,7
Major vein injury		
Subclavian artery/vein	2	5,4
Femoral vein	1	2,7
	1	2,7

Common iliac vein **Ulnar artery**	1	2,7
Lung injury	8	21,6
Trachea injury	1	2,7
Esophagus injury	1	2,7
Brain injury	5	13,5
Spine injury	3	8,1
Abdominal injury	6	16,2
Orthopedic injury	15	40,5
Eye injury	2	5,4
Urological injury	1	2,7
Neck injury	1	2,7

Table-1

Surgical Department	**Number of cases (n)**	**percent(%)**
Cardiovascular Surgery	8	21,6
Thoracic Surgery	8	21,6
Brain Surgery	9	24,3
Orthopedic Surgery	16	43,2
General Surgery	8	18,9
Eye Surgery	2	5,4
Plastic Surgery	2	5,4
Ear Nose Throat Surgery	1	

Table-2

Type of Anesthesia	**Hasta sayısı (n)**
General Anesthesia **Endotracheal tube** **Double lumen tube** **LMA**	 22 6 3

Spinal anesthesia	3
Peripheral block **Interscalen block** **Axillary block**	 1 1
Sedation	4
Local anesthesia	1

Table-3

Injury type-Surgical department-Type of anesthesia

Discussion - Conclusion: Anesthesiologists are one of the most important members of the first responder team in combat. It is not always possible to use trauma algorithms in war environments, where a wide variety of injuries are increasing day by day. It is necessary to record the experiences and update the algorithms.

Keywords: combat surgery, anesthesia

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Pub No: S-028

Intraoperative Resistant Hypertension

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Giriş - Amaç: Hypertensive crises are rare but associated with severe complications. We report a case of hypertensive crisis under general anesthesia, which was promptly detected with the help of close monitoring.

Phenomenon: A 55-year-old woman was scheduled to undergo laparoscopic oophorectomy. Her medical history included diabetes mellitus and hypertension, both controlled. After standard anesthesia induction and intubation, a radial arterial cannula was inserted. The patient was hemodynamically stable. As surgery started, blood pressure was measured 270/140 mmHg, confirmed with noninvasive measurement. Her heart rate was 95 beats per minute, while other vital parameters were normal. Anesthesia depth was appropriate. Remifentanil dose was increased, along with a bolus of nitroglycerin. Her blood pressure remained elevated. The surgeon was informed, and a nitroglycerin infusion was initiated. Intraoperative frozen section findings were compatible with serosal tubal malignancy. The operation was switched to open surgery. As the blood pressure remained high, esmolol infusion was added. After all the tumoral masses were resected, the blood pressure normalized, and antihypertensive infusions were stopped. Blood gas analyses remained within normal range. The patient was extubated and transferred to the intensive care unit. She was conscious and hemodynamically stable. Her urine metanephrin and normetanephrine levels were mildly elevated 347 µg (>180 µg/24 hours) and 729 µg (>484 µg/24 hours), respectively. Pathological findings were not typical for a neuroendocrine tumor. After 24 hours ICU admission and 5 day follow up, she was discharged .

Discussion - Conclusion: Intraoperative hypertension may be caused by vasopressor administration, light anesthesia, pheochromocytoma, carcinoid syndrome, thyroid storm, surgical or electrical manipulation of the adrenal gland (1-4). Values ≥ 80/120 mmHg are associated with acute end-organ damage like dissecting aortic aneurysm, left ventricular failure, myocardial ischemia, hypertensive encephalopathy (5). In our case thanks to the invasive blood pressure monitoring, unexpected and resistent hypertention attack was detected early and treated properly.

Keywords: hypertension, intraoperative, invasive blood pressure, monitoring

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Pub No: S-029

Our Experience with Entropy Monitoring For Determining Depth of Anesthesia

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[1]Bursa Şehir Hastanesi

Giriş - Amaç: Introduction:Determination of the depth of anesthesia has an important place in anesthesia management. With the technology developed in recent years, it has become possible to monitor the depth of anesthesia. Entropy provides information about cortical status and depth of anesthesia by measuring irregularities in electroencephalographic (EEG) and frontal electromyographic (FEMG) signals.

Phenomenon: Cases:Our 2 patients who underwent general anesthesia and in whom we used entropy monitoring were monitored as standard after being admitted to the operating room and an entropy probe was connected. SE in both patients before induction: 91 RE: 100 in both patients before induction. Anesthetic agents were titrated and induction was performed with an entropy value of 40. In both cases, SE and RE values close to 40 were obtained with 2L/min fresh gas flow and 0.8MAC desflurane. Both cases were hemodynamically stable intraoperatively but showed signs of awakening. In the renal transplantation case,2 respiratory efforts and tachycardia were observed. In the case of intracranial abscess drainage, sweating, tachycardia and hypertension were observed. In both cases, entropy data responded approximately 5 seconds after clinical and hemodynamic data. Patients were extubated without any problems. Modified Brice questionnaire was administered to the patients 1hour after they were removed from the recovery unit and it was confirmed that no awareness was experienced.

Discussion - Conclusion: Discussion:We think that the use of entropy in our cases decreased the consumption of anesthetic agents and this had a positive effect on hemodynamics. Lack of postoperative awareness in the patients. In both of our cases, the fact that there was a sign of awakening when there was sufficient depth of anesthesia according to entropy and the delayed reaction of entropy may be negative aspects. We think that the evaluation of entropy together with neuromuscular and nociception monitoring will give more accurate results in determining the depth of anesthesia.

Keywords: Depth of anesthesia, entropy

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Pub No: S-030

Evaluation of Our Ophthalmic Regional Anesthesia Management for Different Surgeries in Three Patients with Comorbidities.

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Giriş - Amaç: This century has witnessed major advancements in ophthalmic surgery with the adoption of minimally-invasive techniques, technologic innovations, and an expanding population seeking eye care and many procedures are now performed on more comorbid patients, (1)Ophthalmic regional anesthesia(ORA) with monitoried anesthesia care(MAC) is a viable alternative for many ocular insults, particularly for the elderly and patients with major organ dysfunction. Nowadays anesthesiologists are shifting away from retrobulbar to peribulbar block. Sub-Tenon block (STB) is used primaliry for cataract but it is also useful and effective in other eye surgeries(2). We aimed to present our ORA management in three patients.

Phenomenon: All patients sedated with dexmetodimidin, midazolam and fentanyl with proper dose.Case1:A 73-year-old female patient with Alzheimer desease, DM, was treated with peribulbar block (5 cc 2% lidocaine) for strabismus operation. Case2: A 50-year-old female patient who had undergone brain aneurysm surgery had a very low TSH level (0.02 uIU/ml). Peribulbar block was applied to the patient with 4cc of 2% lidocaine for strabismus surgery. Partial akinesia occured. Case 3: A 58-year-old patient with high TSH (35,06 uIU/ml), COPD,DM and arrhythmia was taken into emergency surgery due to detachment. STB applied with 7 cc lidocaine + marcain. Complete akinesia was achieved. Minimal kemosis was seen. No major complications developed in three patients and they were discharged without any problems.

Discussion - Conclusion: Many ophthalmic interventions are now managed under ORA. Anesthesiologists must adapt their management plans looking to alternative regional techniques and short-acting medications that promote rapid awakening and ambulation. Anaesthetic techniques have contributed to improved efficiency, cost savings and safety while maintaining patients' satisfaction (3). ORA reduces the risk of anesthesia in risky cases that cannot receive general anesthesia or cannot wait, but also has many advantages. ORA- MAC can be safely used as an alternative to general anesthesia in cases with comorbidities(4).

Keywords: Peribulbar, Sub-Tenon, Ophthalmic, Regional, Block

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Chronic Pain Management in a Patient with Metastatic Renal Cell Carcinoma

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Giriş - Amaç: Pain is one of the most important problems in cancer patients and the pain significantly affects the quality of life. The aim of this case report is to describe the management of a cancer pain case in which interventional method was applied together with medical treatments.

Phenomenon: A 58 years old male case diagnosed with renal cell carcinoma 3 years ago, was admitted to the algology outpatient clinic with complaints of diffuse body pain for 3 months. Numeric rating scale(NRS) was 6 at the time of presentation. The medications used were transdermal fentanyl 100mcg/h, pregabalin2x150mg, ibuprofen3x600 mg. PET imaging showed metastases in the lungs, liver, surrenal glands and bone. Glomerular filtration rate was 55ml/min/1.73m2. He had intermittent attacks of severe pain during the day and complaint of increasing burning in his legs at night. He had previously used oxycodone but stopped taking it due to constipation. At the first outpatient visit duloxetine 1x30mg, sublingual fentanyl citrate4x100mcg as needed were prescribed and ibuprofen was discontinued. Ten days later, he stated that he needed fentanyl citrate two times a day and his leg pains were gone. NRS was 3. Two months later, the patient presented to the outpatient clinic again with abdominal pain described as girdle-like in the upper abdomen. NRS was 8. Bilateral splanchnic phenol ablation procedure was recommended. Splanchnic phenol ablation procedure was performed with 3ml phenol, 3ml lidocaine and 3ml bupivacaine at the level of bilateral T11 vertebrae under fluoroscopic guidance in operating room. The patient's complaint of abdominal pain resolved in the first month after the procedure and NRS was 3. The patient continues medical treatment.

Discussion - Conclusion: In addition to the analgesic step ladder therapy recommended by the World Health Organization(WHO) in the treatment of cancer pain, interventional procedures can be applied at every step in selected and appropriate patients(1,2).

Keywords: cancer pain, pain management, chronic pain, splanchnic nerve phenol ablation

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Pub No: S-033

Anaesthetic Management in a Patient With Multiple Sclerosis

Şeyma Sayıt[1]

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Giriş - Amaç: Multiple sclerosis(MS) is an immune-mediated disease characterized by inflammation, demyelination, and axonal damage in the central nervous system. MS typically involves periods of worsening symptoms followed by periods of symptom relief occurring sporadically throughout several years. The stress of anesthesia and surgery may cause exacerbations and may worsen symptoms. However, this correlation is uncertain.

Phenomenon: 45 years of age, female patient (height: 160 cm, weight: 68kg) who has MS diagnosed 1 year before, and was going to undergo laparoscopic cholecystectomy was prepared for general anesthesia. The patient was taking interferon beta-1a for MS and was consulted to the neurologist before surgery. She haven't undergone any surgery after diagnosed MS and she had not any other comorbidities. There were no any laboratory abnormalities in the preoperative examination. Before induction of anesthesia vital signs were stable. Sedation was obtained with 1 mg of midazolam and 50 µg of fentanyl via intravenously. 170mg of propofol and 20 mg of rocuronium were given for induction of anesthesia. Subsequently, anesthesia was maintained with 1.5% sevoflurane in air and oxygen and 0.1 µg/kg/min remifentanil. Fentanyl 50 µg and acetaminophen 15 mg/kg were administered by intravenous injection for postoperative analgesia. The effect of rocuronium was reversed by 3mg/kg sugammadex. The patient was observed in the post anesthesia care unit for 45 minutes after than she was transferred to the inpatient service. She was followed up for 1 week after discharge and no complications or exacerbations were observed.

Discussion - Conclusion: The use of succinylcholine is not recommended in patients with MS. Although non-depolarizing muscle relaxant agents are safer, they should be used with caution. Therefore, low dose rocuronium was used and was maintained anesthesia without additional administration of rocuronium in our case. As a result, sugammadex and safe dose rocuronium can be used in patients with MS.

Keywords: multiple sclerosis, general anesthesia, rocuronium, sugammadex

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Pub No: S-034

Our Experience in Anesthesia Management in a Case Diagnosed with Partial Tetrasomy 18p

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Giriş - Amaç: Tetrasomy 18p is a very rare genetic chromosomal anomaly that affects different systems in the body and is estimated to have a prevalence of 1/140,000-180,000 live births (1). It is generally characterized by symptoms such as difficulty feeding in infancy, developmental delay, changes in muscle tone, distinctive facial features, and difficulty in ventilation due to these (2). We aimed to present our anesthesia experience in our case, a patient with undescended testis and a patient who was planned to undergo diagnostic cystoscopy.

Phenomenon: It was planned to clean the laryngeal mask airway (LMA) under total intravenous anesthesia due to the risk of malignant hyperthermia (MH) in our 6-year-old male patient, who was planned to undergo cystoscopy and undescended testis.Standard anesthesia and temperature monitoring were performed. Our patient, who was sedated with intravenous 0.05 mg/kg midazolam and 1mg/kg fentanyl, was adequately preoxygenated, and after induction with 1mg/kg ketamine and 2 mg/kg propofol, he was ventilated smoothly with a number 2 LMA. Anesthesia was maintained with 10 mg/kg/h propofol and 0.1 mcg/kg/min remifentanyl total intravenous anesthesia (TIVA) with a 40% O_2-Air mixture. During the operation, which lasted a total of 1 hour, the patient, who did not require additional doses and remained stable, was extubated without any problems. The patient, who was followed up in the ward during the postoperative period, was discharged after 24 hours as he was stable.

Discussion - Conclusion: There is a risk of MH in patients diagnosed with tetrasomy 18p and necessary preparations must be made. In addition, due to the presence of micrognathia as a typical facial appearance, preparation for difficult ventilation and difficult intubation must be made thoroughly. Since there is not much data in the literature regarding anesthesia management, we aimed to present our case performed under TIVA anesthesia to contribute to the literature.

Keywords: malignant hyperthermia, pediatric anesthesia, partial tetrasomy 18p

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Pub No: S-035

Rigid Bronchoscopy: Iatrogenic Foreign Body Aspiration in an Elderly Adult

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Giriş - Amaç: Foreign body aspiration is a potentially lethal emergency. Rigid bronchoscopy is a useful procedure with a high success rate for these situations.In this case, we demonstrate the management of rigid bronchoscopy in the diagnosis and treatment of a patient with recurrent pneumonia and respiratory failure.

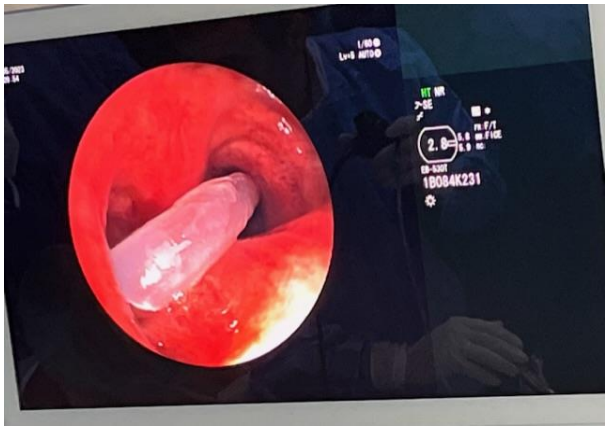
Phenomenon: A 95-year-old female patient has hypertension, lung cancer with brain metastases. 15 days ago, the patient, who had an one-week intubation and intensive care stay at an external center, developed sudden respiratory distress while being followed up in our hospital ward. On thorax CT, the right lung was completely collapsed. The volume of the right hemithorax decreased and secondary mediastinal structures were observed to shift to the right. The diagnostic flexible bronchoscopy performed in the ICU and a foreign body(catheter?) was observed, sitting on the main carina in the distal part of the trachea and extending to both main bronchi. The patient was taken to the bronchoscopy unit, and access to the trachea was achieved with a 12f thick rigid bronchoscopy accompanied by midazolam(0.08mg/kg), fentanyl(2 mcg/kg), propofol(0,4 mg/kg), and rocuronium(0,6 mg/kg). Anesthesia maintenance was provided by propofol infusion. Oxygen support with intermittent mechanical ventilation was given to the patient and the foreign body was seen as a piece of aspiration catheter and removed. The patient was also administered metilprednizolon(0,8 mg/kg), awakened with sugammadex(4 mg/kg), then discharged to the intensive care unit.

Photo 1



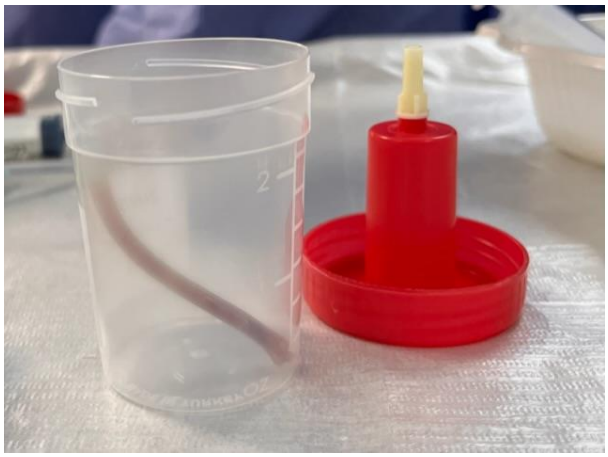
Ct scan: total collapse of right lung lobe

Photo 2



Bronchoscopy: foreign body image on bronchi

Photo 3



Foreign body: a piece of a suction cathater

Discussion - Conclusion: Suspecting iatrogenic aspiration, although rare, is important for rapid diagnosis and treatment in patients who are followed up in the intensive care unit due to unresolved respiratory failure and pneumonia. General anesthesia is preferred for rigid bronchoscopy, and oxygen support can be provided with intermittent mechanical ventilation or jet-ventilation.

Keywords: Rigid bronchoscopy, Aspiration, Respiratory failure, Intensive care unit

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Pub No: S-036

Anesthesia Management in a Patient with Lesch Nyhan Syndrome

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Giriş - Amaç: Lesch-Nyhan Syndrome is a disease in which excessive purine production and uric acid accumulation are observed due to hypoxanthine guanine phosphoribosyltransferase deficiency(1).There is not enough data regarding anesthesia in patients, but sudden unexplained deaths, respiratory abnormalities, apnea, severe bradycardia, increased nausea and vomiting and aspiration pneumonia have been reported. (2,3) In this case report, we aimed to share our anesthesia experience in a patient with Lesch-Nyhan Syndrome.

anathomy



Phenomenon: Ureteroscopy was planned for an 18-year-old male patient with Lesch-Nyhan syndrome due to kidney stones. Difficult airway preparation was made in the patient with micrognathia and neck extension limitation. Electrocardiography, oxygen saturation and noninvasive blood pressure monitoring were performed. After spontaneous ventilation with 1 mg/kg fentanyl and 2.5 mg/kg propofol, a supraglottic airway was established with a size 2.5 i-gel. Gastric contents were aspirated. No muscle relaxants were used. For maintenance, 0.02-0.05 mcg/kg/min remifentanil applied. As inhaler anesthetic,50% O2 - 50% air and 2% sevoflurane were used. Bradycardia had occurred in the 45th minute of the operation and 0.1 mg/kg atropine applied and the patient returned to normal sinus rhythm. 2 mg of ondansetron used as an antiemetic. Hypnosedatives were discontinued at the 120th minute of the operation and the patient was separated from the supraglottic airway.

during surgery



Discussion - Conclusion: Preoperative assessment is important in patients in terms of difficult airway, intravenous cannulation and position. If the patient's anatomy, position and duration of operation are suitable, supraglottic airway may be preferred in this group of patients with an increased risk of difficult intubation. No adverse effects were encountered when propofol and opioids were used in induction (4). We observed that serious bradycardia could develop under anesthesia. We would like to re-emphasize the importance of intraoperative electrocardiography and blood pressure monitoring in this patient group.

Keywords: lesch-nyhan syndrome, anesthesia management

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Pub No: S-037

Medical Device-Related Pressure Injuries: 2 Cases In Icu

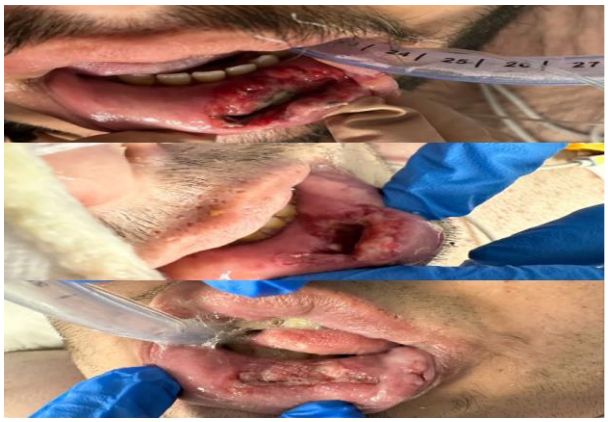
Durdu Kahraman Yıldız[1], Habibe Çevik[1], Halil Erkan Sayan[1]

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Giriş - Amaç: Medical Device Related Pressure Injury (MDRPI) is defined as localized injuries that occur in the skin or underlying tissues due to the continuous/intense pressure applied by medical devices used for diagnosis and treatment, including the mucosa, that conform to the shape of the device(1). Continuous pressure or friction from medical devices, combined with immobility, sensory disorders, additional diseases, micro-climate balance of the skin, moisture, nutritional deficiencies, and/or poor oxygenation are the factors causing medical device-related pressure injuries(2).

Phenomenon: Case 1: A 25-year-old male patient, admitted to the intensive care unit (ICU) with a pneumonia diagnosis, had to use an airway due to his incompatibility with the intubation tube. After using the airway for five days, it was observed that there was an eschar and fibrin-textured wound, approximately 3x3x2 cm in size, tunneling from the inner lower lip to the outer lip, accompanied by deep tearing (Picture 1).Case 2: The patient, who was admitted to the ICU for pneumonia and subsequently intubated, was found to have a 1x1 cm abrasion on the lateral edge of the lower lip 10 days after extubation. This abrasion, accompanied by a tear that tunneled from the inside out, was caused by the internal pressure from the tooth and the external pressure from the intubation tube(Pictures 2).

Picture of case 1



Picture of case 2



Discussion - Conclusion: Nowadays, medical devices are widely used in the treatment of many diseases and in patient care and monitoring. Due to the increasing use of medical devices for diagnostic and therapeutic purposes, the frequency of the development of MDRPI in patients is gradually increasing (3). Raising awareness that medical devices can cause pressure sores is an essential step in determining the frequency of these wounds and preventing them. Healthcare professionals should be aware of all potential sources of pressure injury related to medical devices and specific patient populations at high risk.

Keywords: Medical Device, Pressure Injury, Intensive care unit

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Pub No: S-038

Central Pontine Myelinolysis in the Intensive Care Unit: a Case Report

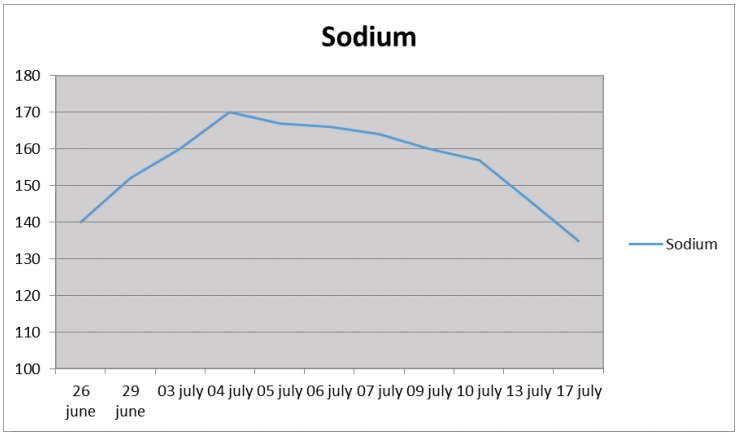
Serkan Uçkun[1], Hafize Fisun Demir[1], Ahmet Köroğlu[1]

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Giriş - Amaç: Neurological examination of patients in intensive care can be intricate and important. Our aim in this case report is to highlight an central pontine myelinolysis (CPM) due to electrolyte disturbance in a patient who developed quadriplegia.

Phenomenon: A 45-year-old male patient presented to the emergency department with complaints of symptoms of dysponea . On initial examination, his blood pressure was 220/100 mmHg and rales were detected in breath sounds upon auscultation. Following with preliminary diagnosis of hypertensive pulmonary edema, treatment was initiated through furosemide infusions. The arterial blood gas analysis result was: pH 7.2, paCO2 50, paO2 74, sO2 90.9 (fiO2 to 50). The patient was orotracheally intubated. The patient was then transferred to the intensive care unit and mechanical ventilation was initiated. During the initial examination, the patient showed a blood pressure of 140/80 mmHg and a pulse of 110 beats/min. the neurological examination, the patient had a GCS of 3, absent deep tendon reflexes, pupils were isochoric, with no lateralized motor deficits. Fluid-electrolyte therapy was administered to the patient with hypernatremia(Graphs 1). Sedation ceased on the ninth day of the intensive care assessment, resulting in spontaneous eye opening; however, no motor or verbal response was elicited. Radiological imaging confirmed no acute pathology in brain computed tomography. The diffusion MRI of the same patient demonstrated focal diffusion restriction in the pontine region. Forty days after, muscle strength began to return.

Graphs 1.



Patient's sodium values (Normal: 135 -145 mEq/L)

Discussion - Conclusion: Although a clear distinction could not be made between ischemia and CPM in our patient, pontine infarction did not explain the existing quadriplegia. The pathogenesis and cause of CPM are not fully explained. Many studies indicate that osmotic stress in pontine glia following the swift correction of hyponatremia plays a significant role in pathogenesis(1,2).As a result, it should not be forgotten that correction of electrolyte disturbances may cause osmotic damage.

Keywords: intensive care, pontine myelinolysis, electrolyte imbalance

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Pub No: S-039

Our Experience with General Anesthesia in a Pediatric Patient Diagnosed with Hypermethioninemia

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Giriş - Amaç: Hypermethioninemia is a metabolic disease that may be of genetic or non-genetic origin and is characterized by high plasma methionine levels. It usually does not cause clinical symptoms, but if left untreated, it can progress with neurological and hepatic symptoms and is a serious and rare disease that can be seen from the neonatal period.Studies have shown that methionine reduces Na+, K+ ATP-less and Mg+2-ATP-less enzyme activity, induces oxidative stress, and increases acetylcholinesterase activity. These enzyme changes and hepatic involvement may affect the metabolism of anesthetic drugs, making the anesthetist's job difficult. With this case, we aimed to share our experience with general anesthesia in a patient with hypermethioninemia and to review the points that need to be taken into consideration.

Phenomenon: Adenoidectomy and bilateral ventilation tube placement surgery was planned for a 3-year-old, 10-kg male patient by the ear, nose and throat surgeon due to adenoid hypertrophy. During the preoperative anesthesia evaluation, developmental delay and mental retardation were observed in the patient. His medical history includes hypermethioninemia and secundum ASD diagnoses. In the system examination, pectus excavatum was observed. The patient cannot speak, walk, or sit without support.When the patient was taken to the operating table, after routine monitoring, mask ventilation with sevoflurane, IV vascular access was established, 10 mg lidocaine, 10 mcg fentanyl, 4 mg rocuronium was administered and he was intubated with a number 3.5 spiral tube. After the operation, the patient was successfully extubated and taken to the recovery room.

Discussion - Conclusion: It should be kept in mind that the duration of effect of the muscle relaxant administered may be prolonged as a result of increased acetylcholine esterase activity due to hypermethioninemia, and the anesthetist should be prepared for all scenarios to cope with the consequences of this effect during the patient's awakening and recovery phase.

Keywords: General Anesthesia, Hypermethioninemia, Metabolic disease

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Pub No: S-041

Safe Anesthesia and Monitoring in Endobronchial Ultrasound (EBUS). Our Operating Room and Non-operating Room Ebus Experience.

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Giriş - Amaç: Endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) is a safe and effective technique for sampling hilar lymph nodes and mediastinal masses. The types of anesthesia used for EBUS-TBNA are moderate sedation and general anesthesia. Need for postoperative intensive care increases in patients with comorbidities. In sedation anesthesia, airway management may be difficult and bronchospasm may develop. In this case report, we wanted to present our experiences in two cases we received in the operating room and endoscopy unit.

Phenomenon: The first patient was a 57-year-old female patient, 96 kg, 168 cm tall, and a history of smoking 1 pack/day. The patient was newly diagnosed with lung cancer. She also developed Vena Cava Superior Syndrome due to mass compression. She was evaluated as ASA III. Therefore she was taken to the operating room for EBUS-TBNA procedure. 80 mg prednol was administered before the procedure. No complications developed during the procedure. The second patient was a 78-year-old male patient who weighed 62 kg and was 176 cm tall. The patient with newly diagnosed lung cancer and known Diabetes Mellitus. He was evaluated as ASA II. Patient taken to the endoscopy unit for procedure. After EBUS-TBNA, no complications other than cough were observed during recovery.

Discussion - Conclusion: Anesthesia method and location of the procedure is affected by factors such as the presence of comorbidities or obesity, the anatomical localization of the site and the preference of the bronchoscopist, anesthetist, or patient. As a result, various complications may develop during EBUS-TBNA depending on the procedure and the type of anesthesia given. We think that patients with systemic diseases and high ASA scores should be taken under operating room conditions, as in our first case.

Keywords: Endobronchial ultrasound, Endoscopy, General Anesthesia, Sedation

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Pub No: S-042

Epileptic Seizure and Psychogenic Polydipsia

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Giriş - Amaç: Polydipsia is a clinical disorder characterized by excessive water intakeHowever, psychogenic polydipsia (PPD), also known as compulsive water drinking or self-induced water intoxication, is often observed in patients with mental disorders, such as schizophrenia, bipolar disorder, and depression with psychotic features (1).

Phenomenon: A 23-year-old female patient with known Obsessive-Compulsive Disorder (OCD) is brought to the hospital after experiencing a generalized tonic-clonic seizure. Laboratory values for the patient are measured as follows: Glucose: 213, pH: 7.10, pCO2: 34, pO2: 140, HCO3: 10, Lactate: 11, and Na: 107. The patient is admitted to the intensive care unit (ICU), and treatment with 3% NaCl is initiated. On the third day, the Na level has increased to 137. In her medical history, it is noted that she lost her father two years ago, and since then, she has been consuming approximately 25 liters of water per day. Routine biochemical tests, ACTH, cortisol, complete blood count, and brain magnetic resonance imaging (MRI) all show normal results. Due to an increase in urine density following water restriction and desmopressin treatment, central and peripheral diabetes insipidus are ruled out, and it is considered to be psychogenic. As a result, the patient is referred to the psychiatry department on the 5th day of her ICU stay. During psychiatric follow-ups, with fluid restriction and cognitive-behavioral therapy, the daily intake of water decreases to 7 liters by the 32nd day of hospitalization and the patient is discharged.

Discussion - Conclusion: The primary goal of treating psychogenic polydipsia is to modify the drinking behavior, and in most cases, fluid restriction and psychiatric support are sufficient (2). Sometimes, medication such as phenytoin, bupropion, propranolol, or irbesartan is used to improve polydipsic behavior and prevent hyponatremia. In our case, the patient was discharged with fluid restriction and psychiatric support treatment.

Keywords: convulsion, hyponatremia, Polydipsia

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Pub No: S-043

Our Experience with Total Intravenous Anesthesia in a Patient Who Will Have Spinal Surgery Operation Using Buprenorphine/naloxone Combination in the Treatment of Chronic Substance Use

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Giriş - Amaç: Total Intravenous Anesthesia (TIVA) is a general anesthesia technique that is achieved by administering hypnotic agents solely through intravenous routes.In this case presentation, the choice of medication for the total intravenous anesthesia technique, in addition to propofol, involved the preference for ketamine infusion instead of opioid analgesics due to the patient being under buprenorphine/naloxone treatment for chronic substance use.

Phenomenon: The patient is a 57-year-old male with a history of chronic alcohol use, diagnosed with HCV, and a history of multiple substance use.A lumbar magnetic resonance imaging revealed an extradural mass at the L5 vertebra. Given the suspicion of a malignant metastatic mass, the patient was urgently taken for surgery by the neurosurgery department.Intraoperatively, it was decided to apply neurological monitoring by the surgical team. The chosen anesthesia method was general anesthesia with maintenance provided through TIVA .Because the patient had been using buprenorphine/naloxone for approximately 7-8 months, it was decided to avoid narcotic analgesics in TIVA and administer propofol and ketamine.Following the induction of general anesthesia, maintenance anesthesia was initiated with 0.25 mg/kg/hour of ketamine for the first 10 minutes, followed by 12 mg/kg/hour for the next 10 minutes, and then 9 mg/kg/hour, along with 6 mg/kg/hour of propofol.After the surgery, the patient was successfully extubated.

Discussion - Conclusion: In TIVA, ketamine is another intravenous agent that can be used in addition to propofol. Ketamine is a potent analgesic even at subanesthetic doses. It has no negative effects on circulation and respiration; in fact, it leads to an increase in blood pressure and heart rate. Because ketamine provides effective analgesia and has the opposite cardiovascular effects of opioids, it can be considered a suitable option in TIVA for cases where opioids should be avoided due to various reasons.

Keywords: TIVA, ketamin, neuromonitoring, buprenorfin/naloksan

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Pub No: S-044

Use of Picco in a Case of Paraganlioma Surgery; Case Report

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Giriş - Amaç: Introduction:Paraganglioma is the general name given to tumors arising from neuroendocrine cells associated with the sympathetic or parasympathetic nervous system. Clinical symptoms are due to increased catecholamine release. The most common symptoms are hypertension, headache, sweating and palpitations and are nonspecific. Interventions to the mass in the perioperative period may lead to catecholamine discharge and cause hypertension, ventricular extrasystoles and ST elevations. Calcium channel blockers, alpha and beta adrenergic receptor blockers can be used in preoperative preparation of patients.

Phenomenon: Case:A 53-year-old male patient with hypertension, previous myocardial infarction, previous intracranial hemorrhage and DM was diagnosed with a mass in the right surrenal gland extending up to the VKI. The patient was hospitalized in the endocrine service with a prediagnosis of pheochromastroma and paraganglioma due to high blood catecholamine levels. The patient was then consulted by the urology clinic and an operation was planned. PICCO monitoring was performed in addition to peroperative routine monitoring. Nitroglycerin, esmolol, nicardipine and noradrenaline infusion were started. The patient had episodes of hypo-hypertension during the operation and hemodynamic stabilization was achieved with intermittent bolus doses. A successful surgery was performed without complications in our case. The patient was electively extubated on the same day after inotrope levels were decreased. The next day, the patient was transferred to the endocrine service with stable hemodynamics and was not receiving inotropes and antihypertensives and was followed up. The patient was discharged with healing at the end of the 5th postoperative day.Conclu

Discussion - Conclusion: Conclusion:In high-risk patient groups with high bleeding risk and hemodynamically unstable course such as paraganglioama, we think that monitoring the patient's immediate invasive cardiac data can help anesthesia management in terms of rapid identification of perioperative complications and short-term stabilization of the patient by providing cause-directed treatment.

Keywords: (Pulse Index Continuous Cardiac Output), paraganglioma surgery, Monitorization

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Pub No: S-045

Relationship Between Hemodynamic Changes and Acute Cholecystitis in a Patient in the Intensive Care Unit

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Giriş - Amaç: The epidemiology of hypertensive urgency or hypertensive emergency in medical ICUs has not been clearly defined, but appears to be frequent (1).Also ,distension of the gallbladder cause reflex increases in heart rate and arterial blood pressure that involved afferent vagal pathways and efferent sympathetic mechanisms(2).We wanted to show that acute cholecystitis can also cause severe hypertension in ICU patients.

Phenomenon: The 60-year-old male patient with a known history of hypertension was initially under observation in the ward due to intracranial hemorrhage.However, he was later admitted to the ICU due to the development of aspiration pneumonia.He underwent orotracheal intubation(OTI) and was started on antibiotic therapy.He was diagnosed with septic shock during his ICU follow-up based on the presence of growth in tracheal aspirate and blood cultures.He was subsequently managed with inotropic support and intermittent sedation.Due to the patient's inability to be weaned off mechanical ventilation and underlying infectious processes, tracheostomy was performed on the 15th day of his ICU stay.The patient experienced episodes of hypotension and severe hypertensive attacks, along with intermittent flushing, prompting an investigation for pheochromocytoma.An upper abdominal magnetic resonance imaging revealed findings suggestive of acute cholecystitis, leading to the placement of a percutaneous cholecystostomy catheter on the 29th day of his ICU stay.Oral intake was discontinued, and the patient was managed with parenteral nutrition and antibiotic therapy. After the treatment, the patient's hypertensive and hypotensive attacks resolved. His tracheostomy tube was removed.On the 52nd day of their stay in ICU, antihypertensive treatment was adjusted, and he was transferred to the ward.

Discussion - Conclusion: Severe hypertension is frequent in the ICU.Control of the triggering factor allows the restoration of normal blood pressure.(1)In this case, we concluded that acute cholecystitis, which we rarely encounter in an ICU patient, may cause serious hypertensive attacks and should be kept in mind during patient follow-up.

Keywords: Hypertension, Gallbladder Disease, Acute Cholecystitis, Intensive Care Unit

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Pub No: S-046

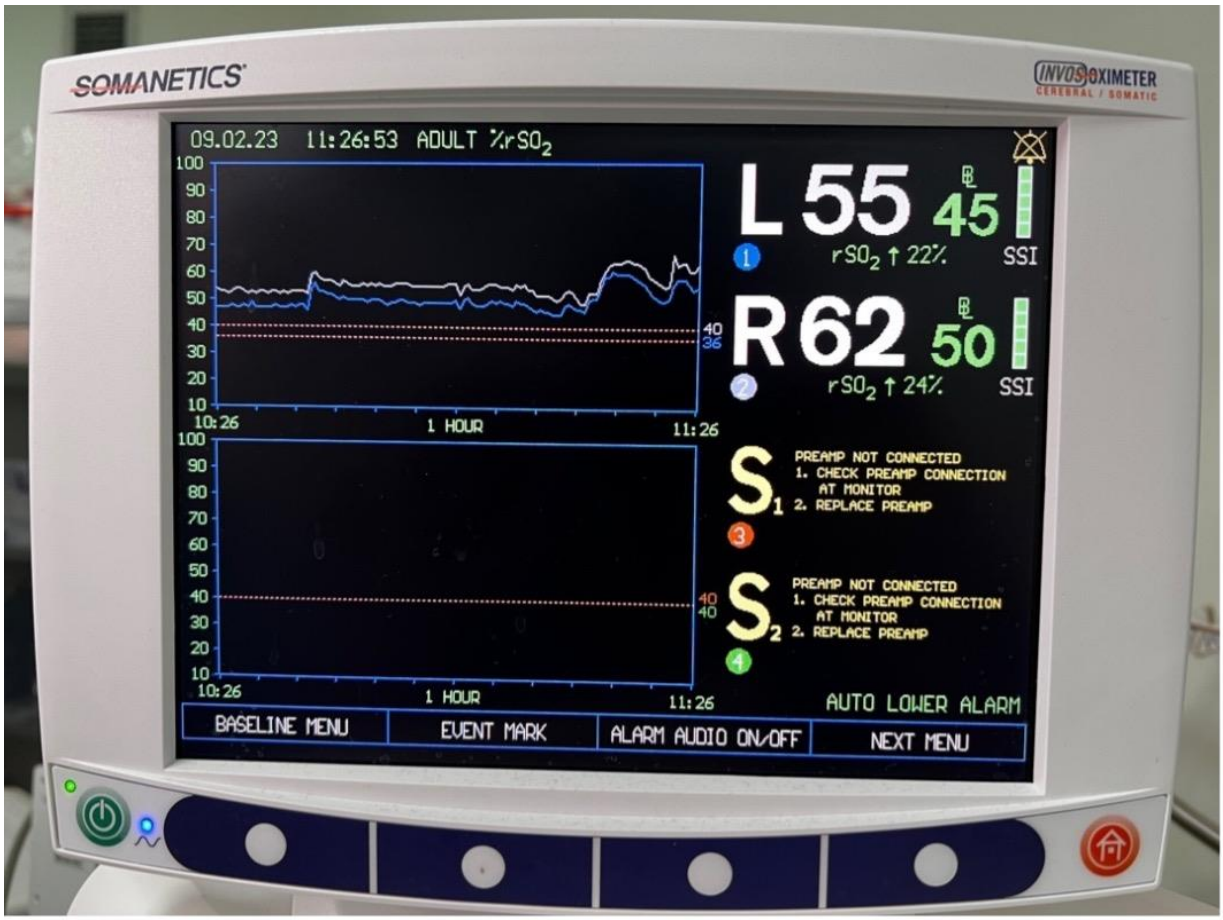
Prospective Evaluation of the Relationship Between Cerebral Oximetry Values and Postoperative Renal Functions in Patients with Cardiovascular Surgery

Oğuz Kayıkçı[1], Canan Balcı[1]

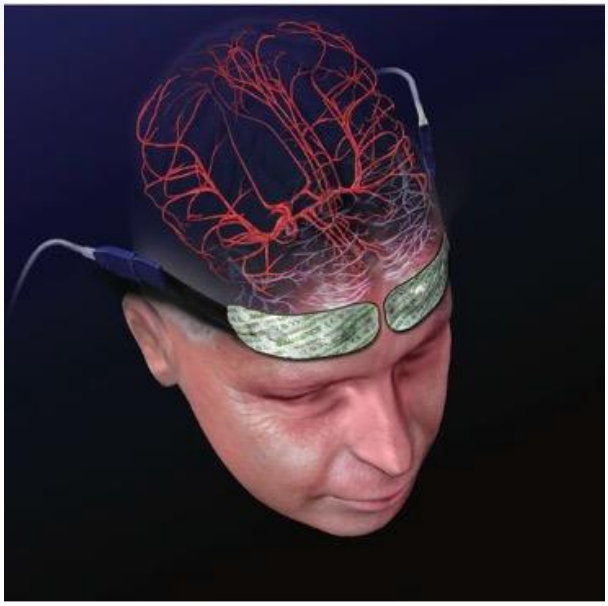
[1]Kütahya Sağlık Bilimleri Üniversitesi

Introduction - Purpose: The aim of this study is to reveal the potential of cerebral oximetry in predicting AKI by prospectively following our patients after cardiac surgery.

INVOS 5100 C used in NIRS measurement

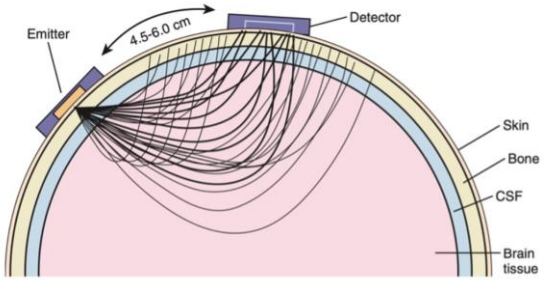


View of cerebral oximeter probes in the patient's frontal lobe



INVOS Cerebral/Somatic Oximeter Operations Manual, Covidien 2010

Schematic view of NIRS on the patient's head



Monitoring in Neurocritical Care, Chapter 33, Pippa G. Al-Rawi and Peter J. Kirkpatrick, 328
2013 Elsevier Inc

Materials and Methods: Patients who underwent Coronary Artery Bypass surgery between 01.01/01.07.2022 were followed up perioperatively. Postoperatively, they were in the Cardiovascular Surgery Intensive Care Unit at 1, 24 and 48 hours. has been followed. The patients included in the study were divided into two groups according to the AKIN criteria.Statistical significance level was accepted as $p<0.05$.

Results: A statistically significant difference was found when the APACHE-2 Scores, postoperative extubation times, intensive care unit length of stay and 30-day mortality period of the patients of both groups were compared ($p<0.05$) When we compared preoperative and postoperative 1st hour laboratory parameters , Albumin and eGFR values were statistically significant. $p<0.05$). When the postoperative 24th hour data were compared, the difference between creatinine, eGFR, AST and Lactate values was found to be statistically significant

($p<0.05$). When we compared the postoperative 48th hour data of both groups, a statistically significant difference was found between creatinine, eGFR, Na and AST values ($p<0.05$).When we compared the urine output values of both groups at the 6th, 12th, 24th and 48th hours, the values were lower in the group with AKI between the two groups, and this was statistically significant. When we compared the initial and postoperative 1-24 and 48th hour rScO2 values between the two groups, it was detected more in the AKI group and this was considered statistically significant ($p<0.05$).

Discussion - Conclusion: We observed that perioperative and postoperative rScO2 values were lower in patients undergoing cardiopulmonary bypass surgery and in patients with postoperative acute kidney injury. In patients with low perioperative rScO2 values, the risk of perioperative AKI development should be considered, nephrotoxic agents should be avoided, and renal protective measures should be taken.

Keywords: Acute Kidney Injury (AKI), Cardiopulmonary Bypass (CPB), NIRS

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The Effect of Early Continuous Venovenous Hemodiafiltration(cvvhdf) on Clinical and Laboratory Values in Metformin Intoxication

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Giriş - Amaç: Metformin is an oral antidiabetic drug which is used for treatment of diabetes mellitus(DM).Toxic dose of this drug may result in tachypnea,hypoglycemia,tachycardia,hypotension,nausea,vomiting,and metabolic acidosis,which may ultimately cause mental state alterations.Metabolic acidosis caused by elevated lactat levels,one of the side effects of this drug,becomes a life-threatening condition in cases of intoxication.It is essential to diagnose and treat this clinical entity as quickly as possible.

Phenomenon: A 46-year-old female patient with type-2-DM took total 30 gram of metformin orally for suicide intention.She was admitted to the emergency department with symptoms of nausea,vomiting and dizziness.Laboratory tests revealed a reduced glomerular filtration ratio(GFR) and increased creatinine levels(GFR:45 Creatinine:1,44).Metabolic acidosis due to raised lactate levels in arterial-blood-gas(ABG)(pH: 7.26; LACTATE: 10)was noted.Patient's Glasgow coma score(GCS) was 15 and her vital signs were stable.Activated charcoal was administered at the emergency department.Patient was admitted to intensive care unit due to predicted deepening metabolic acidosis.Intravenous hydration resumed in the ICU.After it was seen that patient's lactat values increased,a hemodialysis catheter was placed and CVVHDF was initiated.Meanwhile patient's blood glucose level monitored and intravenous dextrose solution administered due to hypoglycemia.The patient's metabolic acidosis improved as lactate values decreased after a 15-hour CVVHDF procedure(table 1).The patient was able to fed by orally.The patient was transferred to the ward on the fourth day when lactate values were below 2 mmol/l and showed no signs of acidosis in the ABG.

Lab. Values

	ADMISSION	1st HOUR	3rd HOUR	6th HOUR	9th HOUR	12th HOUR	15th HOUR
PH	7.14	7.16	7.15	7.27	7.30	7.42	7.45
LACTIC ACID	10.3 mmol/l	9.73 mmol/l	9.3 mmol/l	7.13 mmol/l	5.2 mmol/l	2.52 mmol/l	1.53 mmol/l
GFR	45 ml/min			58 ml/min		76 ml/min	90 ml/min
CREATININ	1.44 mg/dl			1.17 mg/dl		0.81 mg/dl	0.68 mg/dl

Discussion - Conclusion: Renal replacement therapy is an important treatment for metabolic acidosis caused by lactate increase after metformin intoxication.Early use of CVVHDF can impact mortality due to the drug's high volume of distribution.However,there is lack of research in the literature regarding the administration of CVVHDF in early stages of metformin intoxication.We choose to initiate CVVHDF in early stages due to progressive acidosis.The principal method of managing metformin intoxication with unstable hemodynamics is by utilizing CVVHDF.

Keywords: cvvhdf, metformin toxicity, renal replacement therapy, diabetes mellitus, acute kidney injury

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Pub No: S-048

Clinical Improvement After Delayed Anti-Venom Application in Life-Threatening Scorpion Sting

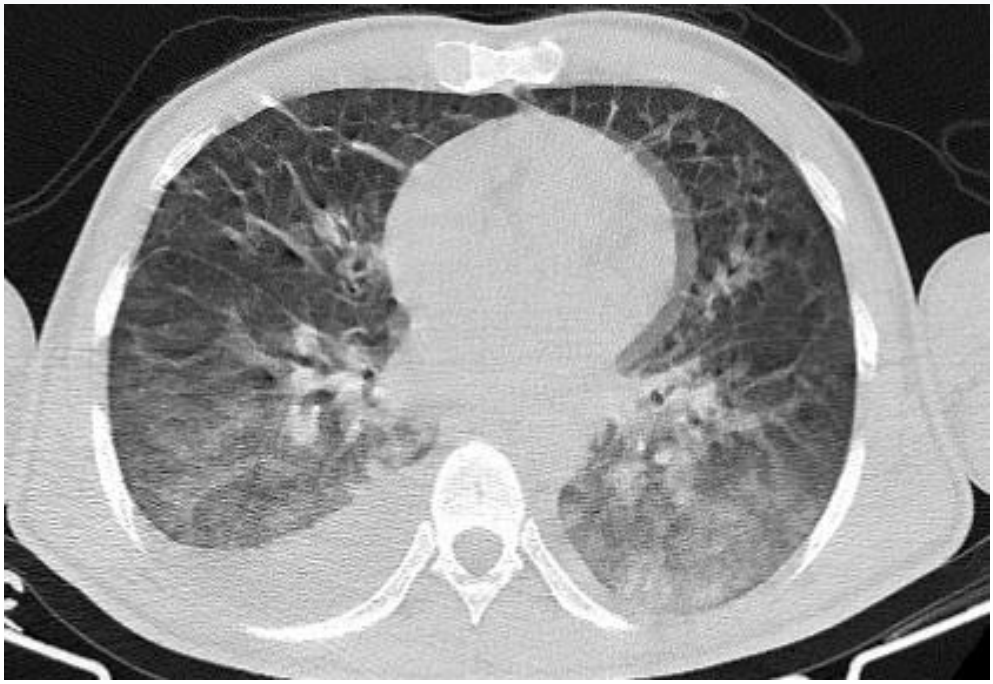
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Giriş - Amaç: Scorpion stings(SS) are mostly observed in tropical and sub-tropical regions(1). While 1.2 million SS are reported annually in the world, 3 thousand of these result in death(2). We will describe the response to antivenom treatment after 13 days of envenomation.

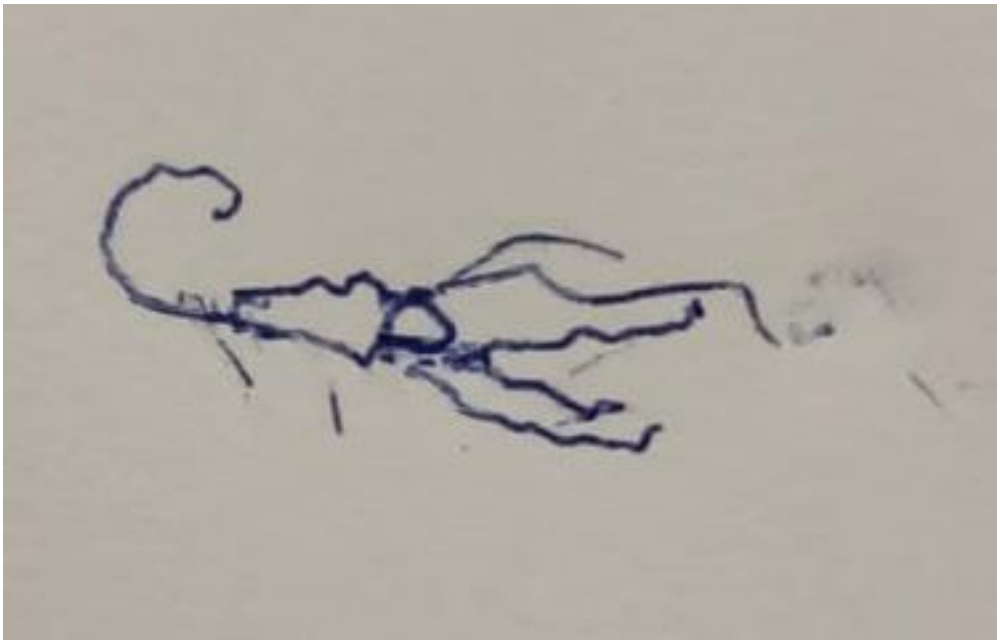
Phenomenon: A 23-year-old male patient was brought to the emergency after being found sluggish on the roadside with lack of oral intake for 3 days. Although attempts were made to communicate with the patient, no communication could be established because he spoke an unintelligible language. The patient was followed up in the ward for 6 days with acute kidney injury(AKI). When dyspnea developed and tachypnea increased, the patient was transferred to the Intensive Care Unit(ICU). The patient was lethargic and tachypneic (Rate:30-40/min) on admission. Imaging showed pulmonary edema and pleural effusion(Figure1). Continuous renal replacement therapy(CRRT) was started in the patient whose anuric and hyperkalemic. The patient, whose tachypnea and dyspnea increased and did not benefit from non-invasive ventilation, managed to transmit an important information by drawing a scorpion on the paper before intubation(Figure2). After intubation, despite the FiO2:1.0 and PEEP:10cm-H20 parameters, the SpO2 level could not exceed 85%. Antivenom containing 1ml immunoglobulin was administered. At 12 hours of antivenom treatment, PaO2/FiO2 increased dramatically from 40 to 174mm-Hg. Within 24 hours, urine output was achieved and CRRT was terminated. The patient was discharged to the ward after a 16-day ICU period.

Figure 1



Computerized tomography section of the patient viewed during admission

Figure 2



Scorpion drawing by the patient

Discussion - Conclusion: Scorpion stings can rarely progress to life-threatening systemic pathologies such as myocardial damage, shock, neurotoxicity, AKI, and pulmonary edema(3). Antivenom should be administered as soon as possible after SS(4-6). However, we did not find any time-effectiveness study for antivenom administration. In our case, antivenom significantly improved pulmonary and renal symptoms even 13 days after envenomation. Communication through drawing on paper has determined the fate of the treatment process.

Keywords: scorpion stings, acute kidney injury, late antivenom treatment, intensive care unit

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Pub No: S-049

Acute Masseter Dystonia Due to Antipsychotic Use

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Giriş - Amaç: Antipsychotics are the most common group of drugs causing different movement disorders, especially akathisia. Parkinsonism, tardive dyskinesia, tremor and dystonia are among the movement disorders.We described a case of acute masseter dystonia due to mirtazapine use that became apparent during induction of general anesthesia.

Phenomenon: 24-year-old patient was intubated and admitted to ICU after a motorcycle accident. There was no special history. No damage occurred in the perineal region except for tissue loss involving the anal sphincter in the perineal region. Colostomy was opened in the ICU follow-up. The patient was extubated on the 6th day and transferred to the general surgery service in an oriented and cooperative manner.The patient was operated under general anesthesia for debridement and vac exchange every other day. While general anesthesia was repeated by the same physician, it was noticed that the mouth opening decreased progressively after induction and the patient could not place an airway. In the anamnesis, it was learned that the patient had difficulty in opening his mouth and locking in his jaw for the last one week and his laboratory values and orders were checked. It was observed that her complaints started 2 days after mirtazapine was started as antipsychotic. Mirtazapine was discontinued in the patient who was thought to have acute masseter dystonia due to antipsychotic use. He was operated again under general anesthesia 5 days after the drug was discontinued. After induction by the same physician, an airway could be placed and full mouth opening was observed.

before induction



After induction



Discussion - Conclusion: We associated acute masseter dystonia with antipsychotic use because the patient did not have electrolyte imbalance in the follow-up, had no symptoms before antipsychotic use, and the symptoms improved after stopping the drug and the half-life elapsed. The risk of acute dystonia in antipsychotic users should be under the attention of the clinician.

Keywords: acute masseter dystonia, general anesthesia, Antipsychotics

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Pub No: S-050

Cardiac Adverse Complications Developed During Low-dose Remission Induction in a Patient with New Diagnosis Acute Myeloid Leukemia in Accordance with Current Guidelines and Our Management Process in Our Intensive Care Unit: a Case Study

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Giriş - Amaç: Acute myeloid leukemia (AML) is in the group of hematological diseases that usually occur in patients aged 65 and over, difficult to manage with the addition of comorbidities and additional genomic factors. Responses to standard chemotherapy protocols are limited by hemodynamic instability. Therefore, current treatment protocols consist of lower dose regimens and combined therapy of hypomethylating agents in the older age group. Our aim is to present the early diagnosis of rare cardiac complications due to chemotherapy and the treatment management in intensive care unit.

Phenomenon: A 74-year-old female patient applied to the hematology clinic due to complaints that had been going on for 2 weeks, and as a result of the bone marrow biopsy, the patient's treatments were continued with a prediagnosis of AML. With cardiology approval, personalized low-dose combined chemotherapy regimen is started. On the 15th day of the combined therapy, the patient with a pre-diagnosis of tamponade and septic shock with increased respiratory distress is admitted to our general intensive care unit. The patient was re-evaluated by cardiology. Pericardiocentesis was canceled again due to high risk and regression of clinical outcomes. However, the patient, who had respiratory distress, was quickly intubated. On the echocardiography was found to have newly developed hypokinesia in the segmental-inferoposterior area. The day after she was taken to coronary angiography. A drug-eluting stent was placed in Cx. Despite all the medical interventions, she was died.

Discussion - Conclusion: In addition to the complications that are frequently encountered after chemotherapy (CTx) in the middle and advanced age group, early diagnosis and treatment of cardiac complications that may develop during CTx are of vital importance. In common consensus with hematology, we think that MI and tamponade clinic are related to chemotherapeutics. In this regard, more studies and data are needed, both in the treatment dosage and management of complications.

Keywords: acute myeloid leukemia, cardiac complications secondary to treatment, critical illness management

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Pub No: S-051

Successful Extracorporeal Membrane Oxygenation Treatment Process in a Pregnant Patient Who Developed Severe Respiratory Failure Due to Covid 19 Pneumonia

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Giriş - Amaç: “In pregnant women, Covid-19 pneumonia can cause higher degree of morbidity and mortality." In serious respiratory failure cases, mechanical ventilation and ECMO are ultimate treatment options. In this case presentation, we discussed a 26-week pregnant patient who has experienced respiratory failure due to COVID-19 infection, progressed to ECMO, transitioned from mechanical ventilation to spontaneous respiration during the ECMO process, and ultimately discharged the patient after ECMO.

Phenomenon: A 26-week pregnant woman, not vaccinated against COVID and 42 years old, conceived through in vitro fertilization (IVF). The patient arrived at the emergency department with complaints of cough and fever. Diffuse pneumonic infiltrations were observed on the chest X-ray. The PCR test was positive. The patient was started on antibiotic and anticoagulant treatment. On the 3rd day, due to respiratory distress, the patient was admitted to the intensive care unit and intubated. Despite mechanical ventilation, when oxygenation did not improve, she was connected to ECMO (veno-venous). On the 5th day of ECMO, the patient was extubated, and on the 14th day, she was separated from ECMO. The patient was discharged at the 29th week of pregnancy, 21 days later. After a normal pregnancy process, she gave birth via C-section at 38 weeks.

Discussion - Conclusion: During the COVID-19 pandemic, one of the most sensitive groups was pregnant women. Due to uncertainty about the vaccine, they did not get vaccinated. The clinical condition rapidly deteriorated, progressing to respiratory failure and eventually requiring ECMO treatment. The mortality rate was high.Our case, which we followed with close monitoring, up-to-date treatment, and a multidisciplinary approach, is the only reported COVID-19 pregnant case in the literature, where spontaneous respiration was observed during ECMO support.

Keywords: Acute respiratory distress syndrome, COVID-19, Extracorporeal membrane oxygenation, Pregnancy

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Pub No: S-053

The Use of Adenosine in Supraventricular Tachycardias in ICU

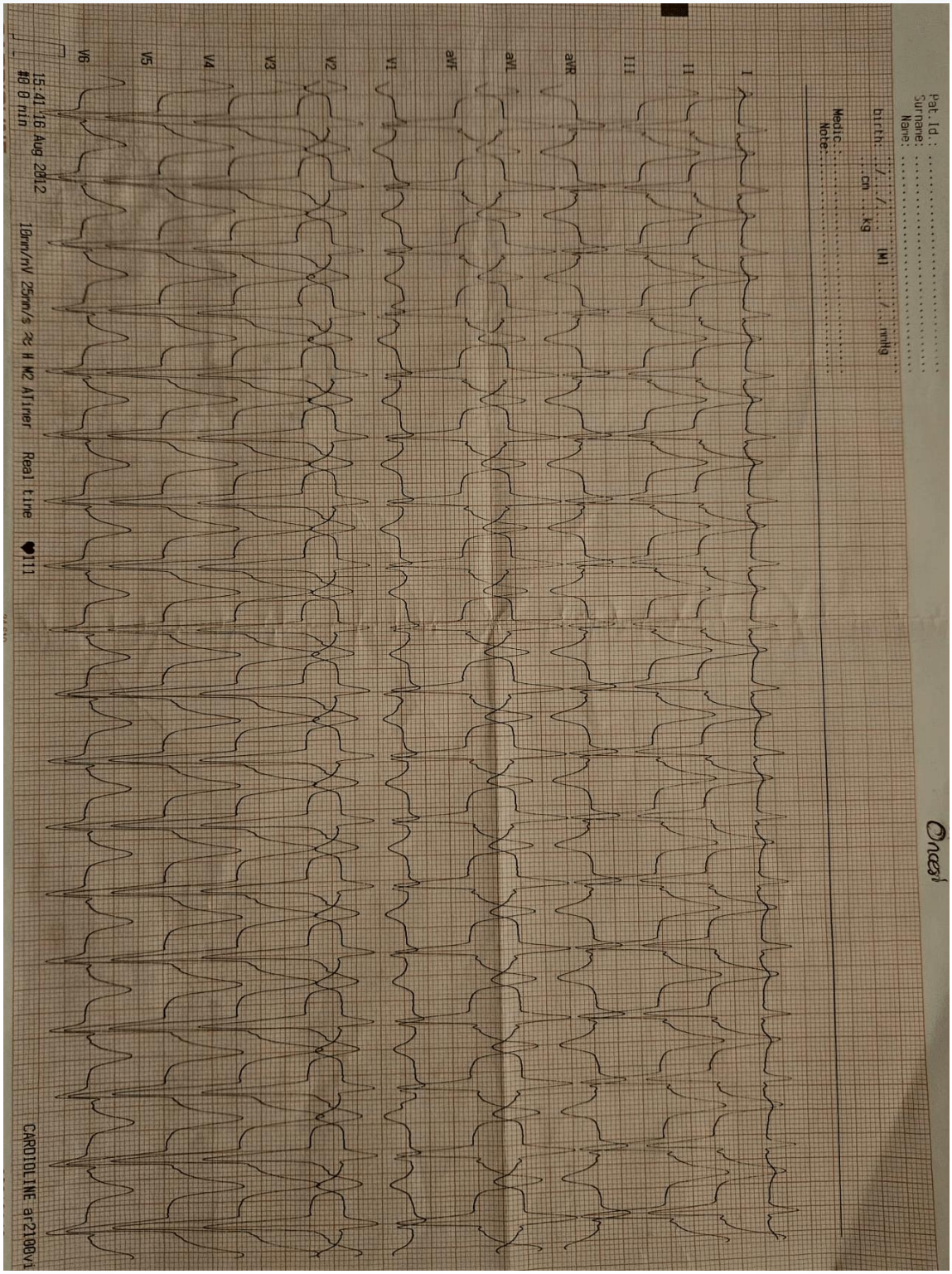
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Giriş - Amaç: Rapid-onset tachycardias can seriously disrupt the patient's clinical condition and hemodynamics. In cases of supraventricular tachycardias, despite being the first choice ahead of calcium channel blockers and beta blockers, adenosine, a drug that suppresses the AV node, is not frequently used in the intensive care unit (ICU) due to its short duration of action. In this case, we also wanted to see the availability or effectiveness of this agent.

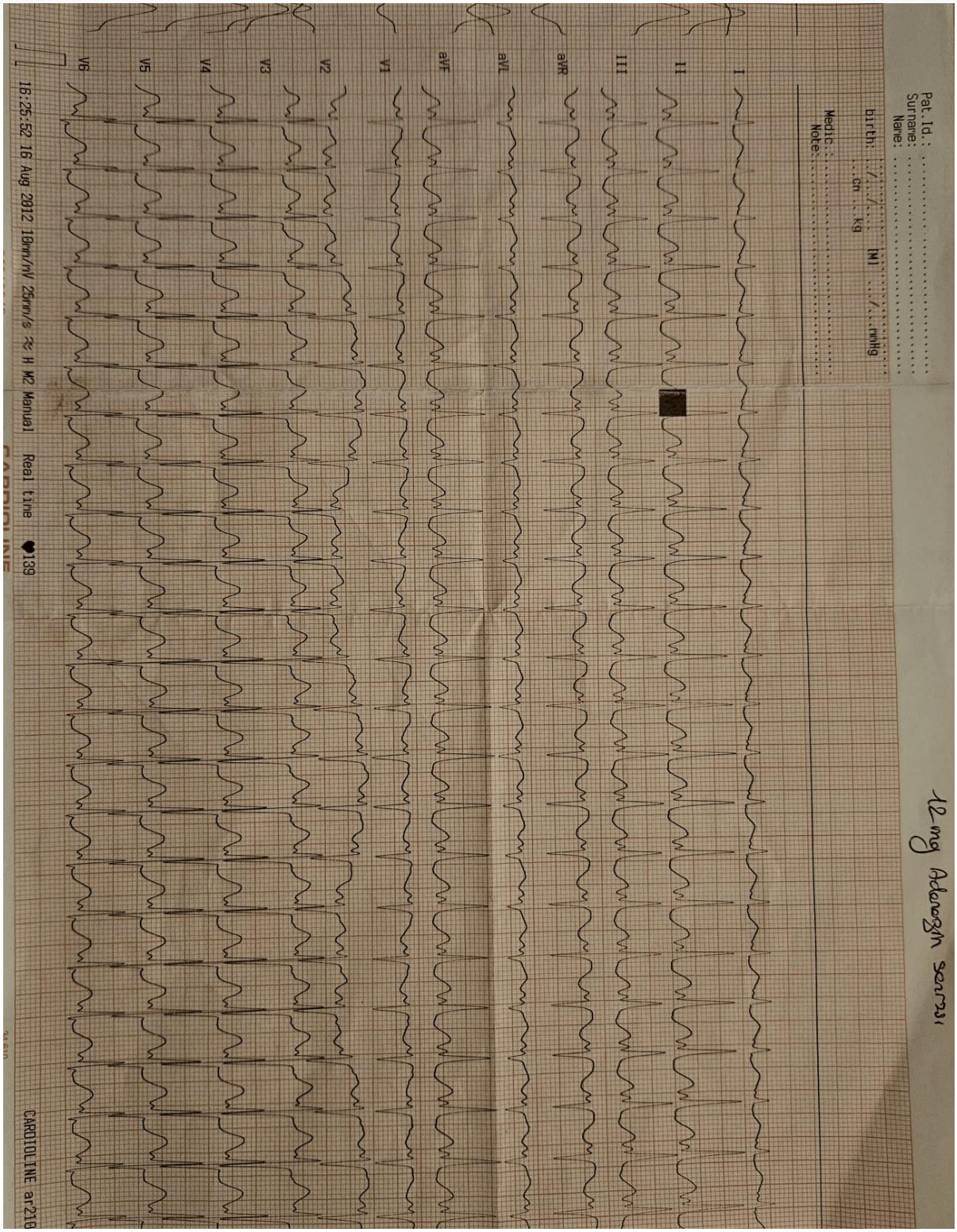
Phenomenon: A 43-year-old female patient; who had undergone an aneurysm rupture operation had experienced sudden hypotension and tachycardia (150 beats/min) in ICU. Following a cardiologist's recommendation, adenosine was planned to be administered intravenously due to its rapid effectiveness. 6 mg of adenosine was administered intravenously. The ECG pattern returned to normal after the administration, tachycardia was terminated, and the patient's hypotension improved. Since adenosine has a short half-life, Patient's condition worsened again. Adenosine was administered three times more, initially 6 mg, then 12 mg, and finally a high dose of 24 mg. Despite these interventions, the patient's tachycardia reoccurred and 50 mg of metoprolol were administered. This time, tachycardia was definitively terminated, and the patient's overall condition improved.

1



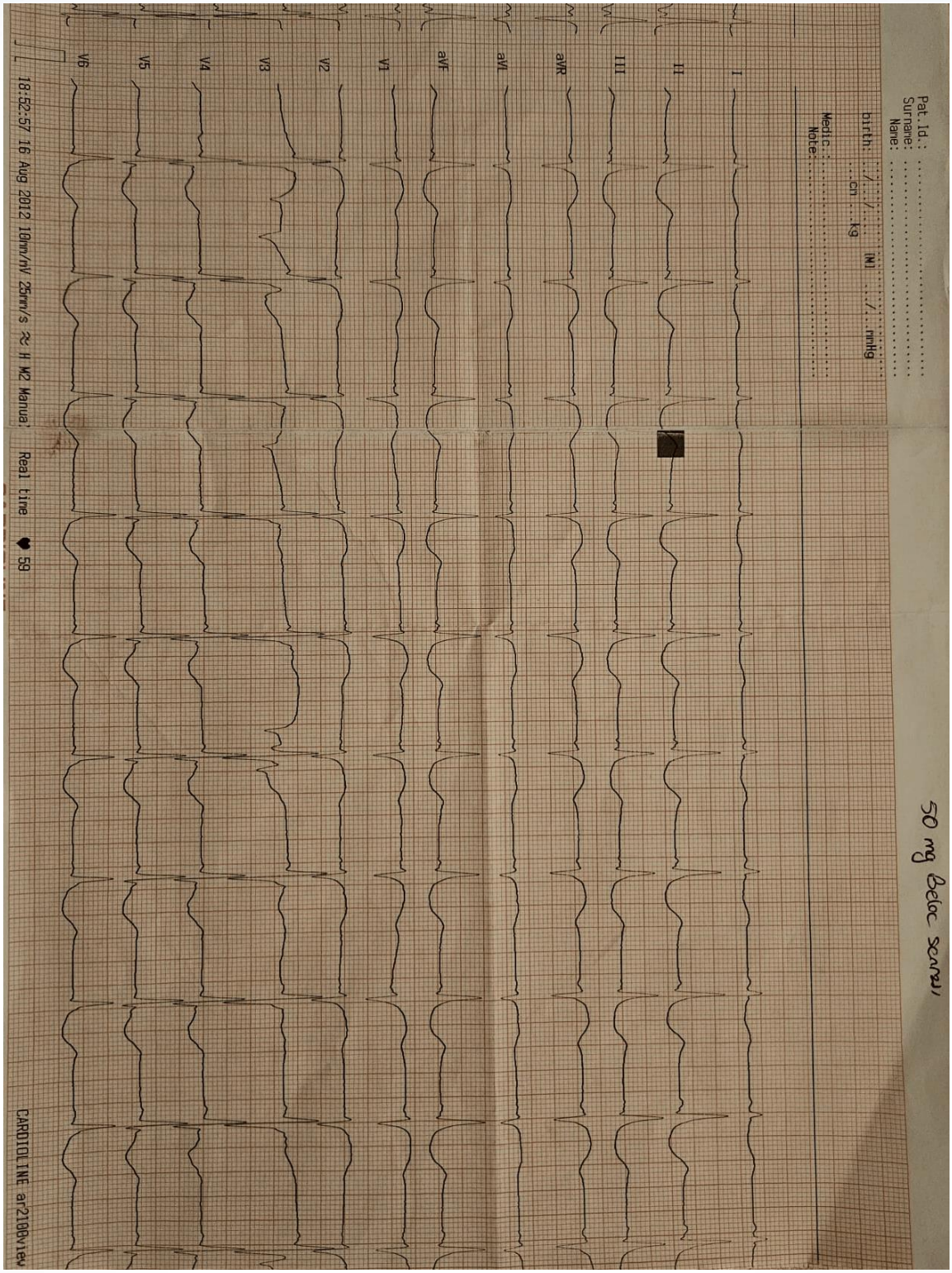
First ECG of incident

2



After 12 mg of Adenosine

3



After 50 mg of Metoprolol

Discussion - Conclusion: Adenosine acts on the AV node, suppressing electrical conduction there, thus breaking the rapid ventricular response in supraventricular tachycardias. Its onset of action is rapid but short-lived. The usage protocol includes application doses of 6 mg, 6 mg, and finally 12 mg. In our research, we have seen that in some centers, a high dose of 24 mg is applied and provides more benefit. In this case, adenosine was chosen due to its rapid onset of action; however, the desired effect could not be achieved due to its short duration. We believe, in ICU practice, adenosine may find a place by its rapid effect, providing clinicians to save time before planning a long lasting therapy.

Keywords: adenosine, supraventricular tachycardia, intensive care unit

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Pub No: S-054

Preoperative Preparation and Anesthesia Management in Pheochromocytoma Surgery

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Giriş - Amaç: Pheochromocytoma is rare neuroendocrine tumor that can cause hypertension, tachycardia, palpitations, headaches. Uncontrolled release of catecholamines during anesthesia induction and surgical manipulation often leads to hemodynamic instability. Therefore, intensive preoperative preparation, intraoperative/postoperative care are crucial for this patients

Phenomenon: Case: 54-year-old male, 84kg presented to general surgery clinic after a 9cm mass was incidentally discovered in left kidney on abdominal CTscan. Laboratory tests showed elevated levels of metanephrine 610mcg/day in 24-hour urine, normetanephrine 565mcg/day, VMA 5.95mg/day,. Patient was diagnosed with pheochromocytoma. Three weeks before surgery, anesthesiology department evaluated patient, in consultation with endocrinology department, initiated antihypertensive treatment, α1-selective blocker doxazosin 4mg1*1 and β1-selective blocker 5mg1*1. After three weeks of antihypertensive treatment, patient was admitted to hospital for surgery. Three days before operation, doxazosin, β1-selective blocker were discontinued, urapidil IV infusion was started at 5mg/h and increasing to 6mg/h to control blood pressure. Operation day hydrocortisone 50mg and 0.03mg/kg midazolam induced intravenously. After standard monitoring was applied, 20ml/min infusion of 0.9% saline was started. Prior to induction, blood pressure was 162/81mmHg, heart rate of 69bpm. Anesthesia induction included IV lidocaineHCl (0.5mg/kg), propofol (2.5mg/kg), and rocuroniumbromide (0.6mg/kg). Central venous catheterization and invasive arterial monitoring were performed. Anesthesia maintenance was achieved with mixture of 50% O2 and 50% air (3L/min), sevoflurane (1.5-2.5%), and a remifentanil infusion (0.25-1mcg/kg/min). Urapidil infusion (5-30mg/h) was continued until clamp was placed on the left adrenal vein. The patient didn't experience hypotension after mass excision. surgery lasted for 180 minutes, patient was extubated without any complications. After one hour of PACUmonitoring, patient was transferred to ward.

Discussion - Conclusion: In this case, early initiation of alpha1 blockade under the control of anesthesiologists, detailed perioperative monitoring, close follow-up have been discussed as strategies to reduce complications and morbidity in patients undergoing elective surgery for pheochromocytoma, based on a review of relevant literature

Keywords: pheochromocytoma, urapidil, adrenalectomy, Preopartive preparation

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Pub No: S-056

The Importance of Oral and Dental Examination in Airway Management

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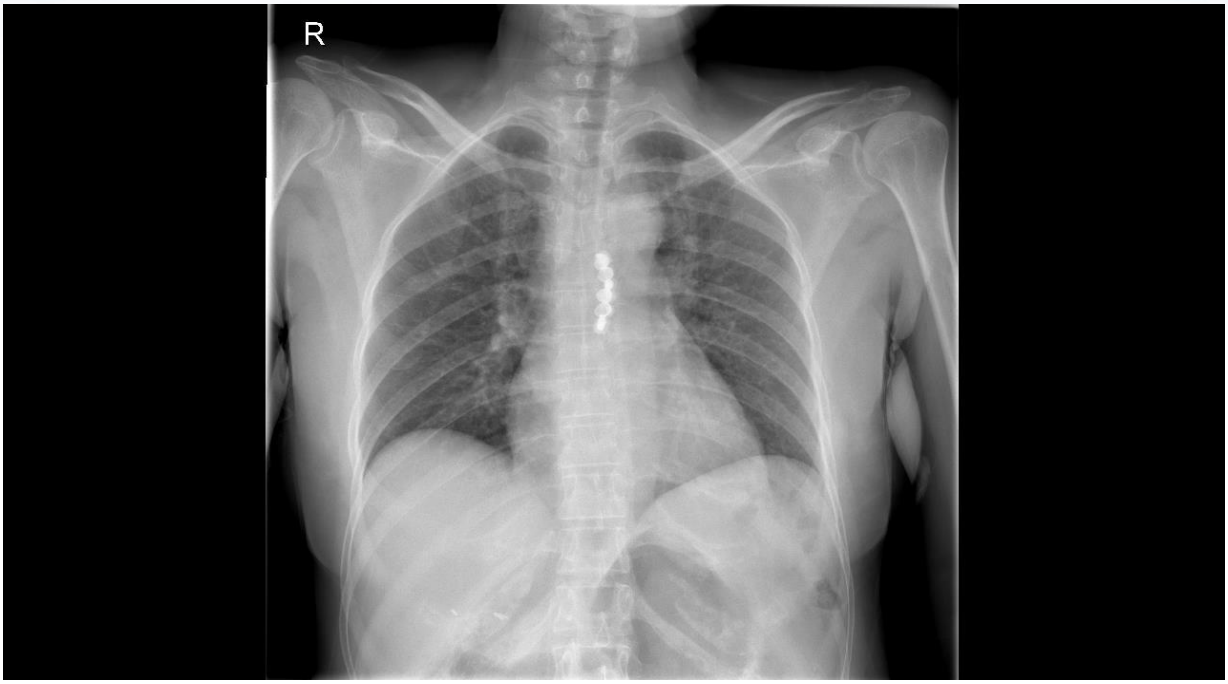
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Giriş - Amaç: Orotracheal intubation (OTE) is a frequently used method in general anesthesia practice. Although airway operations may seem easy, hypoxic brain injury, emergency surgical airway, trauma and teeth may emerge as unexpected airway complications that are difficult to remedy (1). In our case, we aim to present the management process of our patient whose preoperative oral and dental examination yielded normal results and who did not exhibit any findings despite the separation of six sequential teeth in the operation.

Phenomenon: Aged 43, the female ASA II patient was taken in for elective cholecystectomy. The patient's Mallampati II, oral and dental examinations were normal. The patient verbally expressed that they had no teeth that swayed or broke out. After routine monitoring, preoxygenation and induction processes, airway was placed, and mask ventilation was provided. OTE was implemented smoothly and in one go with intubation tube number 7.5. The operation lasted 90 minutes. No complications were observed in extubation. The patient was transferred to the postoperative unit (PACU) for monitoring. PA chest X-ray was taken after the patient said that their teeth were missing in PACU. The six sequent capped teeth were found as united in the esophagus. The patient was immediately transferred to the endoscopy unit. Under sedoanalgesia, the teeth were removed endoscopically. No complications were observed. Ethics committee approval was obtained from the hospital for this case report.

Discussion - Conclusion: Although no complications and findings were observed during the intubation and extubation stages, intraoral examination should be performed in all preoperative and postoperative patients. Especially in the presence of missing teeth, the possibility of aspiration should be considered, and radiological evaluation should be performed when necessary (2).

Figure 1: Patient's PA chest X-ray



Keywords: Airway complications, Airway management, Dental examination

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Pub No: S-057

Anesthesia Management in a Difficult Airway Patient Diagnosed with Laryngomalacia

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Giriş - Amaç: This case details the anesthesia management of a 3-month-old patient diagnosed with congenital laryngomalacia and challenging airway conditions, who underwent surgery for inguinal hernia.

Phenomenon: This male patient scheduled for inguinal hernia repair, weighing 3650 grams, and presenting with no other underlying medical conditions except for laryngomalacia, the physical examination unveiled notable characteristics, including macrocephaly, micrognathia, and a distinctive syndromic facial appearance. His breath sounds were rough on auscultation and he was using accessory respiratory muscles. Therefore, ICU bed for postoperative care and difficult airway preparation was organized. Along with the glidescope and fiberoptic bronchoscope, laryngeal masks of different sizes, intubation tubes and bougie guides were prepared. After standard monitorization, anesthesia induction was conducted with 3mg lidocaine, 25mg propofol, 1mcg fentanyl and 2mg rocuronium. Following adequate mask ventilation first intubation attempt was done with glidescope but failed. Then, we turned back to mask ventilation. Intravenous 3mcg fentanyl was administered and second attempt was done with fiberoptic bronchoscope. Epiglottis and vocal cords were more visible and intubation was provided with a 3mm uncuffed tube. Perioperative period was uneventful and after the operation he was transferred to pediatric ICU. The day after he was extubated and followed up with nasal CPAP.

Figure shows prominent micrognathia and macrocephaly, which are difficult airway findings.



Discussion - Conclusion: Laryngomalacia manifests as an inspiratory stridor, which tends to intensify during feeding, crying or during periods of agitation. These symptoms typically manifest within the initial weeks of life and commonly resolve by the age of 12 to 24 months(1). Anesthesia management requires attention due to supraglottic airway collapse, which makes them difficult airway patients(2). In our patient it was more difficult because of syndromic face (3). However, successful anesthesia management can be achieved by applying the difficult airway algorithm with auxiliary equipment and experienced anesthesiologists.

Keywords: Anesthesia, Airway Management, Laryngomalacia , pediatric surgery

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Pub No: S-058

Awake Fiberoptic Intubation in a Patient with Cervical Fractures

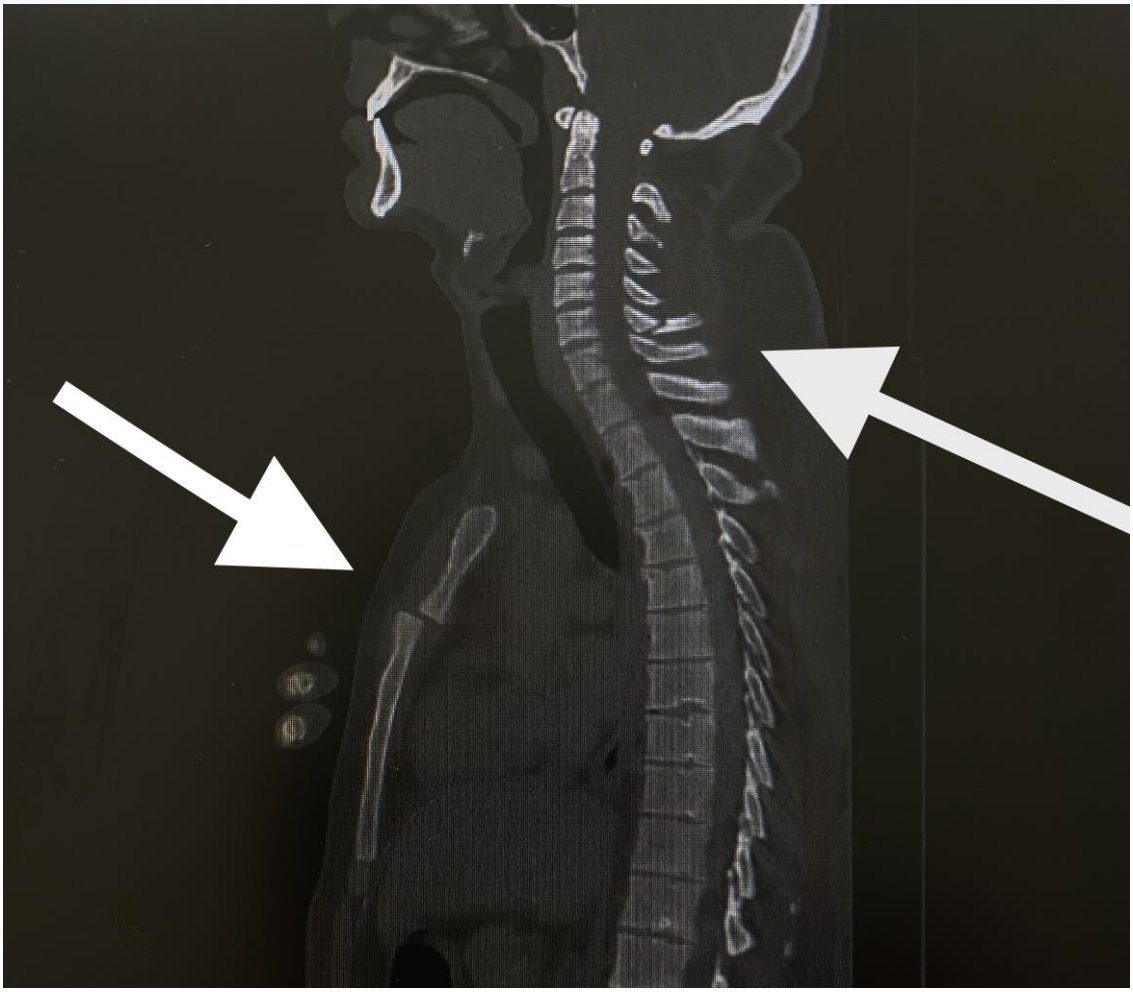
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Giriş - Amaç: This case report presents the effective airway management of a 29-year-old male patient who sustained fractures in the cervical vertebrae (C5-C6-C7) and sternum due to an accident. The primary challenge was to secure the patient's airway for sternum fracture stabilization while minimizing further harm and discomfort.

Phenomenon: The patient was alert, wearing a cervical collar, and had stable vital signs: blood pressure 123/78 mmHg, heart rate 78 bpm, oxygen saturation 97% on room air, and respiratory rate 16 breaths per minute. A non-contrast whole-body CT scan confirmed the cervical and sternum fractures without neurological deficits.The patient was continuously monitored for ECG, blood pressure, oxygen saturation, and respiratory rate. After explaining the procedure, intravenous 2 mg midazolam was administered, and a remifentanil infusion was initiated to ensure the patient's comfort. Local anesthesia was applied by spraying 1 ml of 10% xylocaine into the oropharynx and injecting 50 mg of lidocaine into the trachea via the cricothyroid membrane. Subsequently, awake fiberoptic intubation (AFI) was performed, guiding a 7.0 endotracheal tube through the left nostril with lubricant gel. Successful intubation was followed by anesthesia induction using 50 mcg fentanyl, 2 mg/kg propofol, and 0.6 mg/kg rocuronium. Anesthesia was maintained with Sevoflurane and remifentanil. The operation lasted without complications and extubation was performed. He was transferred to the ICU with Aldrete score 9.

Figure 1.



The figure illustrates sternum and cervical bone fractures in the patient's CT scan

Figure 2.



The figure illustrates the state of stabilization following fiberoptic intubation.

Discussion - Conclusion: Managing the airway in trauma cases is inherently complex. AFI is a valuable technique, especially for patients with challenging airways, such as those requiring cervical stabilization, or those who may not tolerate general anesthesia. Effective communication and appropriate sedation are crucial to secure patient cooperation for optimal outcomes. This case underscores the successful airway management in a patient with cervical fractures, highlighting its utility in complex trauma scenarios.

Keywords: Anesthesia, Airway management, Multiple traumas

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Pub No: S-059

Anesthetic Management of a Parkinson Disease Patient in a Coronary Artery Bypass Graft

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Giriş - Amaç: Parkinson's disease(PD) undergoing cardiac surgery is a little known,progressive neurodegenerative disease characterized by resting tremor,muscle rigidity,and bradykinesia.It's caused by arteriosclerosis,diffuse central nervous system degenerative disease,repeated head trauma, tumour,and metabolic defect.Autonomic dysfunction can lead to orthostatic hypotension,sialorrhea, constipation,incontinence,frequency,excessive sweating and seborrhea.Preoperative acid aspiration prophylaxis is given to prevent gastric stasis and reflux. As dopamine is known to increase cardiac inotropism and vasomotor tone,peripheral dopamine decarboxylase inhibitor is coadministered to suppress the peripheral conversion of levodopa to dopamine.Levodopa poses potential cardiovascular risks,thus its use in patients with existing CAD needs to be carefully monitored.

Phenomenon: We present 68 years old female with PD since 4 year,hypertension,DM and ischemic heart disease.Echocardiography showed evidence of ischemic heart disease,LVEF:45-50%, regional wall abnormality present, moderately depressed LV systolic function, mild pulmonary hypertension, PASPby TRjet 30mm.Patient had a complaint of severe typical chest pain since 1 week.In the CAG report triple vessel disease was detected. Patient was scheduled for emergency CABG.We used a method of anesthesia in PD.Considering pros and cons so as to minimize the complication associated to conduct smooth anesthesia.

Discussion - Conclusion: Maintaining a PD medication schedule is very important.If medications are not given in a timely manner, Parkinson's symptoms may worsen and recovery may become increasingly difficult.PD medications should be continued as soon as possible after surgery.It's possible that sensitivity to Parkinson's medications may temporarily increase or decrease in the days immediately following surgery.Recovery may be slower.Concomitant PD is an important factor in terms of perioperative morbidity.Establishing guidelines for hospitalized Parkinson's patients may impact perioperative morbidity.PD is an increasingly common disease of elderly patients who present a particular anesthetic challenge.With increasing life span of general population and improved medical and diagnostic facilities,it's more likely for any anesthesiologist to encounter an elderly patient with PD.Every anesthesiologist should become familiar with special demands and needs of patients with PD.

Keywords: Dopamine, Levodopa, Parkinson's Disease, Coronary Artery Bypass Grafting Surgery, Anaesthesia Management

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Pub No: S-060

Surgical Anesthesia Under the Erector Spinae Plane Block in a Challenging Patient Undergoing Thoracotomy

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Giriş - Amaç: Lateral decubitus position during thoracic surgery under general anesthesia can present challenges due to physiological changes in complex patients. This case demonstrates our successful anesthesia management through sedation and erector spinae plane block (ESP) for a patient undergoing thoracotomy.

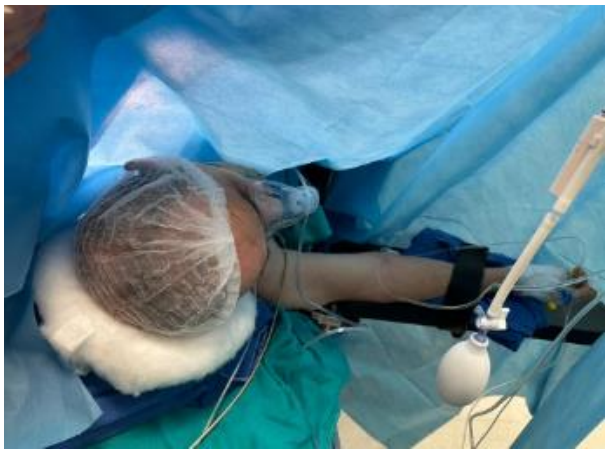
Phenomenon: This 72-year-old male, lung cancer patient who underwent left lobectomy under general anesthesia two weeks ago and was followed up in ICU for 5 days was planned for reoperation due to infection at the surgical incision site. Therefore, he was scheduled for exploration with thoracotomy. He had a history of COPD, hypertension, atherosclerosis and abdominal aortic aneurysm. Physical examination revealed coarse lung sound, wheezing and rhonchi. Saturation was 96 in room air and other vitals were normal but, he was anxious about the possibility of another ICU stay due to reoperation. Following sedation with 50mcg fentanyl and 40mg ketamine, ESP was performed at level T6 and T8 under the ultrasound guide. Each level was given 10ml 0.5% bupivacaine, 2.5ml 2% lidocaine and 4mg dexamethasone. Additionally, 10ml 2% lidocaine was injected to surgical site by surgeons. After having a painless surgical site, the operation commenced. Noninvasive hemodynamic monitoring was provided (Heart rate, ppv, respiratory rate, sPO2, temperature, noninvasive arterial monitoring, and end tidal CO2). The patient reported no pain and remained hemodynamically stable throughout the 1.5-hour procedure. The operation lasted without complications and he was transferred to the ward.

Figure1



Figures show the awake patient under the erector spinae plane block during thoracotomy.

Figure2



Figures show the awake patient under the erector spinae plane block during thoracotomy.

Discussion - Conclusion: Lateral decubitus position with general anesthesia can compromise cardiac and pulmonary functions of frail patents in thoracic surgery. In this patient, due to his accompanying comorbidities, we eliminated possible negative outcomes by performing the operation awake under the ESP block. ESP block, as a standalone and alternative anesthesia method, can be utilized in suitable patients to circumvent the potentially hazardous effects.

Keywords: Anesthesia, Analgesia, Erector spinae plane block, Thoracic surgery, Thoracotomy

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Pub No: S-061

Comparison of Effectiveness of Ultrasound Guided Costoclavicular Block Versus Shoulder Block For Postoperative Analgesia in Shoulder Arthroscopy Cases

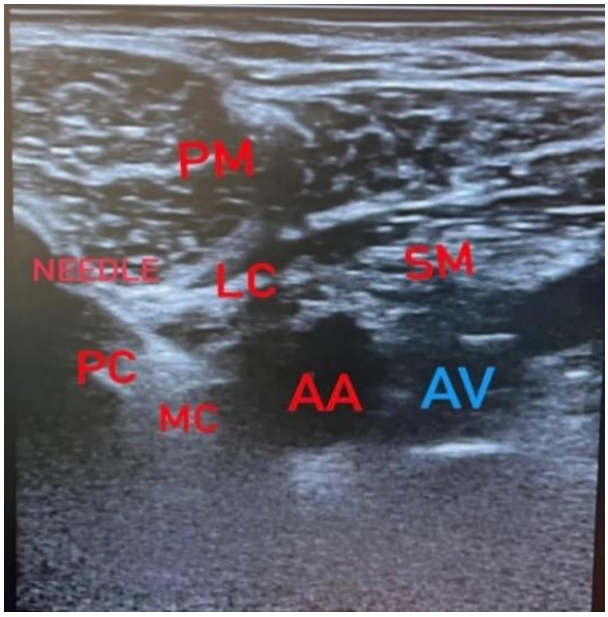
BLERTA KRASNIQI[1], Volkan Özen[1]

[1]Prof.Dr.CEMİL TAŞCIOĞLU ŞEHİR HASTANESİ

Introduction - Purpose: Our primary objective was to compare the effectiveness of ultrasound (US)- guided costoclavicular (CCB) and shoulder block (ShB) for postoperative analgesia in patients undergoing shoulder arthroscopy using the Numeric Rating Scale (NRS) pain score. Our secondary objective was to evaluate the timing of the first analgesia, the total amount of analgesia administered, and the postoperative complications associated with the blocks.

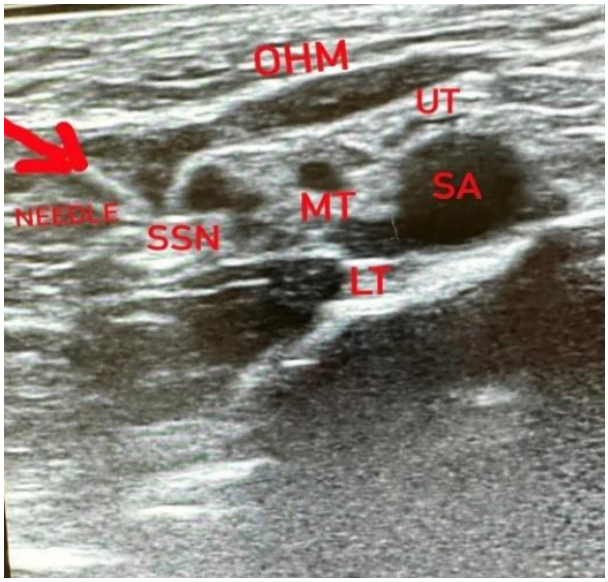
Materials and Methods: Our prospective observational study included patients between the ages of 18-65 years, who underwent unilateral shoulder arthroscopy, who did not have any disease that would cause limitation of cooperation, who were not allergic to local anesthetic (LA), who were American Society of Anesthesiologists (ASA) I-III, who did not have coagulopathy, and who agreed to participate in the study by signing the consent form. Patient's pain was assessed and recorded by a blind anesthesiologist using NRS at 30th minute, 1st, 2nd, 4th, 6th, 12th, 24th hours postoperatively in the ward where the patients were located.

Costoclavicular Block



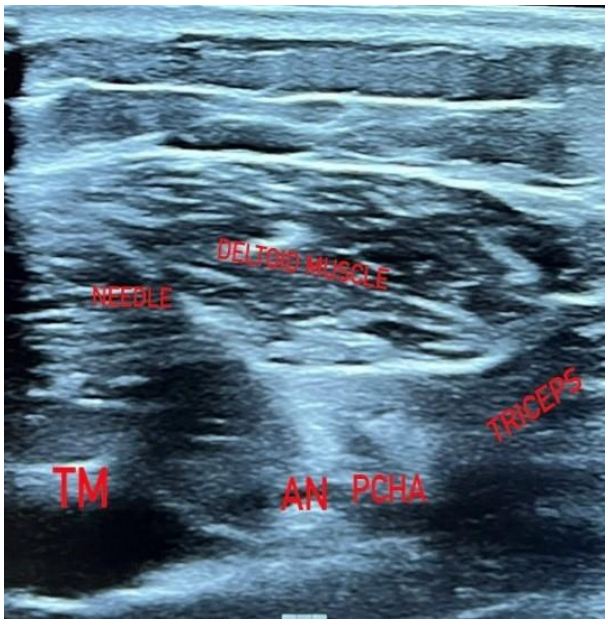
AA: Axillary Artery, AV: Axillary Vein, LC: Lateral Cord, MC: Medial Cord, PC: Posterior Cord, PM: Pectoral Muscle, SM: Subclavius Muscle

Suprascapular Block



OHM: Omohyoid Muscle, UT: Upper Trunk, MT: Middle Trunk, LT: Lower Trunk, SA: Subclavian Artery, SSN: Suprascapular Nerve

Axillary nerve block



TM: teres minor, PCHA: posterior circumflex humeral artery, AN: Axillary Nerve

Results: A total of 26 patients were included, 13 receiving the CCB (Group K) and 13 receiving the ShB (Group O). The mean age of the patients, education level, gender, ASA score, NRS score, intraoperative duration, first analgesia hour, total analgesic amount, postoperative complications did not show statistically significant differences between the groups. Block failure was not seen in any patientes.

Findings and characteristics of the patients(n=26)

Variable	**Group K (n= 13)**	**Group O (n= 13)**	**p**
Age	55 [IQR]	57 [IQR]	0.608
Gender			
Male	6 (46.2)	3 (23.1)	0.216
Female	7 (53.8)	10 (76.9)	
ASA I/II/III	4 (30.8) /8 (61.5) /1 (7.7)	4 (30.8) /6 (46.2) /3 (23.1)	0.526
Educational status			
Illiterate	2 (15.4)	4 (30.8)	
Primary school	8 (61.5)	7 (53.8)	
High school			
University	3 (23.1)	1 (7.7)	1.000
	0 (0.0)	1 (7.7)	

Values are presented as median (IQR) or number (%)

NRS Scores of Patients, Operation Duration, and Analgesic Data

	Group K (n=13)		Group O (n=13)		
	Mean.±sd/n %	Medi	Mean±sd/n %	Medi	P

		an		an	
First analgesia time (hour)	3.7	1.0	2.2	0.0	0.0510
İntraoperative time (hour)	1.1	3.5	0.8	3.0	0.230
NRS					
30th min.	0.5	1.0	0.4	1.0	0.8120
1st hour	3.2	1.0	2.0	2.0	0.8090
2nd hour	1.8	1.0	1.8	1.0	0.6090
4th hour	2.0	2.0	1.6	2.0	0.5760
6th hour	2.1	2.0	2.1	2.0	0.9150
12th hour	1.6	0.0	2.1	1.0	0.329

24th hour	2.1	1.0	1.9	2.0	0.979
Post op. Paracetamol 1gr	(30.8)(69.2)		(61.5)(38.5)		0.116
Post op. Tramadol 100 mg	(38.5)(61.5)		(69.2)(30.8)		0.116

X^2 Ki-Kare test / m Mann-whitney u test

Discussion - Conclusion: This is the first prospective study that compares CCB and ShB for postoperative analgesia in shoulder arthroscopy. CCB and ShB under US-guidance has been shown to provide effective, safe, and long-term postoperative analgesia. In a randomized prospective study, CCB was compared with ISB, and the NRS scores did not differ significantly in terms of postoperative analgesia. In another multicenter randomized study conducted in 2020, anterior SSNB and ISB were compared. Postoperative NRS scores did not show any difference between these two blocks.

Keywords: Shoulder, arthroscopy, analgesia

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Pub No: S-062

Case: Analgesia in Patient with Hellp Syndrome

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Giriş - Amaç: HELLP syndrome is associated with liver size,trombocytopenia,hemolysis and high mortality.Transversus Abdominal Plane(TAP) block is applied to the patient with HELLP in the intensive care unit.

Phenomenon: High liver function tests and low thrombocyte are detected in a 23-year-old and 39-week-old pregnant woman. After cesarean section under spinal anesthesia the patient is transfered to the intensive care unit.4 units of pooled platelets were given to the patient whose platelets were 30,000 at the postoperative 12th hour.Although tramadol was administered,ultrasound guided TAP block is applied to the patient for persistant pain.Bilateral 10 ml of %0,5 bupivacaine and 10 ml isotonic is given.Visual analog scala is 1 point 30 minutes after TAP block.The patient is taken to the ward postoperative 1th day with no complication related to TAP block

Discussion - Conclusion: HELLP syndrome is a rare but life-threatening disease associated with pregnancy. HELLP syndrome occurs in 0.5%-0.9% of all pregnancies. [1 Platelet counts of less than 50,000 µL are associated with high maternal morbidity [2]. In study, the patient was diagnosed with HELLP syndrome in the examinations of the patient, who was found to have hematoma on the postoperative 3rd day, and it is mentioned that the toxicity due to paracetamol used during this period.[3].Early diagnosis of our case enabled us to avoid the use of paracetamol for analgesic purposes and to use regional field block under USG guidance. A study of HELLP syndrome has shown that the worst biochemical state is reached within 24-48 hours after birth [4]. Our case highlights the importance of intensive care follow-up and postoperative analgesia management to enable timely intervention.For the patients with HELLP,ultrasound guided TAP block can be used as a safe and effective method for analgesia.

Keywords: Hellp syndrome, analgesia, TAP block

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Pub No: S-064

Airway Management in Patients with Trachea and Carina Resection and Reconstruction; Flow Controlled Ventilation and Jet Ventilation

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Giriş - Amaç: Tracheal carina surgery is a particularly challenging and multidisciplinary operation for the surgeon and anaesthetist in terms of airway management (1). Our aim is to present the anaesthetic management of our patient who underwent left video-assisted thoracoscopic surgery(VATS) followed by right thoracotomy with upper lobectomy and carina resection due to lung cancer.

Phenomenon: A 29-year-old female patient with a pre-operative ASA-III risk assessment underwent surgery. After induction of anaesthesia, the patient was intubated using a Univent® bronchial blocker(BB) tube. Total intravenous anesthesia was administered for the procedure. Fiberoptic bronchoscopy (FOB) was utilised to place the BB into the left main bronchus(Figure-1). The patient received flow-controlled ventilation(FCV) using a Ventinova-Evone® mechanical ventilator. After the completion of left VATS for ligament and bronchial release, the patient's position was changed. Then, the BB was placed into the right main bronchus this time. Afterwards, a right thoracotomy was performed for a right upper lobectomy. Subsequently, the Univent® tube was pulled proximally to the trachea and a sterile endotracheal tube was inserted to include the right middle and lower lobes for cross-field ventilation. Conventional ventilation was implemented for the right lung while high-frequency jet ventilation(HFJV) was applied to the distal part of the incision in the left lung by placing a Tritube®(Figure-2). Incisions were made in the trachea and left main bronchus, followed by resection of the carina(Figure-3). After completing the patient's tracheal/bronchial anastomoses, the mode was switched to FCV. The patient's hemodynamics remained stable during follow-up. After the operation, the patient was transferred to intensive care unit in a sedated and curarized state. The patient was extubated at 18 hours postoperative and was discharged smoothly after being observed with FOB that the neocarina was intact.

Figure-1: Univent® Bronchial Blocker Left Main Bronchial

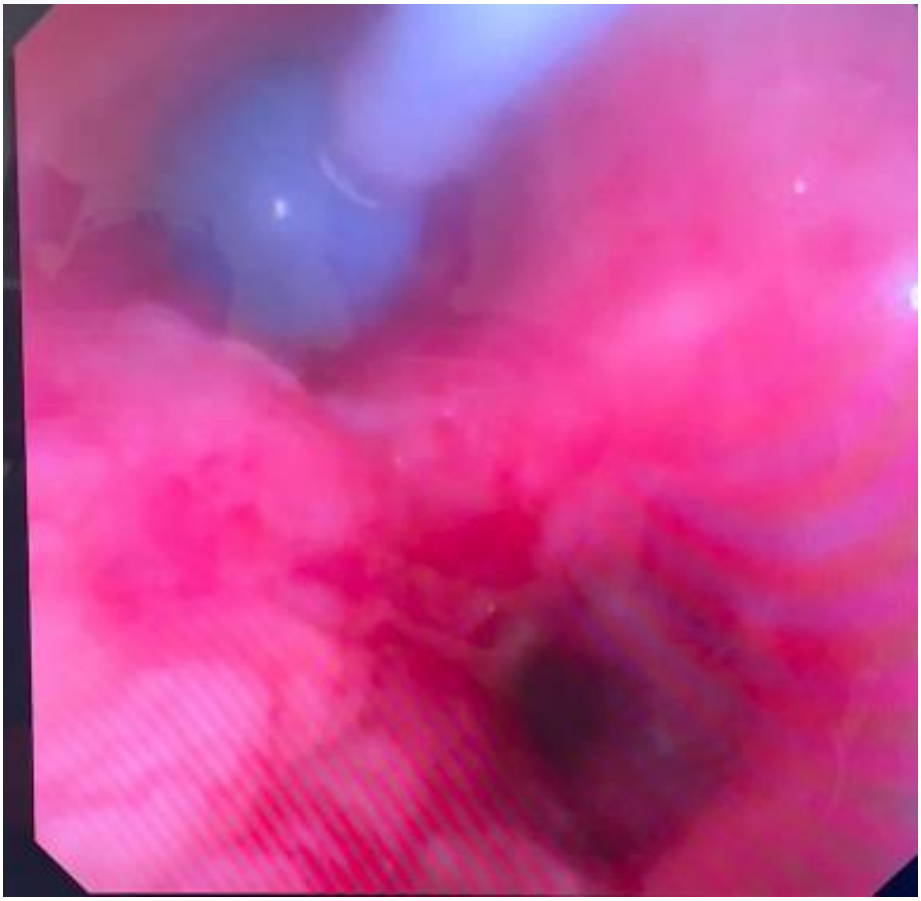


Figure-2: Order of resection right/left lungs conventional ventilation/high-frequency jet ventilation



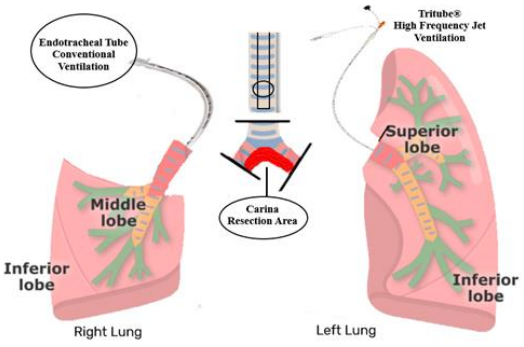


Figure-3: Resection materials



Discussion - Conclusion: We believe that in ensuring safe airline management, both FCV and HFJV can limit potential complications alongside conventional techniques.

Keywords: Carina Resection, Trachea Resection, Flow-Controlled Ventilation, High-Frequency Jet Ventilation, Anesthesia Management

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Pub No: S-065

Should the Type of Anesthesia Change in Inguinal Hernia Surgery? Single Center, Multiple Surgeon and Anesthesiologist Experience

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Introduction - Purpose: Inguinal hernia surgeries are performed quite frequently in general surgery practice. While local anesthesia and regional anesthesia are at the forefront in open surgery, general anesthesia is frequently used in laparoscopic surgery (1). In this article, we aimed to retrospectively evaluate and compare the complications of regional and general anesthesia in patients operated on for inguinal hernia in our high-volume center.

Materials and Methods: Patients who underwent open inguinal hernia repair at Bursa City Hospital General Surgery Clinic between July 2023 and August 2023 were included in the study. The patients' age, gender, type of inguinal hernia, type of anesthesia applied, duration of surgery and early postoperative complications were noted from retrospective archive records and patient interviews. Patients who underwent regional anesthesia were classified as Group A and those who underwent general anesthesia were classified as Group B. Comparisons between groups were made using the Mann-Whitney U test, and comparisons between categorical variables were made using the Fisher – Exact test. Statistical analyzes were performed in SPSS 26.0 program and significance was accepted as $p = 0.05$.

Results: While inguinal hernia was detected in all cases in Group B, inguinal hernia was detected in 17 patients and femoral hernia in 3 patients in Group A. Mesh repair was preferred in all cases. No significant difference was detected between the groups in terms of ASA scores. The average duration of surgery was 80 minutes in the general anesthesia group and 60 minutes in the regional anesthesia group. A statistically significant difference was detected between both groups in terms of surgery time ($p = 0.001$). VAS pain scores, headache, urinary retention and complications are summarized in Table 2.

Descriptive statistics

	General Anesthesia Group (n=20)	Regional Anesthesiz Group (n=96)	P-value
Age	65 (29-82)	57 (18-87)	0,144[a]
Gender			0,032[b]
Female	6 (%30,0)	10 (%10,4)	
Male	14 (%70)	86 (%89,6)	
Urgent/Elective			0,001[b]
Elective	16 (%80,0)	96 (%100,0)	
Urgent	4 (20,0)	0 (%0,0)	
Surgery Duration (min)	80 (35-420)	60 (10-135)	0,001[a]

Data are expressed as median (Minimum – Maximum) and n(%) a: Mann Whitney U Test b: Fisher's Exact Test

Comparison of groups in terms of length of stay, urinary retention, complications, headache and VAS

	General Anesthesia Group (n=20)	Regional Anesthesia Group (n=96)	P- value
Lenght of Stay	2 (1-7)	2 (1-4)	0,278[a]
Urinary Retention			0,517[b]
Absent	18 (%90,0)	71 (%80-7)	
Available	2 (%10,0)	17 (%19,3)	
Post-op Complication			0,386[b]
Absent	18 (%90,0)	83 (%93,3)	
CAE	1 (%5,0)	5 (%5,6)	
Subcutaneous Hemorrhage	1 (%5,0)	0 (%0,0)	
Allergy on the back	0 (%0,0)	1 (%1,1)	
Headache			0,068[b]
Absent	19 (%95,0)	67 (%75,3)	
Available	1 (%5,0)	22 (%24,7)	
Post-op 1st hour VAS	4 (2-8)	4 (0-8)	0,369[a]
Post-op 1st day VAS	2 (0-8)	3 (0-8)	0,867[a]
VAS Difference Change Score	-2 (-5:1)	-2 (-8:6)	0,470[a]

Data are expressed as median (Minimum – Maximum) and n(%) a: Mann Whitney U Test b: Fisher's Exact Test

Discussion - Conclusion: We think that general anesthesia is a good option to avoid postoperative complications of spinal anesthesia in open hernia surgery.

Keywords: Hernia, Surgery, Anesthesia, Complication

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Pub No: S-066

Anesthesia Management in Nine Centennial Patients

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Giriş - Amaç: The elderly population is increasing worldwide as medical interventions and social conditions continue to improve [1]. The number of centenarians (≥100 years) in the elderly population has increased from 2.9 per 100,000 in 1990 to 7.4 in 2015 and is expected to increase to 23.6 by 2050 [2]. This means that we will encounter more centenarians in clinical practice. In this presentation, we aim to evaluate our anesthetic approach in nine patients aged 100 years and older who underwent surgery for various reasons.

Phenomenon: Nine patients aged 100 and over were given anesthesia during the operation. Informed consent was obtained from the relatives of all these patients. Demographic data of the cases, anesthesia applications and operation data are shown in Table 1 and Table 2. During the operation, hemorrhage was observed in Case-3, hypotension was observed in Case-4, and bradycardia, hypotension and desaturation were observed together in Case-8. In the postoperative period, pneumonia was observed in Case-7, and hemorrhagic shock and cerebrovascular accident were observed in Case-8. In the postoperative period, it was determined that one of the patients died within 24 hours and eight (88.8%) died within one year.

Demographic data of the cases

	Age,years	Gender	ASA	Comobidity	Duration of hospital stay,days	Duration of stay in intensive care unit,days
Case-1	101	Female	IIIE	HT,Arrhythmia,CAD	6	1
Case-2	102	Male	III	HT,DM	6	1
Case-3	103	Female	IV	CHF,CRF,HT,CVO	8	5
Case-4	100	Female	III	Goiter	8	1
Case-5	104	Female	IVE	None	41	41
Case-6	106	Female	III	HT	27	6
Case-7	106	Female	III	HT,AF	10	2
Case-8	101	Female	III	HT	9	2
Case-9	107	Female	III	Ht	5	0

ASA: American Society of Anesthesiologists, HT: Hypertension, CAD: Coronary Artery Disease, DM: Diabetes Mellitus, CHF: Congestive Heart Failure, CRY: Chronic Renal Failure, CVO: Cerebro Vascular Disease, AF: Atrial Fibrillation

Operational Data

	Type of anesthesia	Name of the operation	Operation time,min	Postoperative survival
Case-1	Spinal anesthesia	Below the knee amputation	90	1 days
Case-2	Lumbar plexus + sciatic nerve block	Femur fracture	100	4.5 months
Case-3	Lumbar plexus + sciatic nerve block	Femur fracture	170	4 months
Case-4	Spinal anesthesia	Femur fracture	90	2 months
Case-5	General anesthesia	Subdural hematoma	120	39 days
Case-6	General anesthesia	Rectal cancer	350	16 days
Case-7	Lumbar plexus + sciatic nerve block	Femoral neck fracture	180	10 months
Case-8	Cımbined spinal epidural anesthesia	Femur fracture	110	9.5 months
Case-9	Spinal anesthesia	Dj Stent + endoscopic stone	60	3.5 years

Discussion - Conclusion: The fastest growing population in health services is among the elderly. Age increases perioperative risks associated with anesthesia. It is also associated with many pathological processes that further increase morbidity and mortality [3,4]. Intraoperatively, surgical and anesthesia plans should minimize known risks for elderly patients. General anesthesia in geriatric patients is associated with acute respiratory failure, longer hospital stay, and higher mortality from hip fractures. Some studies suggest that regional anesthesia is safer, but more research is needed to evaluate this hypothesis [5]. We believe that a multidisciplinary approach when anesthesia is required in these patients with more comorbidities and physiological changes is vital to reduce morbidity and mortality.

Keywords: anesthesia, geriatric anesthesia, elderly, mortality

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Pub No: S-067

Our Anesthesia Practices in Rigid Bronchoscopy Procedures for Pediatric Patients

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Giriş - Amaç: Bronchoscopy is an invasive procedure that allows surgical procedures such as detailed examination of the trachea and bronchi in childhood, removal of foreign bodies, and taking samples from the airway (1,2). The joint use of the airway by the surgeon and anesthesiologist makes the anesthesia application during this procedure special (3,4). This study aimed to evaluate anesthesia management in children who were anesthetized due to rigid bronchoscopy.

Phenomenon: After obtaining local ethics committee approval, the data of the patient aged 0-18 years who underwent rigid bronchoscopy in our hospital between 01-01-2017/01-07-2021 were evaluated retrospectively. Demographic data of the patients, complaints and admission time, type of anesthesia, need for intensive care, length of hospital stay and complications were recorded.

Discussion - Conclusion: 73 patients were included in the study. The demographic data of the patients and the reasons for admission are shown in Table 1 and Table 2. All patients underwent general anesthesia. It was determined that propofol and rocuronium bromide were used as anesthesia induction agents in all patients. One patient underwent bronchoscopy due to laryngomalacia. Another patient was brought home after being intubated due to respiratory arrest. 49 (67.1%) patients were transferred to the postoperative caring unit and 18 (24.6%) patients were transferred to the pediatric intensive care unit. Since 3 patients could not tolerate extubation after the procedure, they were re-intubated and taken to the intensive care unit.: In conclusion, rigid bronchoscopy in children is an invasive procedure that can be performed safely in airway-related problems. We think that morbidity and mortality rates will decrease with a multidisciplinary approach with sufficient experience of the surgical and anesthesia team and appropriate equipment.

Table 1: Demographic data

	n=73
Age	
0-1 month	2 (2.7)
1-12 months	42 (57.5
1-6 years old	19 (26)
7-14 years old	7 (9.6)
15-18 15-18 years old	3 (4.1)
Gender	
Male	42 (57.5)
Female	31 (42.5)
ASA	
I	36 (49.3)
II	22 (30.1)
III	12 (16.4)
IV	3 (4.1)
E	60 (82.2)
Number of patients intubated preoperatively intubated	6 (8.2)
Number of patients who were not extubated postoperatively	11 (15.1)
Diagnosis	
Foreign body aspiration	
• organic	52 (71.2)
• non-organic	5 (6.8)
Pneumonia	7 (9.6)
Other	9 (12.4)
Application period	
≤24 hours	51 (69.9)
>24 hours	22 (30.1)
Surgical Procedure time, min	35.41 ± 21.93
Duration of hospital stay, days (min-max)	3.70 (1-60)

ASA: American Society of Anesthesiologists

Table 2: Reasons for hospital admission

	n (%)
Cough	34 (46.5)
Respiratory distress	19 (26.0)
Bruising	13 (17.8)
Grunting	4 (5.5)
Pneumonia	1 (1.4)
Frequent lung infection	1 (1.4)
Other	1 (1.4)

Keywords: Rigid bronchoscopy, pediatrics, anesthesia

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Pub No: S-068

How Safe Are Standardized Color-Coded Syringes İn Anesthesia?

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Giriş - Amaç: A color coding system is the systematic and standardized application of colors to aid identification and classification. The color-coded labeling system in anesthesia is supported by standards established by the Institute for Safe Medication Practices (ISMP) and the American Society for Testing and Materials (ASTM) (1). This use allows the practitioner to match color to the function of the drug. In this study, we wanted to draw attention to the fact that the color code system, which is widely used in the world, can also be used in safe anesthesia practice in our country.

Phenomenon: Anesthesia practices involve procedures that are prone to human error and may be complex. One of the methods developed to minimize errors is the use of the color coding system (3). A standard color coding system has been adopted for syringe labels applied in developed countries (Picture-1). In our practice, the same color barcoding system is used (Picture-2). When the studies conducted between 2019 and 2023 in the literature were scanned, it was seen that medication errors and medication search time decreased, and error detection in eye and behavioral responses improved with the application of the color coding system. However, it has not been proven that medication errors are completely prevented (4). While the color label identifies a category of drugs, it does not necessarily identify a specific drug. Additionally, no specific study has been conducted on color blindness, which occurs at a rate of 5% to 8% in the male population.

Image-1



Image-2



Discussion - Conclusion: The color coding system provides clues in object recognition and supports error reduction. We did not find any study on this subject in Turkish sources in the literature. We believe that this application will further increase security and that it will be beneficial to implement it in our country.

Keywords: color-coded syringe, anesthetic drug, standardization, patient safety

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Pub No: S-069

Anesthetic Management in a Patient with Down Syndrome and West Syndrome

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Giriş - Amaç: West syndrome(WS) is a rare syndrome consisting the triad of infantile spasms, hypsarrhythmia and developmental regression(1).It is also the most common epilepsy syndrome in children with Down syndrome(DS)(2).Patients with DS present unique anesthesia challenges with associated cardiac disease, endocrine disorders and difficult airway, while patients with WS suffer from cerebral palsy, facial malformations, skeletal deformities(3).Preoperative assessment should be carefully performed in these patients.

Phenomenon: Patient was 8yo,BMI was25.4,had a short neck,her throat and tongue were large,her mouth opening was limited.The Mallampati score was III.She had history of upper respiratory tract infection one week before surgery and she had treatment during this period.On auscultation, lung sounds were coarse.Using standard monitoring and BIS,all vital signs were stable except SpO2(95%).Preoxygenation was carried out with 100%O2 for 3minutes and in the induction phase 3mg kg-1 propofol,1 mg kg-1 ketamine,0.2 mg k kg-1 atropine,0.6 mg kg-1 rocuronium bromide i.v. was given.Due to desaturation during mask ventilation, orotrecheal intubation with direct videolaryngoscopy was performed.Anesthesia was maintained with 1MAC sevoflurane.Paracetamol 10 mg kg-1 was administered iv for postoperative analgesia.Sugammadex 4 mg kg-1 IV was administered and the patient was extubated.The patient,who was monitored without problems in the follow-up care unit,was brought into service.No seizure-like activity or complications occurred in the postoperative 48hours after surgery.

Discussion - Conclusion: Our patient was diagnosed withDS,WS,hypothyroidism and had a history of allergies to midazolam and fentanyl.Comorbidities and convulsions should be considered when using anesthetics in patients with WS(4,5,6).Studies have shown that midazolam, propofol and sevoflurane don’t cause problems in appropriate doses.Due to the patient's allergies,we couldn’t use midazolam and fentanyl.To achieve the effects of these drugs,we took advantage of the anesthetic,analgesic,neuroprotective and antiepileptic properties of ketamine,which are reported in many publications(7).Ketamine;In cases where midazolam and fentanyl cannot be used,maybe considered as it provides adequate analgesia and enhances propofol anesthesia through its anesthetic and antiepileptic effects.

Keywords: West syndrome, Down syndrome, Ketamine, Anesthetic management, Opioid allergy

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Anton's Syndrome Due to Cerebrovascular Disease: A Case Report

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Giriş - Amaç: Anton-Babinski syndrome is a rare neuropsychiatric clinical condition characterized by bilateral cortical blindness,visual confabulation and anosognosia.The most common etiology is ischemic cerebrovascular accident of both posterior cerebral arteries. In this report,we aimed to present a case of Anton-Babinski Syndrome due to occipital artery infarction in the light of current literature.

Phenomenon: Case presentation: A 68-year-old male patient with metastatic renal cancer and vena cava thrombosis underwent nephrectomy and vena cava thrombectomy.In the postoperative period,the patient was admitted to intensive care unit (ICU) in spontaneous breathing with mask and oxygen support for close follow-up.At the 4th hour,left-sided weakness and speech disorder developed.Detailed examination revealed limited eye movements,visual anosognosia and cortical blindness.Diffusion MRI revealed diffusely distributed acute infarct areas in both cerebral hemispheres and bilateral occipital infarcts.Anton syndrome was considered in the patient who also had bilateral occipital infarcts, and low molecular weight heparin treatment was started.The patient was transferred to the clinic on the 36th day of ICU hospitalization.No improvement in visual acuity was observed during follow-up.

Discussion - Conclusion: Anton-Babinski syndrome is a rare neuropsychiatric disorder characterized by bilateral cortical blindness (1).Although it most commonly develops due to ischemic stroke involving bilateral occipital lobes, multiple sclerosis, hemorrhages, head trauma, adrenolochodystrophy,hypertensive encephalopathy,vasculitis have also been reported in the etiology(2-9).Treatment is directed towards the underlying cause and antiplatelet agents, thrombolytics and thrombectomy are recommended if stroke-related Anton syndrome has developed(10,11).Patients in this syndrome continue to act normally because they think they see and may be prone to trauma; therefore, relatives should be educated about this condition.In our case,the etiology was bilateral occipital lobe infarction caused by bilateral posterior cerebral artery occlusion and no improvement in visual acuity was observed during discharge despite antiaggregant treatment.Anton syndrome should be considered in all cases of visual impairment with bilateral occipital lobe lesions.

Keywords: Anton-Babinski syndrome, Visual associative agnosia, Cortical blindness, Cerebrovascular disease

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Anesthesia Management During Cesarean Section in a Patient with Stented For Trauma-induced Aortic Dissection

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Giriş - Amaç: Aortic dissection in pregnant patient is a serious clinical condition with high mortality rates for both the mother and the fetus.Our primary goal when choosing anesthesia management is to ensure the safety of the mother and the fetus.We aimed to present our anesthesia management experience in a patient who was stented for trauma-induced aortic dissection and scheduled for cesarean section

Phenomenon: A 32-year-old, gravida2, parity 1,36-week pregnant woman presented tothe emergency department with thecomplaint of water retention.She had noknown history of chronic disease.It was learned thatthe patient had undergone splenectomy,diaphragmatic rupture,ileus and stenting due to trauma-related aortic dissection after a vehicular traffic accident. In the cardiology note requested preoperatively,avoidance of valsalva maneuver and cesarean delivery were recommended.The patient was admitted to surgery with ASA IV risk and intensive care preparation.After she was admitted to operating room, invasive arterial monitoring was performed withradial artery catheterization in addition toroutine monitoring.Theblood pressure was 96/58 mmHg,heart rate was 80 beats/min,and oxygen saturation was 99 in room air.An epidural catheter was inserted at the L3-4 level while the patient was in a sitting position.Test dose was administered through the catheter. After the location of theepidural catheter was confirmed, 7ml 0.5% bupivacaine and 1ml fentanyl were administered through the catheter.After adequate sensory block was achieved,surgery was allowed to begin.Ahealthybabygirl weighing2625g was delivered at5minutes after incision.After the surgery ,shewas followed up inthe recoveryroom for approximately 90minutes.Considering the hemodynamic parameters and physical examination findings,she was transferred to obstetric service for clinical follow-up.

Discussion - Conclusion: Aortic dissection is a rare but fatal condition in pregnancy.The ideal anesthesia method for cesarean section in these patients is still unclear.We preferred epidural anesthesia in this patient.We think,that a multidisciplinary approach,detailed preoperative preparation and close postoperative follow-up are important inthese cases and pure epidural anesthesia may be a suitable option in terms of maintaining hemodynamic stability

Keywords: Aortic dissection, cesarean section, epidural anesthesia

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Combined Treatment of Severe ARDS Due to COVID-19 With VV-ECMO And Prone Position

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Giriş - Amaç: Severe ARDS caused by COVID-19 is characterized by profound hypoxemia and has a high mortality rate. Prone position, which can be applied under non-invasive and invasive ventilation in ARDS patients, is a treatment that has been shown to reduce mortality. In severe ARDS patients, VV-ECMO treatment may be required if respiratory failure progressively worsens and protective ventilation cannot be maintained.

Phenomenon: A 23-year-old male patient with no known comorbidities, who had a positive PCR result for COVID-19 4 days ago, was admitted to the intensive care unit of our hospital with 75-100% involvement on CT and SpO2: 75-85% after his emergency room admission due to respiratory distress. Routine treatment protocol and NIMV were started. In this period, NIVM treatment in prone position was also applied to the patient whose oxygenation did not improve significantly. On the 20th day of hospitalization, the patient was intubated due to increased hypoxemia and hypercarbia. In the clinical follow-up of the patient, PaO_2/FiO_2<70 mmhg, static lung compliance was 11.3 mL/cm H2O and the patient was transferred to VV-ECMO because lung protective ventilation could not be maintained on the mechanical ventilator. Afterwards, the cannulation was appropriately fixed and the patient was placed in the prone position for 16 hours daily. Despite all these, the patient did not show any improvement on the 32nd day of ECMO treatment and died.

Discussion - Conclusion: In ARDS patients, prone position is recommended in patients whose PaO_2/FiO_2 ratio falls below 150 mmhg. Prone position may reduce mortality in ARDS patients by eliminating ventilation/perfusion mismatch and decreasing the VILI rate. Despite all these, VV-ECMO is recommended in progressive patients as a rescue treatment modality. Combined therapy of VV-ECMO and pron positioning allows easy implementation of lung protective ventilation strategies thanks to the flexibility of ECMO in addition to the benefits of prone positioning.

Keywords: ARDS, COVID-19, ECMO, prone position

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Cerebral Malaria

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Giriş - Amaç: Complicated malaria ; is one of the diseases that should be kept in mind in patients who present with symptoms such as fever, chills, headache and confusion after traveling to endemic areas. It is a serious clinical condition that may result in neurological deficit or even death if there is a delay in diagnosis and treatment.

Phenomenon: Two patients that came from Uganda admitted to the emergency service with the complaints headache , chills, tremors, constant drowsiness and agitation for a week. Preliminary diagnoses of encephalitis and meningitis were considered, but cranial CT was normal. Rapid malaria test results were positive, due to diagnosis of complicated malaria, intravenous antimalarial artesunate treatment was started.In the 25-year-old patient; there was pancytopenia, agitation and GCS: 10. He was intubated and methylprednisolone was started as antiedema. Erythrocyte suspension and platelet were replaced and pancytopenia was improved. After the sedation was stopped, quadriplegia was observed during the neurological examination, the control cranial CT was normal. A tracheotomy was performed due to prolonged intubation. He was decannulated after nine days. He was discharged without any neurological sequelae after 53 days.The 22-year-old patient admitted with GCS: 9. Dexamethasone and mannitol were administered to the confused patient as antiedema treatment. He was discharged from the hospital without neurological sequelae after 9 days.

22 years old



25 years old



22 years old patient

	9.9.23	12.9.23	13.9.23
Wbc	6,54	6,09	5,40
Hb	10,5	9,7	9,9
Plt	111	147	109
Crp	69	85	49
Tb	0,56		
Db	0,34		
Ph	7,42	7,36	7,42
Po2	99	99	161
Pco2	40,1	52,1	42,7
Hco3	26,2	29,6	27,6
Ast	23	49	73
Alt	13	23	31
albumin	3	3,1	3,4
Na	135	133	133
K	3,88	4,55	4,41
Creatının	0,57	0,45	0,42
Bun	14	21	21

25 years old patient

	28.7.23	31.7.23	4.8.23	7.8.23	10.8.23	17.8.23	24.8.23	31.8.23	4.9.23
Wbc	3,14	2,14	5,98	9,64	18,63	21,55	13,01	5,14	7,26
Hb	7,6	8,3	6,7	9,6	9,6	9,3	7,7	10,3	9
Plt	17	13	12	81	358	416	489	321	169
Crp	225	97	178	167	210	74	82	249	225
Tb	1,89								
Db	1,61								
Ph	7,36	7,43	7,51	7,39		7,43		7,41	7,42
Po2	69	220	154	87		106		108	83
Pco2	45	42	36,5	48,8		41,9		40	47,8
Hco3	25,6	28	29,3	29,2		28		25,1	30,9
Ast	85	60	58	159	63	177	67	34	36
Alt	15	24	23	79	53	139	62	22	20
alb	2,5	2,6	2,4	2,8	2,4	2,2	3,2	2,7	3,1
Na	142	161	150	149	148	142	139	145	142
K	5,56	3,71	4,05	3,89	4,59	4,64	4,13	3,46	3,6
Creatını	0,49	0,39	1,11	1,08	0,81	0,54	0,58	0,98	1
Bun	52	35	67	73	70	41	28	62	41

Discussion - Conclusion: P. Falciparum is an infection that has complications like serious and different neurological symptoms, even death [1-4]. In addition, surviving patients often have lifelong sequelae, like mostly neurological disorders, that affect activities of daily living and quality of life [5] . The exact pathogenesis of the neurological symptoms are unknown. It has been suggested that occlusion of the brain microvasculature by parasitized erythrocytes may lead to cerebral hypoxemia causing neurological and psychiatric dysfunction [6,7].

Keywords: Complicated malaria, Uganda, artesunate, cerebral hypoxemia, neurological symptoms

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Postoperative Central Anticholinergic Syndrome in a Cocaine User: Case Report

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Giriş - Amaç: The central anticholinergic syndrome (CAS) results from the inhibition of cholinergic neurotransmission. Clinically, agitation, confusion, coma, hallucinations, mydriasis, flushing, fever, tachycardia, hypertension, dry skin and mucous membranes, ileus, urinary retention, and myotic contractions can be observed. In this case, CAS that developed after general anesthesia in a cocaine user is presented.

Phenomenon: A 24-year-old male cocaine user jumped from the 4th floor of the hospital building with the intention of committing suicide on the 3rd day of his hospitalization for addiction treatment. The patient had no known systemic disease and had multiple fractures in all four extremities. Atypical antipsychotic clozapine treatment was initiated by the psychiatrist in the preoperative period. The patient was hemodynamically stable under general anesthesia. At the end of the ortopedic surgery, neuromuscular blockade was antagonized with 0.5 mg atropine sulfate and 1.5 mg neostigmine methylsulfate. CAS was considered when the patient showed experienced agitation, facial flushing, mydriasis, dry mouth, subfebrile fever and tachycardia in the postoperative recovery room. The patient was hydrated, sedated with midozolam and transferred to the intensive care unit (ICU). Physostigmine was not administered to the patient, who did not have severe agitation or mental status impairment. With symptomatic treatment, the patient's symptoms disappeared by the 4th hour of ICU admission and he was transferred to the ward after 24 hours of ICU follow-up.

Discussion - Conclusion: An adulterant is a chemical purposely added to a drug to dilute the active ingredient and to increase the profit margin. Anticholinergic poisoning using adulterated cocaine with atropine have been reparted in the literature. Furthermore clozapine is an atypical antipsychotic with the strongest affinity for muscarinic receptors. In conclusion, atropine-induced central anticholinergic syndrome should be considered in patients with substance use and the use of anticholinergic drugs such as antipsychotics, even if high doses were not administered.

Keywords: Central anticholinergic syndrome, atropine, cocaine

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Awake Video-Assisted Thoracoscopic Surgery with Thoracic Epidural Anesthesia in a Patient with Chronic Obstructive Pulmonary Disease

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Giriş - Amaç: Anesthesia management in thoracic surgery presents significant challenges, particularly in the context of high-risk patients. This case aims to underscore the advanced anesthetic management techniques for a patient with severe Chronic Obstructive Pulmonary Disease (COPD) undergoing awake Video-Assisted Thoracoscopic Surgery (VATS).

Phenomenon: A 66-year-old male, with severe COPD, weighing 70 kg, was admitted to hospital for superior segmentectomy of the right lower lobe due to diagnosis of a tumor. Preoperative assessment revealed dyspnea and widespread rhonchi upon lung auscultation. On the operating table, following 2 mg intravenous midazolam a thoracal epidural catheter was carefully inserted at the T7-7 interspace. Epidural anesthesia was initiated through a carefully titrated combination of 10 ml of 0.5% bupivacaine, 5 ml of 2% lidocaine, and 50 mcg of fentanyl. Comprehensive monitoring involved ECG, SpO2, invasive arterial pressure, temperature, respiratory rate, end-tidal CO2 and BIS (Bispectral Index) monitoring. Perioperative measures were diligently implemented to ensure adequate oxygenation and to sustain SpO2 levels above 92%. An additional 2 mg of midazolam and 25 mcg of fentanyl were administered after the first hour. The patient's hemodynamic parameters remained stable with no report of pain, and the surgery was completed without complications. Subsequently, the patient was transferred to the ward and discharged home after seven days.

Figure 1.



The figure illustrates the comfortable awake patient with mask oxygen under the thoracic epidural anesthesia.

Discussion - Conclusion: It is well-established that one-lung ventilation under general anesthesia in thoracic surgery escalates the risk of pulmonary and cardiac complications. Performing VATS with thoracic epidural anesthesia in high-risk patients underscores the pivotal role of tailored anesthetic planning. This approach reduces the risks associated with positive pressure ventilation and general anesthesia while concurrently providing effective analgesia and has the potential to pave the way for new strategies in managing complex surgical cases.

Keywords: Chronic obstructive pulmonary disease, Awake operation, Video-assisted thoracoscopic surgery, Thoracic epidural anesthesia

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Pub No: S-076

The Effect of Bispectral Index Monitoring on the Amount of Anesthetic Agents Used in Outpatient Anesthesia for Rigid Broncoscopy

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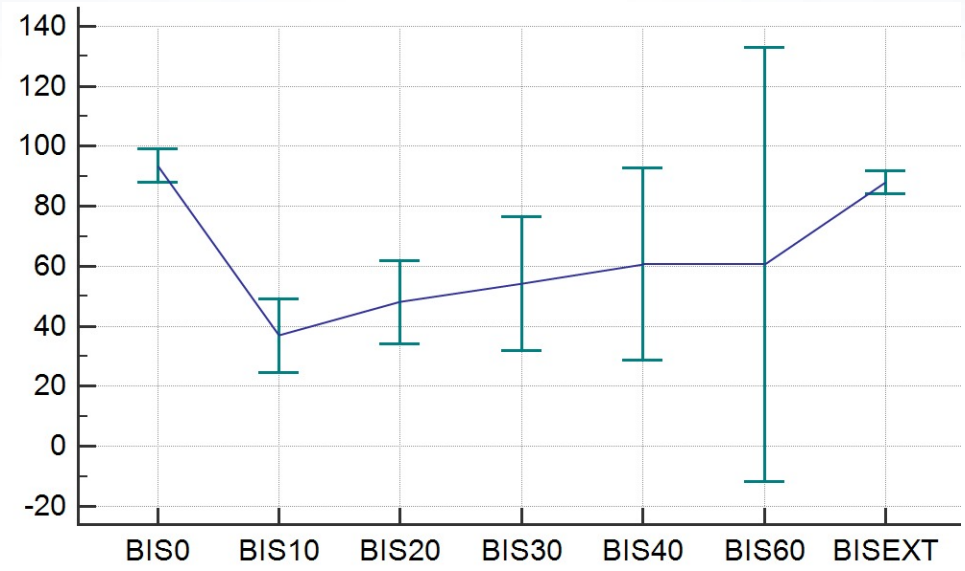
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Introduction - Purpose: Rigid bronchoscopy is currently used for both diagnostic and therapeutic purposes in the trachea and proximal bronchi. It allows interventional procedures such as stent placement, removal of foreign bodies, dilatation of tracheal or bronchial strictures and laser ablation. Rigid bronchoscopy is usually performed under general anesthesia with neuromuscular blockers. In this study, we aimed to compare the effect of bispectral index (BIS) monitoring on anesthetic management and total anesthetic agent use in patients undergoing rigid bronchoscopy(RB).

Materials and Methods: Following approval by the Ethics Committee (27.10.2022, 2022/20) patients over 18 years of age with ASA score of 2-3 who underwent RB were included in the study. Patients who were followed with standard ASA monitoring were classified as group1 and patients who received additional BIS monitoring were classified as group2. Ten patients were randomized in the preliminary evaluation, 5 in each group.Patients who consented to preoperative anesthesia were ventilated for 2 minutes after standard anesthesia induction and released for RB. Additional doses of propofol and ultiva were administered according to the increase in baseline hemodynamic value in group1, the increase in BIS and basal hemodynamic values in group2. Intraoperative and postoperative vital signs, demographic data, doses of anesthetics drugs and duration of anesthesia were recorded. At the end of surgery, patients decurarized with sugammadex. Patients were transferred to the ward after postoperative follow-up if the Alderete score was 9 or higher.

Results: Statistical results of all data are shown in Table1. The BIS values of the patients who underwent BIS are schematized in Table2.

Table 2



BIS value are schematized

Table 1

	Group 1	Group 2	p value
Age (year)	53 (41-57)	56 (50-70)	0,093
Sex	1,2 (1-2)	1,2 (1-2)	1
BMI (kg/m²)	27,6 (22,7-28,3)	26,5 (22,8-29,5)	0,754
ASA score	2,4 (2-3)	2,4 (2-3)	0,811
Duration of Anaestehia (min.)	60 (32 – 95)	60 (30-90)	0,916
Duration of Rigit Bronchoscopy (min.)	50 (18-80)	50 (25-70)	0,916
Propofol (mg)	300 (250-400)	260 (110-380)	0,463
Midazolam (mg)	2 (2-2)	2 (2-2)	1
Rocuronyum (mg)	50 (50-70)	50 (50-70)	0,606
;Fentanyl (mcg)	100 (100-100)	100 (50-200)	1
Remifentanyl (mcg)	60 (40-100)	40 (30-100)	0,665

Metilprednisolon (mg)	80 (60-10)	80 (60-100)	1
Lidocain (mg)	60 (40-60)	40 (40-40)	0,05
Sugammadex (mg)	200 (200-200)	200 (200-200)	1
Preop. SAP (mmHg)	132 (121-188)	145 (130-160)	0,292
Preop DAP (mmHg)	81 (80-110)	90 (80-100)	0,399
Preop Pulse/min	76 (66-131)	100 (82-107)	0,175
Preop SpO2 (%)	100 (98-100)	98 (92-100)	0,309
Preop. SAP (mmHg)	130 (112-180)	130 (110-138)	0,597
Preop DAP (mmHg)	80 (69-101)	75 (65-90)	0,530
Preop Pulse/min	90 (65-121)	100 (94-110)	0,116
Preop SpO2 (%)	100 (98-100)	98 (95-100)	0,095

Statistical results

Discussion - Conclusion: Although the total amount of anesthetic used by the patients was not statistically significant, it was observed to be different between the groups. We believe that we will contribute to the practice of RB anesthesia when we complete this study, which we present as preliminary results.

Keywords: rigid bronchoscopy, outpatient anaesthesia, bispectral index monitoring

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Pub No: S-077

Body Temperature Changes in Children Undergoing Magnetic Resonance Imaging Under Anesthesia

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Introduction - Purpose: There are several publications reporting that magnetic resonance imaging(MRI), which produces radiofrequency(RF) that is absorbed by the body and converted into heat, increases body temperature in children. In our study, we investigated body temperature changes in children undergoing MRI under anesthesia.

Materials and Methods: Children aged between 10 days and 17 years who underwent MRI under anesthesia were included in this prospective observational study. Tympanic body temperature was measured before and after MRI and the difference between the measurements was calculated. The relationship between the temperature differences and patient- or procedure-related factors was evaluated by linear and logistic regression analysis.

Results: A total of 285 patients, 174(61.1%) male and 111(38.9%) female patients, were included in the study. Among the patients, 130(45.6%), 120(42.1%), and 35(12.3%) were aged between 0-2 years, 3-7 years, and 8-17 years, respectively (Table 1). An increase in body temperature was observed in 154(54%) patients, while there was no change in 29(10.2%) patients. No significant correlation was found between the negative or positive body temperature difference between pre and post-procedure and BMI, duration of the procedure, temperature and humidity of the MRI room, gender, age group, history of allergy, use of contrast, and concomitant tumor ($p>0.05$). However, there was a significant correlation between negative or positive body temperature difference between pre and post-procedure and fasting duration. The fasting duration(hours) of patients with a negative difference in body temperature pre and post-procedure (8.69±2.52) was significantly longer than that of patients with a positive difference (7.99±2.01)($p=0.044$). In logistic regression analysis, fasting duration was found to predict the difference in body temperature before and after the procedure ($p=0.021$)(Table 2).

Tablo 1. Demographic and medical parameters of patients

	n(%)
Gender	
Male	174(61.1)
Female	111(38.9)

Age (years)	
0-2	130(45.6)
3-7	120(42.1)
8-17	35(12.3)
ASA classification	
ASA 1	51(17.9)
ASA 2	195(68.4)
ASA 3	38(13.3)
ASA 4	1(.4)
History of allergy	
No	269(94.4)
Yes	16(5.6)
Use of Contrast	
No	213(74.7)
Yes	72(25.3)
Concomitant Tumor	
No	264(92.6)
Yes	21(7.4)
MRI protocol	
Cranial	243(85.3)
Thorax	3(1.1)
Abdomen	8(2.8)
Pelvic	8(2.8)
Other	23(8.1)
Body temperature difference	

Negative	154(54.0)
Positive	102(35.8)
No difference	29(10.2)
BMI (kg/m2)	
Mean(SD)	16.76(11.13)
Procedure duration, (h)	
Mean(SD)	22.46(11.40)
Fasting duration (h)	
Mean(SD)	8.42(2.33)

Tablo 2. Results of logistic regression analysis

	OR (95% CI)	p
Fasting duration (h)	.876 (.782 - .981)	.021

Discussion - Conclusion: The results of our study suggest that fasting duration may predict the body temperature difference between before and after the procedure in children undergoing MRI under anesthesia.

Keywords: Magnetic resonance imaging, pediatric anesthesia, body temperature

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Comparison of the Analgesic Effects of Intraoperative and Postoperative Pecs Ii Block in Patients Undergoing Breast Surgery

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Introduction - Purpose: It was aimed to compare the preoperative and postoperative use of PECS block applied in breast surgery with the group undergoing general anesthesia only.

Materials and Methods: We retrospectively reviewed the anesthesia records of 75 patients who had undergone breast surgery between June and November 2015. The cases whose data were obtained were categorized into three groups. Group I (n25: control group under general anesthesia alone), Group II (n25: cases receiving preoperative PECS block and general anesthesia), and Group III (n25: cases receiving postoperative PECS block and general anesthesia). Intraoperative desflurane MAC (minimum alveolar concentration) value, intraoperative fentanyl doses consumed, postoperative first intravenous analgesic application times, agent type and doses, and postoperative visual analog pain scale (VAS) were compared between the groups.

Results: After the analysis of intraoperative data, it was found that intraoperative desflurane MAC value significantly decreased in Group II compared to other groups. In the analysis of postoperative data, significant decrease was observed in analgesic consumption and postoperative VAS (early period, postoperative 0, 2, 4 and 8th hours) in Group II and III compared to the Group I. The total fentanyl dose consumed intraoperatively was found to be significantly higher in Group I than Group II and III ($p<0.05$). The need for the first intravenous analgesic administration postoperatively was found to be significantly later in Group II than in Groups I and III ($p < 0.05$) but in similar between Group I and Group III ($p > 0.05$).

Discussion - Conclusion: In patients who undergo breast surgery, the addition of PECS block to general anesthesia in the preoperative or postoperative period provides a better quality postoperative analgesia. The most important advantage of the preoperative application of the PECS block is that it reduces the consumption of intraoperative anesthetics and analgesics.

Keywords: breast surgery, PECS block, postoperative analgesia, visual analog pain scale

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One Lung Ventilation and Anesthesia/analgesia Management in a 25-month-old Pediatric Patient

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Giriş - Amaç: Congenital cystic adenomatoid malformation (CCAM) is a rare congenital anomaly characterized by the presence of cystic and solid lung components. In this case report, we present the advanced anesthesia management of a 25-month-old patient who underwent single lung ventilation for right lower lobectomy due to CCAM.

Phenomenon: A pediatric patient, weighing 13kg, scheduled for surgery due to CCAM, exhibited normal findings upon physical examination of the oropharynx and lung sounds. Postoperative intensive care unit (ICU) was reserved. Heart rate, blood pressure, SpO2 were monitored in the operating room and induction was performed with iv lidocaine, propofol, fentanyl and rocuronium. Intubation of the patient was performed under fiberoptic bronchoscope (FOB) guidance using a 4mm endotracheal tube, and subsequent placement of a bronchial blocker in the right bronchus beside the tube. Lung isolation was performed and one-lung ventilation was performed. A 5F central venous catheter was placed in the right jugular vein under ultrasonography guidance. Invasive arterial monitoring was performed. Non-invasive advanced hemodynamic monitoring (SpHb,PVI,PI,ORI,SpOC), temperature and urine output monitoring were also performed. After the patient was placed in the left lateral decubitus position, the location of the blocker was checked again with FOB. Paracetamol (10mg/kg) and ibuprofen (10mg/kg) were given for postoperative analgesia and ESP-block was applied at T7 level. Upon completion of the surgery, extubation was carried out using sugammadex. The patient, maintaining stable hemodynamic parameters and FLACC<3, was transferred to the Pediatric-ICU. During the 24-hour postoperative period, the patient remained hemodynamically stable. No additional analgesia was needed

Bronchial Blocker

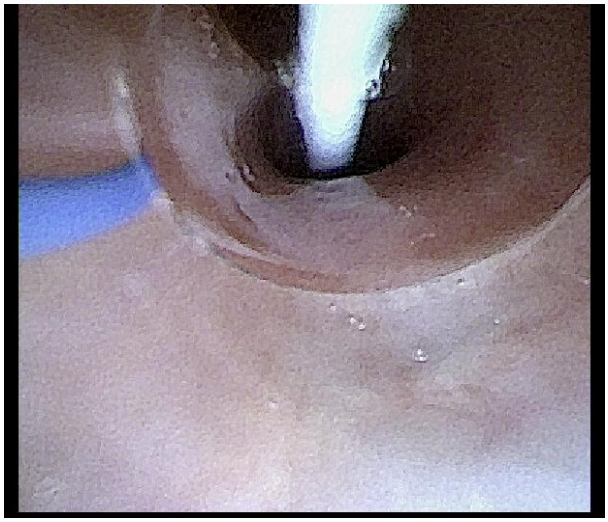


Figure 1: Advancing the bronchial blocker from the side of the tube towards the right bronchus

Bronchial Blocker



Figure 2: Placement of bronchial blocker in the right bronchus

VATS

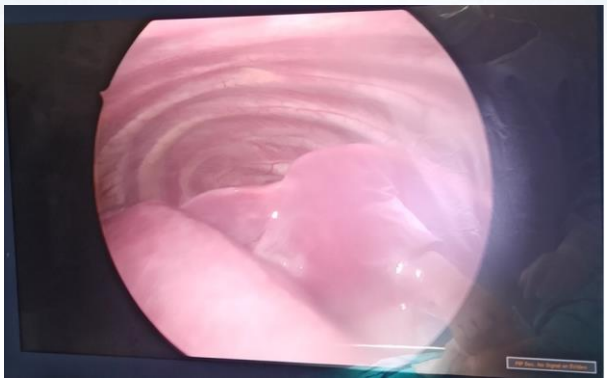


Figure 3: Lung Isolation in Video Assisted Thoracoscopic Surgery

Discussion - Conclusion: This case demonstrates that preparations and advanced equipment prior to difficult airway management in a patient who was planned for right lower lobectomy due to CCAM can be successfully managed by an experienced team. We believe that this case report will guide anesthesiologists who encounter similar situations and will positively affect patient outcomes.

Keywords: Bronchial Blocker, Congenital Cystic Adenomatoid Malformation, One Lung Ventilation, Pediatric Patient, Video Assisted Thorocoscopic Surgery

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Pub No: S-080

Irritant Contact Dermatitis During Intraoperative Period

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Giriş - Amaç: Allergic-immunologic reactions during perioperative period are critical events. Contact dermatitis(CD) to electrocardiogram(ECG) electrode and face mask is rarely reported[1-5]. Allergic CD and irritant CD are the 2 major category. Irritant CD is characterized by direct injury of skin. On the other hand, Allergic CD is characterized by Type IV delayed hypersensivity reaction to allergen[6].

Phenomenon: One year old healty male patient was brought to the operating room for a tongue tie operation. The patient preoperative examination contain no abnormal sign. The patient was sedated with midazolam(0,05mg/kg) and taken to the operating room. After ECG monitoring, the patient developed patchy erythema on anterior chest of his body, under ECG electrode. After careful observation, self limiting feature of lesions and expected short time of the operation, we decided to proceed. The patient received fentanyl(0,5mcg/kg) and propofol(2mg/kg). Due to developed apnea after induction dose, patient was ventilated by face mask. After starting ventilation, same lesions developed on patient’s face and bilateral wheezing was heard in the patient's lung and these finding sustained after emergence. The patient was given inhaler therapy, steroid therapy and oxygen support. The patient discharged to ward after the symptoms improved.

Intraoperative Lesions



Regressed Lesions at PACU



Discussion - Conclusion: Mask ventilation and ECG monitoring is routine application in anesthesia practice. These items could contain irritants. We decided that cause of the lesion in our patient was caused by an irritant rather than allergic antigen, because no history of atopy, morphology and the acute onset of the skin reaction. Concurrently, respiratory symptom characteristics suggest irritants. Self limiting skin lesions may appear as simple lesions during anesthesia. It should be noted that these lesions may occur due to irritants, as in our patient. In this case, it should be kept in mind that the irritants on the face mask may cause respiratory symptoms. Main step in treatment is removing the irritant.

Keywords: irritant dermatitis, mask, electrocardiography monitoring, bronchial spasm, ventilation

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Pub No: S-081

Retrospective Analysis of Cancer Patients Followed in Intensive Care

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Introduction - Purpose: Developments in the treatment of cancer patients have increased their life expectancy. However, this process causes patients to have longer hospital and intensive care unit(ICU) stays.

Materials and Methods: The files of 963 patients hospitalized in the intensive care unit of our hospital in the first 8 months of 2023 were reviewed.50 patients diagnosed with cancer were included in the study.

Results: For the first 8 months, 963 patients were admitted to the intensive care unit. These patients were followed for an average of 12.3 hospitalization days.ICU mortality rate was determined as 31.75%. These rates were found to be 6.4days of stay in cancer patients and a mortality rate of 30%. Stomach and colorectal cancers were found to be the most common in patients admitted to intensive care. The most common reasons for hospitalization of these patients were respiratory failure and postoperative follow-up.

Table 1: Characteristics of Cancer Patients Followed in Intensive Care Unit

Patient Number	Comorbidity	Gender	Cancer Type	ICU Reason for Admission	ICU Infection rate	ICU Hospitalization Duration	Mortality %
50	HT:18 DM:9 Coronary Artery Disease:7	M:31 F:19	Stomach CA: 16 Rectum CA:8 Colon CA:10 Liver CA:3	Respiratory failure:21 Postoperative Follow-up: 16 Low GCS: 5 Hypotension:5 Sepsis:2	%18	6,4	%30

			Breast CA:4 Other:9	Other:1			

Discussion - Conclusion: These patients, whose chances of survival have increased thanks to advances in their treatment, are staying in intensive care and hospital more often for different reasons.Studies have shown that the most common reason for admission to intensive care in cancer patients is respiratory failure(1,2). Our results were found to be compatible with the literature. In studies, ICU mortality in cancer patients was found to be 41%, 36.5% and 22%(3,4,5). We found the mortality rate to be 30%. In our study, we found the intensive care unit stay (6.4days) to be shorter than the general average (12.3days).We believe that the reason for this is that a significant rate of the patients are taken to the ICU for postoperative follow-up and are discharged in a short time.Cancer patients are a special group, and we believe that identifying risk factors that will increase mortality, especially the risk of infection, and taking the necessary precautions will reduce mortality in these patients during their ICU stay.

Keywords: Intensive care, Critical patient, Cancer, Mortality

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Arterial and End-tidal Co2 Gradient as a Mortality Predictor in Critical Care Patients

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Introduction - Purpose: In critically ill patients in the intensive care unit (ICU), there is a greater increase in the difference between partial arterial carbon-dioxide (PaCO2) and partial end-tidal carbon-dioxide (PetCO2) in cases where mortality is high, such as shock, massive pulmonary embolism,etc. The study aimed to discern connections between these CO2 differentials and critical outcomes in intubated patients, including 28-day mortality, lenght of stay (LOS), and ventilator days. It also aimed to compare these findings with scoring systems (SOFA, APACHE-II).

Materials and Methods: This single-center, prospective, observational study included 50 patients admitted to the ICU and who had received mechanical ventilator support within the last 24-hours between November 2021 and April 2022. PetCO2 values were recorded through capnography sensors, and arterial blood gas samples were taken. Patient data, including age, gender, medical history, vasopressor use, scores (SOFA, APACHE-II), blood test results, and ICU records, were collected.

Results: In our study, the data of 50 patients were analyzed. Analysis unveiled a strong association between higher SOFA and APACHE-II scores in patients who deceased compared to survivors ($p=0.011$, $p=0.038$). Notably, P(a-et)CO2 difference was significantly higher in deceased patients (18.22 ± 12.58, 4.91 ± 4.18), exhibiting a robust correlation with 28-day mortality ($p<0.001$). When SOFA, APACHE-II and P(a-et)CO2 difference were evaluated, the most statistically significant result in the relationship with 28-day mortality was the P(a-et)CO2. Examined the correlation between LOS, ventilator days with P(a-et)CO2 but found no correlation.

Discussion - Conclusion: P(a-et)CO2 derived from arterial blood gas PaCO2 and noninvasive capnograph PetCO2 aligns with APACHE-II and SOFA scores, commonly used in ICUs but demanding multiple tests for computation. It has been shown in our study that P(a-et)CO2 value can be used as a mortality marker in intubated patients. More comprehensive studies are needed to evaluate the usability of the P(a-et)CO2 difference in terms of monitoring the effectiveness of the treatments applied to the patients.

Keywords: CO2 Gradient, Capnography, Mortality Predictor, Scoring Systems

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Pub No: S-083

Application of Combined Anterior Suprascapular Nerve Block and Superficial Cervical Plexus Block in Reverse Shoulder Arthroplasty Surgery, Case Series

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Giriş - Amaç: The suprascapular nerve, originating from the C5 trunk, provides innervation to the acromioclavicular and glenohumeral joints. The supraclavicular nerve, a branch of the cervical plexus, contributes to the sensory innervation of the upper deltoid region. Cervical and brachial plexus blocks can cause diaphragm paralysis. This study examined the effects of low-volume anterior suprascapular nerve block and superficial cervical plexus block on pain and phrenic nerve in patients underwent reverse shoulder arthroplasty surgery.

Phenomenon: After ethical approval was obtained, a retrospective analysis was performed on data obtained from eight patients who underwent reverse shoulder arthroplasty surgery. Anterior suprascapular nerve blocks and superficial cervical plexus blocks were applied to these patients. Anterior suprascapular nerve block was performed using 5 mL, and superficial cervical plexus block was performed using 3 mL of 0.5% bupivacaine. Ultrasound was used to measure the diaphragm thickness at the end of inspiration and expiration and to calculate the diaphragm thickness fraction and its changes. Postoperative pain management included patient-controlled analgesia with morphine, opioid consumption and the VAS score recorded by pain forms. Comparing preoperative and postoperative measurements, a significant decrease in diaphragm thickness fraction was observed with z score of -2.521 and p value of 0.012. The average VAS score was 1.25±1.04 at the 30th minute after surgery, and the median value was 2 at other times. Opioid consumption at the 30th minute after surgery was 1.5±1.04 mg, and two patients required rescue analgesia at the 4th and 6th hours

Table 1. Baseline Demographic Characteristics

Variables (n=8)	*Ort±SD*	*Med(IQR)*	*Min-Max*
BMİ (kg/m²)	*28,94±1,72*	*29,13(28,03-30,14)*	*25,7-31,25*
Weight (kg)	*84±10,65*	*84(75,5-91,5)*	*70-100*
Age (year)	*61,5±11,01*	*61,5(53-69,5)*	*46-78*
	Number (n)	***Percentage (%)***	
Gender			
Female	*3*	*37,5*	
Male	*5*	*62,5*	
Surgical Side			
Left	*5*	*62,5*	
Right	*3*	*37,5*	
ASA			
I	*2*	*25*	
II	*4*	*50*	
III	*2*	*25*	

Table 2: Change in Postoperative Diaphragmatic Thickness Measurements

Variables (n=8)	***Med(IQR)***	***Ranks***	***n***	***Mean Ranks***	***Sum of Ranks***	***z***	***p^{w}***
DI Postop-Preop	*3,05(2,85-3,6)/3,55(3,3-4,4)*	*Negative Ranks*	*6*	*5,00*	*30,00*	*-1,687*	*0,092*
		Positive Ranks	*2*		*3,00*		
		Ties	*0*				
		Total	*8*				
DE Postop-Preop	*2,25(2,05-2,6)/2,4(2,2-2,5)*	*Negative Ranks*	*4*	*3,50*	*14,00*	*-0,000*	*>0,999*
		Positive Ranks	*3*	*4,67*	*14,00*		
		Ties	*1*				
		Total	*8*				
DTF Postop-Preop	*36(33-43,5)/51(46-66,5)*	*Negative Ranks*	*8*	*4,50*	*36,00*	*-2,521*	***0,012****
		Positive Ranks	*0*				
		Ties	*0*				
		Total	*8*				

w: Wilcoxon Test, *: p<0,05

Table 3:Pain Control Assesment

Variables (n=8)	*Ort±SD*	*Med(IQR)*	*Min-Max*
Visual Analogue Scale			
30th min.	1,25±1,04	2(0-2)	0-2
4th h.	1,75±1,28	2(1-2)	0-4
6th h.	2±1,07	2(2-2)	0-4
12th h.	1,5±0,93	2(1-2)	0-2
24th. h.	0±0	0(0-0)	0-0
Opioid Consumption			
30th min.	1,5±1,04	1,75(0,75-2)	0-3
4th h.	10,89±7,79	7,8(6-14,25)	4-27
6th h.	14,96±9,3	10,25(8-21,35)	7,5-33
12th h.	19,45±11,69	12,5(11-29,8)	10-39
24th h.	23,83±12,22	17,1(16-36,95)	10-40,5
Perop. Opioid Consumption			
Remifentanil (mg)	0,04±0,08	0(0,0,08)	0-0,17

Discussion - Conclusion: In conclusion; Due to the wide surgical skin incision in reverse shoulder arthroplasty surgeries, the addition of superficial cervical plexus block to the anterior suprascapular nerve block was found to be effective in postoperative pain control. Although diaphragmatic paralysis occurred due to phrenic nerve involvement in this block combination, it did not result in dyspnea in our patients.

Keywords: diaphragmatic paralysis, nerve block, shoulder pain, replacement arthroplasty, cervical plexus

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Pub No: S-084

Evaluation of the Relationship Between Obstetric Comorbidity Index and Obstetric Quality of Recovery Score

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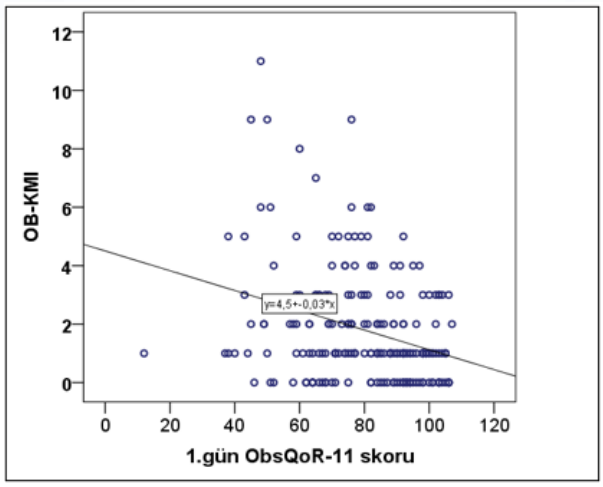
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Introduction - Purpose: Cesarean section is one of the most commonly performed surgery worldwide. Maternal mortality and morbidity remain major concerns globally, making it crucial for both obstetricians as well as anesthesiologists, to predict and prevent these complications and improve the quality of life after surgery. We aimed to examine the relationship between preoperative obstetric comorbidity index (OB-CMI) and postoperative quality of recovery score (ObsQoR-11).

Materials and Methods: In our prospective observational study, patients' demographic data, medical history, ASA score, gravida, parity, gestational age, cesarean section emergency category, the indication of cesarean section, OB-CMI score, preferred anaesthesia method, the amount of intraoperative bleeding, intraoperative transfusion need, complications, the duration of hospitalization, the need for hospitalization in the intensive care unit, and the duration, ObsQoR-11 Scores on the first and second day and the discharge/exit status were recorded.

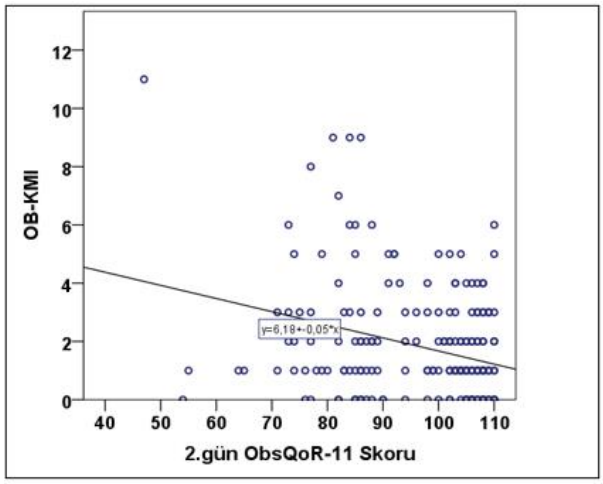
Results: 214 patients were included in our study. A negative significant correlation was found between the OB-CMI score and the ObsQoR-11 score on day 1 (R: -0.286, $p<0.001$) and day 2 (R: -0.225, $p=0.001$). The OB-CMI score was significantly lower in patients who received regional anaesthesia compared to those who received general anaesthesia ($p=0.009$). The ObsQoR-11 score was significantly lower in patients who received general anaesthesia compared to patients who received regional anaesthesia.

Graph-1



Correlation Graph Between OB-BMI Score and 1st-Day ObsQoR-11 Score

Graph-2



Correlation Graph Between OB-BMI Score and 2nd-Day ObsQoR-11 Score

Table-1

	Anaesthesia Method						
	General Anaesthesia			Regional Anaesthesia			p
	Median	Minimum	Maximum	Median	Minimum	Maximum	
OB-CMI	2,0	0	11,0	1,0	0	7,0	0,009
ObsQoR-11 on day 1	76,0	38,0	105,0	85,0	12,0	107,0	0,014
ObsQoR-11 on day 2	100,0	47,0	110,0	104,0	55,0	110,0	0,027

Comparison of OB-CMI and ObsQoR-11 Scores According to the Applied Anaesthesia Method

Discussion - Conclusion: We found that the OB-BMI score evaluated in the preoperative period and the postoperative ObsQoR-11 score were negatively correlated. Therefore, it is possible to predict the quality of recovery of the patients in the postoperative period by evaluating the OB-CMI score in the preoperative period.

Keywords: Comorbidity, Obstetric, Cesarean delivery, Quality of life

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Anesthesia Management in a Pregnant Patient with Glutaric Aciduria Type-1

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Giriş - Amaç: Glutaric aciduria type-1 (GA-1) is a serious metabolic disorder resulting from a genetic deficiency of glutaryl-CoA dehydrogenase. Acute encephalopathic crisis and metabolic acidosis may develop in these patients during or after surgery. Limited literature exists regarding the management of pregnant women with GA-1. This case report presents the anesthesia management during the cesarean delivery of a pregnant woman diagnosed with GA-1.

Phenomenon: A 30-year-old, G2P1 pregnant woman at 39 weeks gestation was admitted to the hospital with a history of GA-1. Her previous pregnancy, under emergency conditions, involved cesarean section with regional anesthesia and had gone smoothly. The patient, whose second pregnancy was planned as an elective cesarean section, was evaluated preoperatively and patient's risk factors and anesthesia method were determined. Combined spinal epidural anesthesia was planned with preparations for possible conversion to general anesthesia. Considering the risk of malignant hyperthermia, dantrolene was kept ready. In the preoperative period, oral carnitine treatment was switched to iv carnitine treatment. The risk of metabolic acidosis and ketonuria was evaluated by arterial blood gas and complete urinalysis. Dextrose fluids and balanced solutions were preferred for perioperative fluid replacement. The operation was performed under combined spinal epidural anesthesia, with vigilant perioperative blood sugar monitoring. She was closely monitored in the intensive care unit for 24 hours and discharged without complications after two days.

Discussion - Conclusion: GA-1 is a mitochondrial metabolic disorder where catabolic stress should be minimized. In pregnant women with GA-1, the prevention of acute encephalopathic crises, adequate parenteral calorie intake, carnitine supplementation, and careful anesthesia and analgesia management are crucial. Anesthesia methods that reduce the stress response, such as neuraxial anesthesia and analgesia, can be considered for optimal outcomes in cesarean sections.

Keywords: Glutaric aciduria type-1, Pregnancy, Cesarean section, Neuraxial anesthesia

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Pub No: S-086

Anesthesia Management in an Opioid Use Disorder Pregnant Patient with Withdrawal Symptoms

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Giriş - Amaç: There is an increased Opioid Use Disorder (OUD) pregnant patient population who need a challenging anesthesia management. This case summarizes the considerations and best practices for managing an OUD pregnant patient who was experiencing withdrawal symptoms, focusing on the safe and effective administration of anesthesia.

Phenomenon: A 24-year-old pregnant woman at full term, with a seven-year history of opioid use, was admitted to hospital for an emergency Cesarean Section with withdrawal symptoms, including tachycardia, tremor, irritability, anxiety and excessive sweating. To manage anesthesia effectively, a combined spinal-epidural procedure was performed. Spinal anesthesia provided with 10mg bupivacaine. After birth, 6 ml of 100mcg fentanyl and 20mg bupivacaine mixture were administered via epidural catheter, along with intravenous 1 gram Paracetamol, 30mg pethidine, and 3mg midazolam to provide adequate pain relief and reduce anxiety. Epidural patient-controlled analgesia with higher doses fentanyl than usual was initiated to ensure a comfortable postoperative period. Following low VAS scores and healed symptoms she was discharged uneventfully.

Discussion - Conclusion: Chronic opioid use poses serious dangers to maternal and infant health. The main concerns include tolerance, hyperalgesia and increased re-use. Pain management may vary depending on whether the patient has an untreated OUD, is actively undergoing medication-assisted treatment, or is in the recovery phase.As in our patient, individuals presently using opioids are susceptible to opioid withdrawal, necessitating continuous monitoring for withdrawal symptoms. Regional anesthesia is preferred to general anesthesia together with multimodal analgesia techniques. Higher epidural opioid doses may be required, additionally intravenous opioids and anxiolytics are needed to alleviate the symptoms. Furthermore, managing pain in these patients may be complicated due to the presence of opioid tolerance and hyperalgesia, both of which can result in profound peripartum pain, underscoring the need for vigilant analgesic management.

Keywords: Opiate addiction, Cesarean section, Pregnant woman, Regional anesthesia

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Pub No: S-087

The Significance of Gastric Ultrasonography in Anesthetic Management of a Child with Zellweger Syndrome

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Giriş - Amaç: Zellweger syndrome is an autosomal recessive disorder characterized by defects in peroxisomes that disrupt the oxidation of long-chain fatty acids. This syndrome results in metabolic abnormalities and multi-organ involvement, including renal, hepatic, neurological, and adrenal dysfunction (1). In this case report, we discuss the pivotal role of preoperative gastric ultrasonography and potential perioperative concerns in the anesthetic management of a girl with Zellweger syndrome.

Phenomenon: A 4-year-old girl weighing 14 kg presented with septic arthritis requiring emergency surgery. Physical examination revealed a broad forehead, flat occiput, small chin, large tongue, mild hypotonia, and motor mental retardation. Kidney function, electrolytes, and coagulation tests were normal; however, hemoglobin was low (Hb: 9.5 g/dl) and aspartate aminotransferase (AST): 79 U/l. The patient was using clobazam because of epilepsy. Preoperative gastric ultrasound was performed on the patient who had last eaten solid food 5 hours prior. Ultrasound indicated an empty stomach in both the supine and right lateral decubitus positions [Grade 0, according to the three-point grading scale (2)] (Figure 1). On the basis of the gastric ultrasound results, general anesthesia without neuromuscular blockade was preferred. Intravenous propofol and fentanyl were used for induction, and anesthesia maintenance was achieved with sevoflurane. A supraglottic airway device was used. After the surgery, the patient, who initiated spontaneous breathing, had the supraglottic airway device gently removed and was successfully transferred to the recovery room. The patient, fully awake with stable vital signs, was transferred to the ward.

Figure 1



The sonographic image of the patient's empty stomach.

Discussion - Conclusion: Anesthetic management in patients with Zellweger syndrome requires individual assessment considering factors such as adrenal insufficiency, intellectual disability, risk of pulmonary aspiration, seizure disorders, airway complications, and other potential complications (3). This case presentation emphasizes the importance of gastric ultrasonography in anesthetic management. This case provides valuable information that may assist in decision-making in similar situations.

Keywords: Zellweger Sydrome, Child, Gastric ultrasound

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Pub No: S-088

A Rare Case Report: CAID SYNDROME

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Giriş - Amaç: Chronic Atrial Intestinal Dysrhythmia syndrome (CAID) is an autosomal recessive disorder identified in 17 cases worldwide, mutation in the SGOL-1 gene that encodes a protein complex called cohesin, responsible for chromosome instability and related with sick sinus syndrome (SSS) and chronic intestinal pseudo-obstruction (CIPO). (1) Patients often have malnutrition and associated immunodeficiency. Overall, the disease is rare and difficult to diagnose, resulting in clinicians' at high rate of misdiagnosis.

Phenomenon: A 31-year-old woman diagnosed with CAID syndrome 3 years ago was implanted a cardiac pacemaker. While followed up in an outpatient center for 20 days with a diagnosis of pneumonia, was admitted to our intensive care unit (ICU) with a prediagnosis of pneumosepsis. She had undergone multiple abdominal surgeries, had ileostomy and percutaneous endoscopic jejunostomy (PEJ). While high flow nasal cannula (HFNC) treatment was administered in the first days of ICU, vasopressors were started. The patient's condition deteriorated and Acute Respiratory Distress Syndrome (ARDS) developed and she was intubated. The infected appearance of right subclavian tunnel catheter was withdrawn and sent for culture test and left jugular vein catheterization performed for parenteral nutrition while she could not tolerate enteral nutrition. Antibiotherapy was revised due to the growth of corynebacterium in the cultures. After infection parameters improved, tracheostomy was planned because weaning was not successful. However, upon the request of her family, she was transferred to the ICU of an external center where she was previously followed up.

Discussion - Conclusion: It is important to be aware that CIPO treatment is unsatisfactory and the course is long. (2) PEJ reduces intra-abdominal pressure and allows for optimal nutritional management. (3) In conclusion, CAID syndrome should be remembered in the etiology of immunodeficiency and malnutrition. Increasing genetic studies will help clinicians to recognize CAID early and improve the quality of life of patients.

Keywords: Chronic Atrial Intestinal Dysrhythmia, Intensive Care Unit, Infection, Malnutrition

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Pub No: S-089

Our Difficult Airway Management in Pediatric Syndromic Patients

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Giriş - Amaç: Difficult intubation is less common in children than in adults, but is more common in children under one year of age and in children with congenital syndromes and congenital cardiac disease. Cornelia De Lange syndrome is a rare genetic disorder characterised by craniofacial,gastrointestinal, cardiac, musculoskeletal and genitourinary developmental anomalies(1). Lowe syndrome is a rare X-linked recessive disorder characterised by cataract, glaucoma, hypotonia, acidosis due to renal tubular disorders and renal failure(2). Digeorge syndrome is a disease with absence/hypoplasia of thymus and parathyroid glands, cardiovascular malformations and facial dysmorphism due to deletion on chromosome 22(3). We aimed to describe our difficult airway management in 3 syndromic cases

Phenomenon: A three-year-old patient with Cornelia de Lange syndrome, in whom nissen fundoplication wasplanned because of gastro-oesophageal reflux, had micrognathia-retrognathia, high palate and growthretardation. When Cormack-Lehane classification was Grade3, he was intubated with videolaryngoscope without any problem (Figure 1). The three-year-old patient who was planned to undergoureterorenoscopy due to uretholithiasis with Lowe's syndrome had developmental delay, dysmorphicface, high palate anomaly, small hands and feet, mild aortic insufficiency, congenital cataract). Whenthe Cormack-Lehane classification was Grade 3, a laryngeal mask was placed (Figure 2). A four-yearold patient with a diagnosis of Digeorge syndrome who was to undergo nissen fundoplication operationfor gastro-oesophageal reflux had a dysmorphic facial appearance, developmental delay and amidmuscular-small venticular septal defect. He was intubated uneventfully with a video laryngoscopebecause of possible difficult airway (Figure 3).

figure 1



figure 2



figure 3



Discussion - Conclusion: Children with congenital syndromes may have difficulties in airway management, especially due to facial dysmorphism. Problems arising from airway pathologies seen in thesesyndromic children increase the risk of morbidity and mortality(4).

Keywords: Difficult airway, Cornelia De Lange syndrome, Lowe syndrome, Digeorge syndrome

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Pub No: S-090

Can Optic Nerve Sheath Diameter Monitoring Be Used as a Monitoring Parameter in Coronary Surgery Patients with Intraocular Bleeding?: a Case Report

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Giriş - Amaç: High doses of heparin are used to prevent intravascular clot formation during cardiopulmonary bypass surgeries (CABG). An increase in bleeding complications may be an inevitable consequence of it (1,2). In our study, a patient with chronic kidney failure(CKF), intraocular bleeding (40% decrease in visual field) during the routine dialysis and who underwent surgery after consent was obtained with the risk of postoperative blindness. We aimed perioperative noninvasively monitoring increased bleeding related to heparinization with ultrasound (USG) guided optic nerve sheath diameter (ONSD).

Phenomenon: A 49-year-old male patient with ASA 4 (CKF, DM,HT) for elective CABG. The patients' preoperatively eye examination is low vision in the right eye and has the risk of postoperative blindness. In the operating room, awaken ONSD was measured under USG in addition to routine monitoring. At perioperatively determined times, ONSD and simultaneous position, temperature, arterial blood gas parameters, mean arterial pressure (MAP) were monitored.Baseline ONSD (mm, right/left) 58/52; 61/52 during hypothermia period (32C); 59/53 when cross clamp is removed; pump outlet measured 59/54 mm. No abnormalities and complications were observed during follow-up. It was thought that there was no increased risk of postoperative bleeding. There was no change in postoperative vision and eye examination of the patient.

Perioperative datas of the patient

	ONSD (R/L) mm	Position	Temperature C	pH	PaO2 mmHg	PaCO2 mmHg	Hemotocrit mg/dL	MAP mmHg
Before anesthesia induction	58/52	supine	37	7,35	86	42	28,7	83
Hypotermia	61/52	supine	32	7,41	279	46	19,8	56

After CC	59/53	supine	34	7,37	267	44	23	58
After CPB	59/54	Reverse trendelenburg	37	7,39	203	43	25	67

ONSD (R/L): Optic nerve sheath diameter (Right/Left), CC: Cross clamp, CPB: Cardiopulmonary bypass, MAP: Mean arterial pressure

Discussion - Conclusion: ONSD has become a reliable and noninvasive method of assessing intracranial pressure and transbulbar space (3). The fact that the increase in intracranial pressure affects ONSD within seconds considered us the use of ONSD in terms of bleeding in the optic area (4). In a study, it was observed that pressure-related changes in ONSD were most evident in the bulbar segment of the optic nerve, and it became a standard follow-up method (5).We think perioperative ONSD is an advantageous, alternative and easy method in terms of warning us in case of possible intraocular bleeding in CABG surgeries with heparinization.

Keywords: Coronary artery bypass greft surgery, Optic nerve sheath diameter, Low vision, hypothermia

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Pub No: S-091

Creutzfeldt-Jakob Disease: A case report

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Giriş - Amaç: INTRODUCTION: Creutzfeldt-Jakob disease (CJD) is a rare, rapidly progressive, and fatal neurodegenerative disease caused by prions (1). According to the diagnostic criteria of the US Center for Disease Control and Prevention (CDC); the definitive CJD diagnosis is made by brain tissue biopsy at autopsy, whereas the possible CJD diagnosis is made by clinical findings and one of the EEG, MRI, and CSF findings of the disease.

Phenomenon: CASE: A 73-year-old female patient was brought to the emergency room unconscious and having a seizure because she had been having myoclonic seizures intermittently for two days. The patient, who had known dementia diagnosed nine months ago and had not been able to speak for two months and swallow for a month, was admitted to the neurology intensive care unit after antiepileptic treatment. The patient, whose resistant myoclonic seizures continued during follow-up, was admitted to our intensive care unit one day later. Cortical hyperintensities were seen in the MRI of the patient, who had rapidly progressive dementia, akinetic mutism, and myoclonic seizures. Protein 14.3.3 was tested in the CSF, and because of the detected positive result, the diagnosis of CJD was considered. A definitive diagnosis could not be made because an autopsy was not performed.

Discussion - Conclusion: RESULTS-DISCUSSION: In this article, we wanted to emphasize that rare prion diseases should be considered in case of myoclonic seizures in patients with rapidly progressive dementia. In this case, the diagnosis of dementia was made nine months before admission and the presence of mutism and myoclonic seizures that started two months ago suggested CJD. Hyperintensity in the cortical region on MRI and positive protein 14.3.3 in the CSF sample made the diagnosis of possible CJD.

Keywords: Creutzfeldt-Jakob disease, Myoclonic seizures, Rare diseases

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Pub No: S-092

Massive Pulmonary Embolism During Orthopedic Surgery: A Case Report

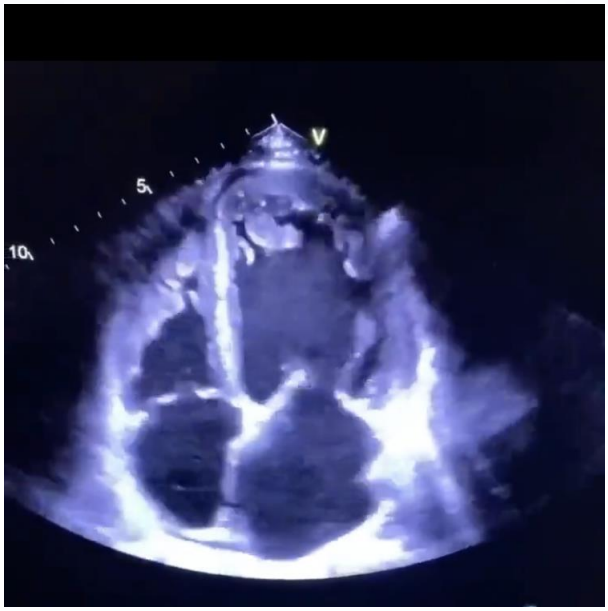
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Giriş - Amaç: Massive Pulmonary embolism is defined as obstruction of the pulmonary arterial tree that exceeds 50% of the cross-sectional area. It can cause acute and severe cardiopulmonary failure from right ventricular overload. Studies show that approximately 70% of patients with massive PE die within the 1st hour after onset of symptoms.

Phenomenon: The 78 year-old female patient who had femur neck fracture with history of hypertension, allergic asthma and atrial fibrillation, was scheduled to undergo surgery with ASA-III-Post-op-ICU. In the operating room, 2 peripheral intravenous accesses and the radial artery was cannulated and monitorized. The monitors showed a blood pressure of 159/80 mmHg, heart rate of 180 bpm, and oxygen saturation of 96%. The central venous line through the right internal jugular vein was inserted. Approximately 2 hours after the surgery was started, the patient's end-tidal carbon dioxide had decreased from 34 to 19 mmHg, and the oxygen saturation decreased to 82% within a few seconds. The heart rate gradually increased to 186 bpm, and electrocardiogram showed atrial fibrillation. We pre-diagnosed the pulmonary embolism, and asked the surgeons to finish the operation immediately. Heparin infusion was administered. We brought the patient to the intensive care unit to perform transthoracic echocardiography to diagnose: A massive thrombus on the right pulmonary artery, enlargement of the right atrium and ventricle, and 'D sign'. Despite the epinephrine, norepinephrine, dopamine, dobutamine infusions, the patient died within post-op 45 minutes.

Transtoracic Echocardiogram



Arterial Blood Gas Analysis

Arterial Blood Gas Analysis	14:32	15:44	16:26	17:08
pH	7,39	7,37	7,38	7,15
BE	-1,5	-0,3	-3,9	-16,7
pCO2	39,6	45,1	36,1	32,5
tCO2	24,5	119,3	21,9	12
pO2	117,8	26,6	97,2	88,2
Lactate	1,61	1,31	2,86	6,94
HCO3-act	23,3	25,2	20,8	11
K	3,24	3,69	3,81	4,1
Glucose	143	151	181	174

Discussion - Conclusion: Intraoperative massive pulmonary embolism is a clinical presentation that is rarely seen but may result in serious complications. It is especially likely to occur during major bone surgeries. History of hypertension, diabetes, coronary artery disease should be taken into consideration. If tachycardia, hypotension, desaturation, and a decrease in carbon dioxide are observed during surgery, the operation should be stopped, treatment for pulmonary embolism should be initiated immediately.

Keywords: Pulmonary, Embolism, D Sign, Femur Surgery, Massive Pulmonary Embolism

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Successful resuscitation of acute massive pulmonary embolism with extracorporeal membrane oxygenation and open embolectomy

- DOI: 10.1016/s0003-4975(00)02540-6

Deep venous thrombosis and pulmonary embolism: prediction, prevention and treatment

- DOI: 10.1016/0002-9149(59)90145-6

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Robotİk Yardimli Laparoskopİk Radİkal Prostatektomİlerde Düşük Akim Ve Normal Akim Anestezİ Yöntemİnİn Karşilaştirilmasi

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Introduction - Purpose: The importance of low-flow anesthesia, which has economic and many advantages, is increasing. The aim of this study is to compare low-flow and normal-flow desflurane anesthesia in terms of hemodynamic and respiratory parameters for robotic radical prostatectomy surgery. The secondary aim of the study was to compare the effects of low- and normal-flow anesthesia in deep Trendelenburg position.

Materials and Methods: Our study was conducted between July and November 2022 after obtaining the approval of the Clinical Research Ethics Committee of SBU Ankara Bilkent City Hospital (E1-22-2755/ 27.07.2022) and with patient consent. Our study included 72 patients, aged between 18-70, ASA I-III, male, who were planned for robotic radical prostatectomy. Group D (n:37) with low flow, and group N (n:35) with normal flow. Both groups were started with 3 lt/min flow. While the flow continued at 3 lt/min in Group N, it decreased to 1 lt/min after 10 minutes in Group D. In both patient groups, after intubation (T0), after positioning (deep Trendelenburg) and moving to pneumoperitoneum (T1), for control purposes in some long-lasting cases (T2, T3), after the end of pneumoperitoneum and moving to the supine position (T4) and after extubation (T5); Hemodynamic and respiratory parameters, plateau and peak airway pressures were recorded. After extubation, anesthesia time, total desflurane used, and the number of soda-lime changes were recorded.

Results: In the study, no significant difference was found between the two groups in terms of hemodynamic, respiratory parameters, liver, and renal function tests ($p>0.05$). No postoperative complications were observed in either group. A significant difference in cost was detected between Group D and Group N ($p<0.05$).

Characteristics of Patients

		Mean±SD	Median (IQR)
Group	Group N (Normal-flow)	35	48,6
	Group D (Low-flow)	37	51,4

Age(years)		63,1 ± 6,6	64,5 (39,0 – 70,0)
Weight (kg)		78,8 ± 8,8	80,0 (50,0 – 108,0)
Height (cm)		172,2 ± 5,5	172,0 (160,0 – 189,0)
BMI(kg/m2)		26,5 ± 2,4	26,8 (18,4 – 32,5)
ASA	I	3	4,2
	II	57	79,2
	III	12	16,7
Comorbidity	yes	50	69,4
	No	22	30,6
PEEP		5,6 ± 0,5	6,0 (5,0 – 7,0)

Comparison of FiCO2 Between and Within Groups

FİCO2	Group N (n=35)	Group D (n=37)	P
T-0 (35/37)	0,06 ± 0,24	0,03 ± 0,16	0,529
T-1 (35/37)	0,14 ± 0,36	0,54 ± 0,51	<0,001
T-2 (34/36)	0,56 ± 0,50	0,81 ± 0,40	0,027
T-3 (7/4)	0,29 ± 0,49	0,75 ± 0,50	0,166
T-4 (35/37)	0,74 ± 0,44	1,08 ± 0,43	0,002
P	<0,001	<0,001	
Difference	T0-T1 and T2-T4	All	

Comparison of Total Desflurane Consumption Between Groups

	Grup N (n=35)	Grup D (n=37)	P

Total Desflurane Consumption (ml)	192,8 ± 66,1	76,0 ± 16,3	<0,001

Discussion - Conclusion: We concluded that the low-flow anesthesia method can be used as safely as normal-flow anesthesia in terms of its effects on hemodynamics, and respiratory parameters in robotic-assisted laparoscopic cases when adequate equipment and anesthesia conditions are provided.

Keywords: Desflurane, Low-Flow Anesthesia, Robotic Assisted Laparoscopic Radical Prostatectomy

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Difficult Airway Management in a Juvenile Type GM1 Gangliosidosis Patient-Case Report

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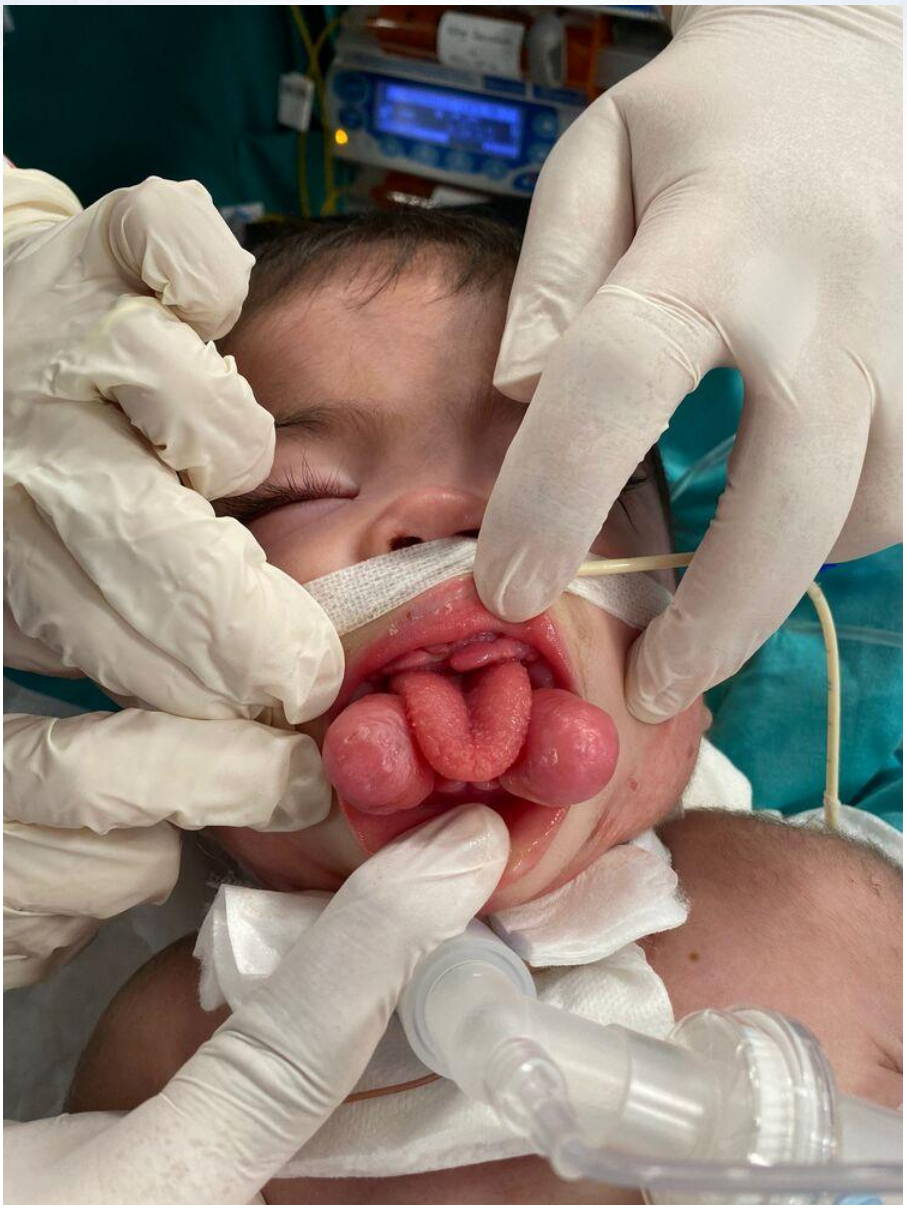
Giriş - Amaç: GM1 gangliosidosis is an autosomal recessive lysosomal storage disorder caused by beta-galactosidase deficiency.It varies clinically depending on the age at which symptoms of the disease appear and the enzyme activity.In this case, we will present our experience in the management of anesthesia during the operation of a 2-year-old patient diagnosed with GM 1 gangliosidosis due to an oral mass.

Phenomenon: A massive intraoral excision was planned in a 2-year-old boy,weighing 12 kg,who had been diagnosed with juvenile gangliosidosis type GM1,due to the formation of a mass 3 cm in diameter in the mouth extending bilaterally from the inside of the mouth to the outside.The patient,who had previously undergone ventriculoperitoneal shunt and inguinal hernia surgery,underwent tracheotomy due to his long stay in intensive care.The patient was considered to have difficult ventilation and intubation due to masses extending outside the mouth and macroglossia,and preparations were made. After a routine induction of anesthesia,he was connected to a mechanical ventilator via the tracheostomy tube.No complications developed during the operation. After the operation,the child was transferred to intensive care in a tracheostomized state and on mechanical respiratory assistance.

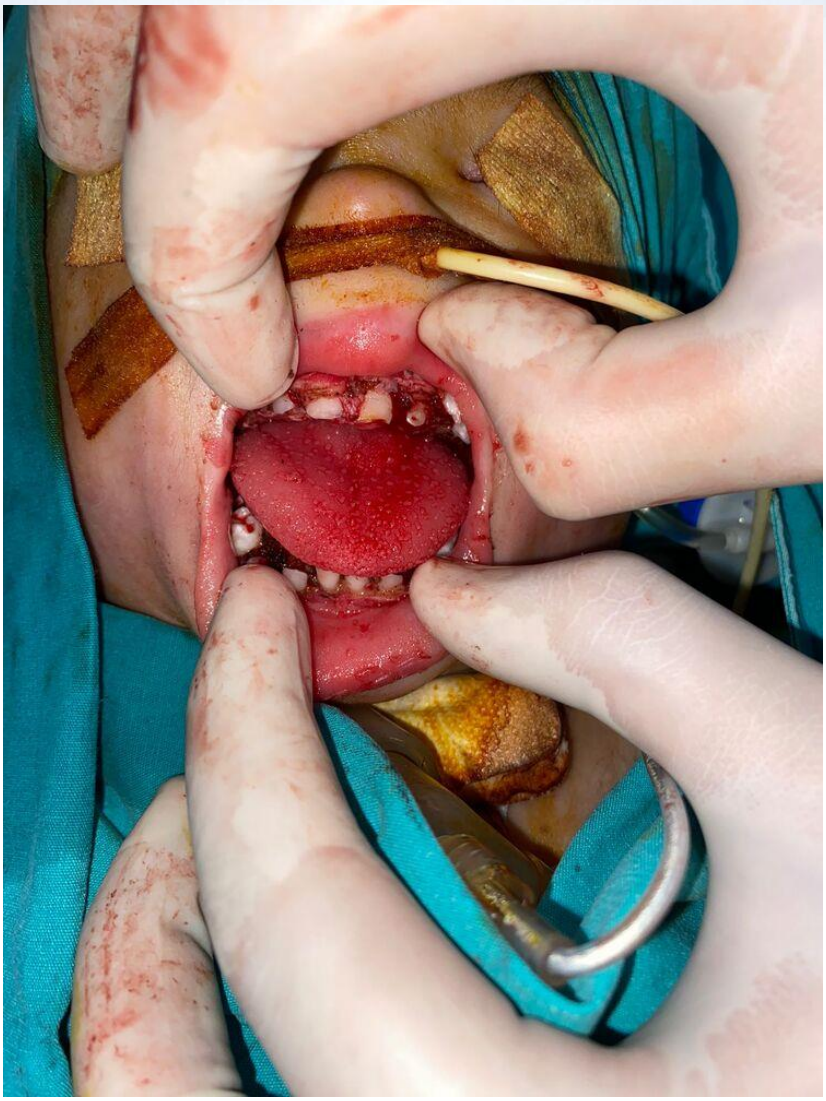
intraoral mass



intraoral mass



after mass excision



Discussion - Conclusion: In patients whose nervous system development has stopped completely starting from 3-6 months,as the age progresses,feeding difficulties and growth retardation,joint contractures,stiffness,dorsal kyphosis,and in most babies,coarse facial appearance,edema,large tongue,coarse gums,nasal root flatness may be observed. After 1 year,rapid neurological deterioration,seizures,swallowing problems,and death occur before the age of 2 years.(1-2) Literature information regarding airway management of patients diagnosed with juvenile type GM1 gangliosidosis is limited.Preoperative evaluation and history are vital in such patients.After preoperative evaluation, it may be beneficial to make difficult intubation and ventilation preparations in the operating room.In conclusion,although tracheostomy was performed for another reason in this patient,it facilitated airway management. Therefore,early tracheostomy with a multidisciplinary approach may be life-saving in these patients.

Keywords: difficult airway management, difficult ventilation, GM1 gangliosidosis

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Use of Videolaryngoscope in a Case of Difficult Ventilation Difficult Intubation

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Giriş - Amaç: Taking the necessary precautions in patients with difficult intubation and ventilation will reduce mortality and morbidity. One of the alternative methods that can be used in patients with difficult intubation is videolaryngoscopes which can provide good glottic visualization. We present a case of difficult ventilation and intubation in a patient who underwent neck dissection operation for tongue root cancer previously , intubated with videolaryngoscope.

Phenomenon: A 55-year-old female patient who was planned operation for metastatic resection from the lung was previously operated on for tongue root cancer, bilateral neck dissection and an artificial jaw was made by taking a graft from the thorax. The patient had limited mouth opening and no tongue movement. Mallampati IV and thyromental distance was 4 cm. The patient was informed and monitored preoperatively. The patient was preoxygenated before induction and induction was performed with 0.5 mg/kg bezodizepine, 2 mg/kg propofol, 1 µg/kg fentanyl and 0.5 mg/kg rocuronium. Oral airway was placed and oxygen support was provided with a mask. Laryngoscopy was attempted with Endolarynx brand videolaryngoscope . Number 35 left double lumen intubation tube was inserted through the glottic opening and the patient was intubated in approximately 35 seconds. Anesthesia maintenance was started with oxygen, air and sevoflurane after confirming the location with end-tidal carbon dioxide curve. At the same time, the location was confirmed with fiberoptic and tube fixation was performed at the appropriate level. She was extubated without any problems.

Discussion - Conclusion: It is extremely important to examine airway and to make the necessary preoperative preparations according to the examination. Many techniques and devices developed in recent years to facilitate difficult airway management. Videolaryngoscopes provide good laryngeal visualization and allow the necessary manipulations to be performed easily. In our case, successful intubation was achieved with videolaryngoscope despite limited laryngeal visualization.

Keywords: Difficult intubation, tongue root cancer, videolanringoscope

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Pub No: S-096

Rare Cause of Perioperative Tachyarrhythmia: Intermittent Wolf Parkinson White Syndrome

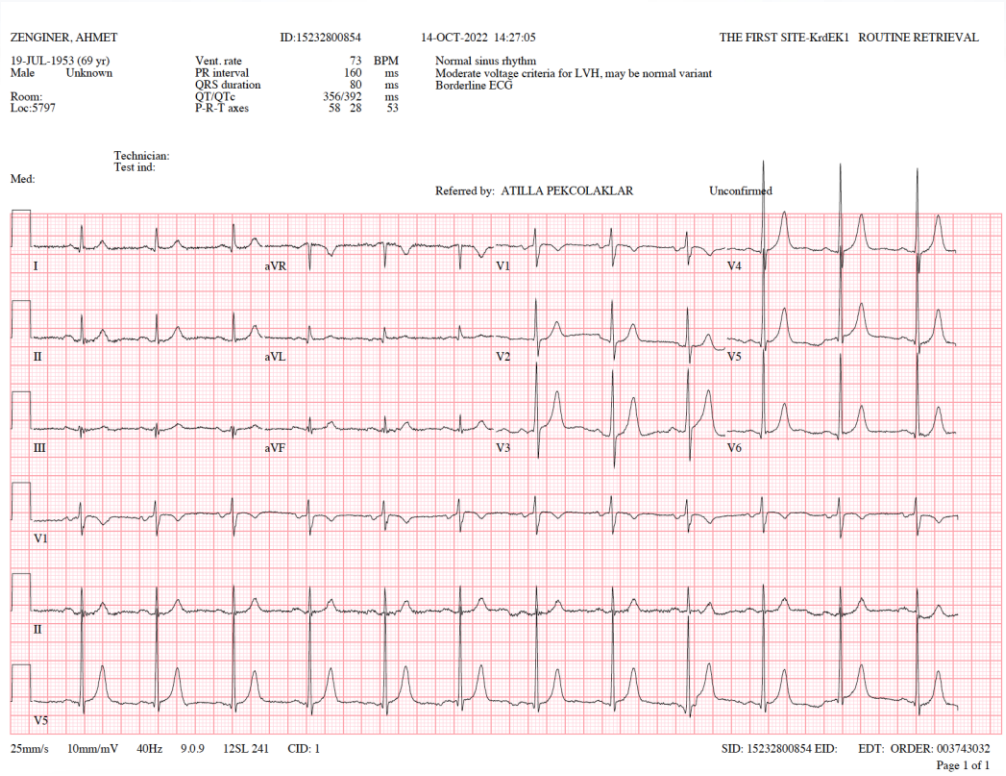
Eralp Çevikkalp[1], Emre Ulusoy[1], Serra Topal[1], İbrahim Denizkıran[1]

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Giriş - Amaç: Wolf-Parkinson-White (WPW) syndrome is a condition involving an accessory electrical pathway connecting the atria to the ventricles, leading to specific ECG abnormalities and potential life-threatening arrhythmias such as supraventricular tachycardia and atrial fibrillation (1). The incidence ranges from 0.1% to 3%. Importantly, the typical ECG findings can vary and may not always be evident (2). We present a case of WPW syndrome diagnosed intraoperatively.

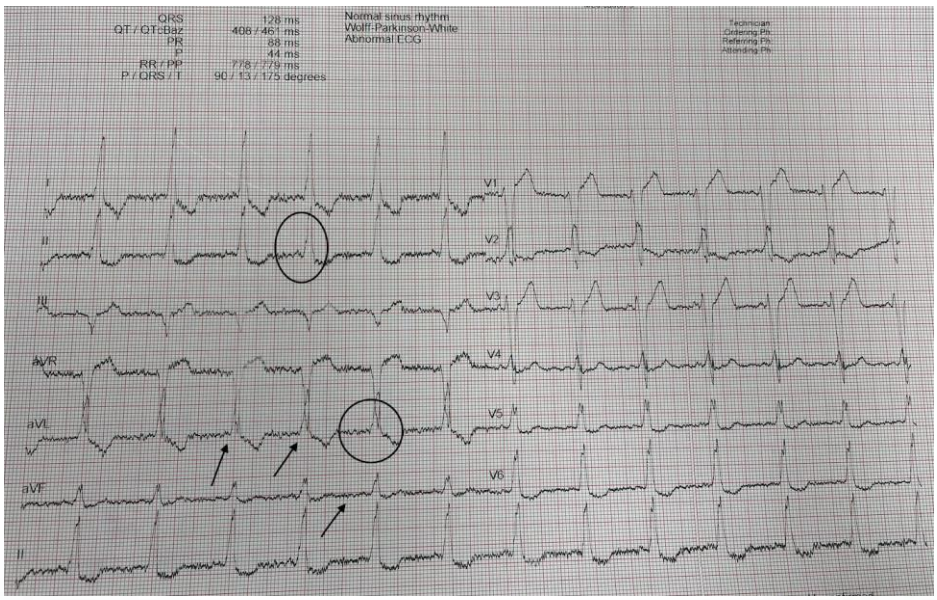
Phenomenon: A 69-year-old male patient, known to have hypertension and diabetes mellitus, was scheduled for a right upper lobectomy due to lung cancer. Laboratory results were normal. Chest radiograph revealed a right upper lobe mass. Preoperative ECG displayed a regular rhythm with a heart rate of 78 beats/minute, indicating normal sinus rhythm (Figure 1). Upon admission, the patient's blood pressure measured 140/75, oxygen saturation (SpO2) was 95 without oxygen support, and the ECG remained in sinus rhythm. For postoperative pain management, Epidural cathater was placed at the level of T4 for postoperative analgesia, and local anesthetic was administered before induction. Following induction, a 12-lead ECG was conducted upon observing a tachyarrhythmia in the ECG characterized by a short PR interval (<0.12 sec) and a wide QRS complex (>0.11 sec), suggestive of WPW syndrome (Figure 2). Intraoperative consultation with the cardiology team led to the postponement of the surgery due to bradycardia-related symptoms. The patient was monitored in the coronary ICU and, after three days, successfully underwent surgery. He had a stable postoperative course and was discharged on postoperative day 7.

Figure 1.



Preoperative ECG

Figure 2.



Intraoperative ECG

Discussion - Conclusion: WPW syndrome can lead to life-threatening arrhythmias under various circumstances (1,2). In our case, ventricular tachyarrhythmia manifested due to post- induction bradycardia. Notably, intermittent WPW syndrome may not exhibit preoperative ECG findings (3,4). It is crucial to remain vigilant about WPW syndrome in cases of perioperative tachyarrhythmias, even though they are relatively rare.

Keywords: Wolff-Parkinson-White Syndrome, Thoracic anesthesia, Electrocardiograph

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Oral Complications in Electroconvulsive Therapy: A Retrospective study

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Introduction - Purpose: Despite advances in pharmacotherapy, electroconvulsive therapy (ECT) remains a mainstay treatment option in psychiatry (1). The aim of this study is to determine the occurrence of oral injury from ECT modified with the use of an inexpensive, disposable, hand made oral protector, customized to the dental needs of the individual patient.

Materials and Methods: Based on data collected between January 1, 2013, and December 31, 2018, registered patients who had received ECT were evaluated retrospectively. We investigate the incidence of oral complications such as dental fracture, dental avulsion, temporomandibular joint dislocation, jaw pain, soft tissue, lip and tongue injuries in a single center.

Results: There were 1750 male patients (59.6%) and 1187 female patients (40.4%), with a mean age of 35.20 ±11.59 years. The incidence of oral injury was 0.1% per patient (4/2937) and 0.01% per session (4/22135). Oral complication characteristics included mucosal abrasion in 2 patients, dental fracture in one patient, and tooth avulsion in one. No dental fracture or avulsion in our patient population has resulted in aspiration. We found no evidence of jaw pain, temporomandibular joint dislocation, or injury to the lip or tongue.

Discussion - Conclusion: Our results demonstrate a minimum risk of oral complications during ECT (2) and also provide additional justification for an adequate oral assessment by the ECT team prior to the procedure.

Keywords: electroconvulsive therapy; dental fracture; tooth avulsion; oral complication; soft tissue injury.

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Pub No: S-098

PENG block for Enhanced Recovery After Surgery in Vein Ligation and Stripping

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Introduction - Purpose: Length of hospital stay (LOS) is an important concern in all types of surgery and the ERAS protocol has been developed to improve perioperative management and outcomes. In terms of pain control regional anesthesia and opioid-sparing analgesia are recommended. For vein ligation and stripping surgery, we aimed to use the PENG block both for surgical anesthesia and reduce pain and opioid-related side effects, thereby hastening recovery.(1-5)

Materials and Methods: This case series includes a total of 12 patients in which we provided surgical anesthesia with the PENG block. Ultrasound-guided PENG block was applied to the affected side using the technique described by Girón-Arango et al (6).

PENG



Results: Sensory block of the patients was evaluated by using pin prick test before starting the inguinal incision. Average onset time was 30 minutes. the duration of the operation was a minimum of 50 and a maximum of 95 minutes. 1 mcg/kg fentanyl was administered to the patients before stripping, and 1mg/kg propofol was given to 3 of these patients. None of the patients needed analgesics in the postoperative period. Eleven patients were discharged on the same day and the other one was discharged the next day. There were no complications in any of the patients.

Discussion - Conclusion: The PENG block method can be used in venous stripping treatments. However, as predicted by Girón-Arango et al(6), 8 patients also experienced minimal muscle strength loss. The PENG block is also associated with better patient satisfaction postoperatively. Although limited studies have been published on the use of the PENG block in surgical anesthesia, the application of ERAS for vein ligation and stripping surgery improves patient-reported quality of life in the early stages of recovery. The PENG block can be considered as a type of surgical anesthesia for early mobilization and discharge in vein ligation and stripping surgery.

Keywords: PENG block, vein ligation and stripping surgery, regional anaesthesia, ultrasound, ERAS

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Pub No: S-099

ESP Block: A Novel Approach for Nephrolithiasis-Associated Pain Management

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Giriş - Amaç: This case presentation aims to illustrate the effective application of Erector Spinae Plane (ESP) block in the management of acute nephrolithiasis-associated pain, focusing on its potential to reduce opioid utilization and enhance patient comfort.

Phenomenon: A 42-year-old male, with a history of smoking as the only significant medical background, was admitted to the emergency department with severe left-sided flank pain. An in-depth history revealed previous unresolved nephrolithiasis-related pain despite traditional analgesic interventions. Urological consultation confirmed left-sided nephrolithiasis as the etiology. Initial analgesia proved ineffective, as the patient continued to experience distressing pain (Visual Analog Scale [VAS] score: 8), prompting a referral to our service.Upon consultation to us, the option of ESP block for analgesia was discussed with patient, and with informed consent, a 20ml 0.25% Bupivacaine (Buvasin, Vem İlac, Türkiye) solution was administered at the 4th lomber vertebra level using ultrasound guidance. Within 15 minutes of the ESP block, the patient experienced a notable reduction in pain intensity (VAS score:3).

Discussion - Conclusion: This case highlights the successful management of nephrolithiasis-induced pain through an ESP block. By targeting the thoracolumbar fascia and associated nerves, the ESP block significantly reduced the patient's VAS score 8 to 3, demonstrating its efficacy in acute pain relief.The utilization of the ESP block in alleviating nephrolithiasis-induced pain presents a promising analgesic strategy. The rapid and substantial pain reduction observed in this case suggests the potential to decrease opioid consumption and mitigate associated adverse effects. This case underlines the significance of exploring regional anesthesia techniques such as the ESP block to enhance pain management strategies in nephrolithiasis cases, thus advocating for broader clinical application and future research in this area.

Keywords: ESP Block, Nephrolithiasis, Pain Management

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Pub No: S-100

Our Preventive Anesthesia Strategies in a Mitral Valve Replacement Patient with Glucose 6 Phosphate Dehydrogenase Deficiency

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[1]SBÜ Bursa Yüksek İhtisas EAH Anesteziyoloji ve Reanimasyon

Giriş - Amaç: Glucose 6 phosphate dehydrogenase deficiency (G6PDH) is the most common red blood cell enzymatic disease(1). In G6PDH deficiency, hemolysis develops because erythrocytes cannot keep glutathione in a reduced state when exposed to oxidative stress. The first and main goal of anesthesia for these patients is to prevent oxidative stress. We aimed to present our anesthesia management in an Mitral Valve Replacement (MVR) patient with G6PDH deficiency.

Phenomenon: 61 years, female patient, ASA3, DM, HT, advanced mitral valve calcification and ejection fraction 30%, pulmonary hypertension, critical G6PDH deficiency for MVR. Laboratory normal, bilirubin in urine, urobilinogen negative. After routine monitoring, reduced and specialized anesthesia induction;Swan Ganz catheter, paravertebral block (at T4 level) for multimodal analgesia, cerebral oximetry and BIS performed. Perioperative follow up stable; hypoxia and hyperoxia were avoided, made agent selection, the need for local anesthesia was reduced, and blood transfusion was not performed. Patient transferred to the ICU with postoperative dobutamine and perlinganite infusion. The patient did not need analgesics during the 24-hour postoperative and was extubated c22nd hour.

Perioperative datas of the patient

	MAP mmHg	htc mg/dL	Temperature C	pH	PaO_2 mmHg	$PaCO_2$ mmHg	Ürine output ml	rSO2 R/L	BIS	PCWP
Before anesthesia induction	78	34.8	37	7,37	78	40	500	83/78	95	32
Hypotermia	65	22.1	32	7,39	187	38	150	68/67	42	24
After CC	68	24.2.	35	7,36	192	42	250	72/70	45	18
After CPB	68	24.5	37	7,39	176	36	200	75/78	48	14

MAP: Mean arterial pressure, htc: hemotocrit, rSO2:rejionel oxygen saturation, BIS: Bispectral ındex, PCWP: Pulmonary capillary wedge pressure, CC: Cross Clamp, CPB: Cardiopulmonary bypass

Postoperative VAS values

VAS 1h	VAS 6h	VAS 12h	VAS 24h
0	0	1	2

VAS: Visual Analog Scale, h: hour

Discussion - Conclusion: It has been suggested that anesthetic agents such as halothane, ketamine, sevoflurane, prilocaine, diazem and midazolam are effective on G6PD enzyme activity, and especially sevoflurane, isoflurane, diazem and midazolam have an inhibitory effect (2). Cardiac surgeries performed in this group of individuals are associated with an additional risk of impaired oxygenation, prolonged ventilation, and increased risk of hemolysis(3). It is recommended to reduce anesthesia and surgical stress,use antioxidant agents such as selenium or vitamin E, and especially reduce pain in the postoperative period (4).Reducing the stress caused by surgery and anesthesia in patients with G6PD deficiency, avoiding drugs that may cause hemolytic crisis, effective treatment of pain, rapid surgery, less CPB and aortic cross-clamp time, maintaining normothermic bypass, normoxia, monitoring and titrating the anesthetic agent dose is efficient for maintaning hemolysis.

Keywords: G6PDH deficiency, Mitral valve replacement, oxidative stress

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Pub No: S-101

Traditional versus Pulse Pressure-Variation Based Approachto Intraoperative Fluid Management in Major Surgery

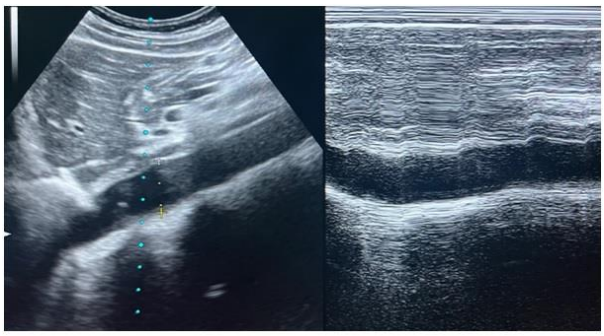
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Introduction - Purpose: The aim of our study was to compare the effects of goal-directed fluid management based on pulse pressure variation (PPV) and traditional fluid management on intraoperative hemodynamics and postoperative outcomes in major surgery.

Materials and Methods: 75 patients aged 18-65 years, ASA I-III, scheduled for major surgery under general anesthesia were divided into Group P (PPV) and Group T (traditional). Inferior vena cava diameters and Inferior vena cava collapsibility index (IVCCI) were measured in the operating room preoperatively and postoperatively (Figure 1). In Group P, when PPV was>12%, 250 ml/10 min of fluid was given until it reached ≤12%. Inotropic agent was given when PPV was ≤12% and hypotension was present. Demographic data, oxygen saturation, heart rate, blood pressure, pH, lactate, urine output, blood loss, the amount of fluid delivered and inotropic use were recorded intraoperatively. Postoperative urine output in the first 24 hours, complications, and length of stay in the intensive care unit and hospital were recorded.

Figure 1



IVC images (longitudinaland M mode)with USG

Results: Demographic data were similar between the groups(Table-1). There was no difference in the incidence of intraoperative hypotension and inotropic agent requirement between the groups (p=0.588,p=1.000). The preoperative IVCCI was 31.07±10.31 in Group P and 23,83±7.34(p=0.016) in Group T and the postoperative IVCCI was 25.63±7.73 in Group P and 19.77±8.07 in Group T (p=0.006). Total volume of fluid administered intraoperatively was 1425

ml in Group P and 3260 ml in Group T (p<0.001,Table-2).There was no significant difference between the groups in heart rate, mean arterial pressure, lactate, sPO2, pH, pCO2 and pO2 values. The duration of intensive care unit and hospital stay was shorter and pneumonia was less in Group P (p<0.001,p=0.003,p=0.038 respectively,Table-3).

Table 1: Demographic Data, Operation Diagnoses, and Durations [n (%), median (min-max), mean ± SD]

	Group P (n=30)	**Group T (n=30)**	***p***
Female/Male	15 (50.0) / 15 (50.0)	17 (56,7) / 13 (43,3)	-
Age (years)	53.97 ± 11.84	53.47 ± 8.90	0.477®
BMI(kg/m2)	24.33 ± 2.33	24.70 ± 2.18	0.858&
ASA	2 (2-3)	3 (2-3)	0.072®
Duration of operation (min)	166.90 ± 68.10	148.36 ± 50.30	0.236®
Duration of fasting time (hours)	9.1 ±1.5	8.7 ± 1.04	0.330&
Diabetes Mellitus	6 (20)	5 (16.7)	0.739&
Hypertension	12 (40)	11 (36.7)	0.791&
Type of Surgery			
IKK	23 (76.7)	19 (63.3)	
SA	2 (6.7)	9 (30.0)	
Nephrectomy	3 (10)	0 (0)	
Prostatectomy	2 (6.6)	2 (6.7)	0.796®

Table 2: Distribution of Preoperative-Intraoperative Fluid, Hb, Urine, and Blood Loss according to groups [n (%), mean ± SD]

	Group P (n=30)	**Group T (n=30)**	***p***
Preoperative Crystalloid (ml)	208.33 ±237.47	181.67 ±184.99	0.811
Intraoperative Crystalloid (ml)	1425 ±926.50	3260 ±917.02	**<0.001***
Intraoperative Urine (ml)	500 ±290.36	716.67 ±472.76	0.080
Intraoperative Bleeding (ml)	270 ±162.20	296.67 ±151.96	0.308
Preoperative Hb	12.33 ± 1.02	12.46 ± 1.64	0.708
Postoperative Hb	11.47 ± 0.83	11.40 ± 1.25	0.800

Table 3: Comparison of Postoperative Data Between Groups [n (%), mean ± SD]

	Group P (n=30)	Group T (n=30)	*p*
ICU stay (hours)	25.80 ± 6.39	39.20 ± 3.30	**0.000**[t]
Hospital stay (days)	3.93 ± 0.63	4.63 ± 1.03	**0.003**[t]
Urine (ml)	2135 ±205.59	2205 ±165.75	0.152[t]
Pneumonia	2 (3.3)	8 (13.3)	**0.038**[c]
Hypertension	8 (13.3)	14 (23.3)	0.108[c]
Hypotension	3 (5)	4 (6.6)	0.162[c]
Surgical infection	4 (6.6)	8 (13.3)	0.197[t]
Atelectasis	1	1	-
Pulmonary edema	0	1	-

t: Student T test, c: ChiSquare test

Discussion - Conclusion: Intraoperative fluid volume, incidence of postoperative pneumonia, intensive care unit and hospital length of stay were less in patients with goal-directed fluid management based on PPV compared to traditional management in major surgery(1,2,3)

Keywords: Goal-directed therapy, Inferior Vena Cava, Ultrasonography, Pulse Pressure, General Anesthesia

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Pub No: S-103

Anesthesia Management in 7 Pediatric Patients with Osteogenesis Imperfecta

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Giriş - Amaç: Osteogenesis imperfecta (OI) is an autosomal inherited connective tissue disease whose incidence in live births is reported to be approximately 1:20000. Abnormal type I collagen production occurs due to specific mutation in type I collagen genes and is divided into 4 types. Patients diagnosed with Type I and Type IV OI only have a normal life expectancy despite having deformities such as short stature and kyphoscoliosis (1,2). Our aim in this presentation is to evaluate the anesthetic approach we applied to 7 pediatric patients diagnosed with OI who underwent surgery for various reasons.

Phenomenon: Anesthesia was administered to 7 pediatric patients diagnosed with OI. Informed consent was obtained from the relatives of all these patients. Demographic data and anesthesia practices of the cases are shown in Table 1 and Table 2. No complications were observed in any of the patients during anesthesia. None of the patients had any difficulties in mask ventilation, intubation and LMA placement. In the majority of our patients, airway was established with LMA.

Table 1

	Age	Gender	Weight,kg	ASA
case 1	11 year	Male	25	II
case 2	1 year	Female	13	II E
case 3	3 months	Male	2	IV
case 4	3 months	Male	5.5	III
case 5	5 months	Male	4	II
case 6	3 months	Female	4	II
case 7	10 year	Female	25	II E

ASA : American society of anesthesiologists

Demographic data

Table 2

	operation name	Airway management	Anesthetic approach Induction / Maintenance		Anesthesia duration, min	Length of stay, day
case 1	Circumcision	Face mask	Midazolam, ketamine, propofol	-	20	1
case 2	Supracondylar fixation	ETT	Propofol, fentanyl, rocuronium	Sevoflurane	180	3
case 3	Tracheostomy +PEG	ETT	Fentanyl, lidocaine, propofol, rocuronium	Sevoflurane	60	80
case 4	Cystoscopy	LMA	Fentanyl, lidocaine, propofol	TIVA (Propofol, remifentanyl)	50	40
case 5	Inguinal hernia	LMA	Midazolam, fentanyl, lidocaine, propofol	TIVA (Propofol, remifentanyl)	110	59
case 6	Achilloplasty	LMA	Midazolam, fentanyl, lidocaine, propofol	Sevoflurane	90	4
case 7	Femur head frakture	LMA	Midazolam, fentanyl, lidocaine, propofol	TIVA (Propofol, remifentanyl)	90	4

ETT: endotracheal intubation, PEG: Percutaneous endoscopic gastrostomy, LMA: laryngeal mask airway, TIVA: total intravenous anesthesia

Features related to operations and anesthesia practices

Discussion - Conclusion: Patients with OI need anesthesia due to recurrent bone fractures, and there may be various difficulties during anesthesia such as difficult ventilation, difficult intubation, tooth and mandible fractures, risk of cervical trauma, and difficulty in positioning (1,2). Studies have been reported in which both regional techniques and general anesthesia were successfully applied (3). Hall et al. (1992) reviewed 266 anesthesia applications in OI patients over a 30-year period and drew attention to the increased metabolic rate, not the increase in the risk of malignant hyperthermia (4). Bojanic et al. (2011) collected data focusing on intraoperative hyperthermia in 180 anesthesia applications in 49 patients and reported that no anesthetic complications were observed (5). In patients with OI, care must be taken to avoid new fractures during monitoring, positioning, establishing vascular access and providing airway.

Keywords: Osteogenesis imperfecta, general anesthesia, regional anesthesia

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Pub No: S-105

Comparison of the Peroperative Effectiveness of Preoperative Pericapsular Nerve Group Block and Lumbar Erector Spina Plan Block in Patients Undergoing Hip Fracture Operation

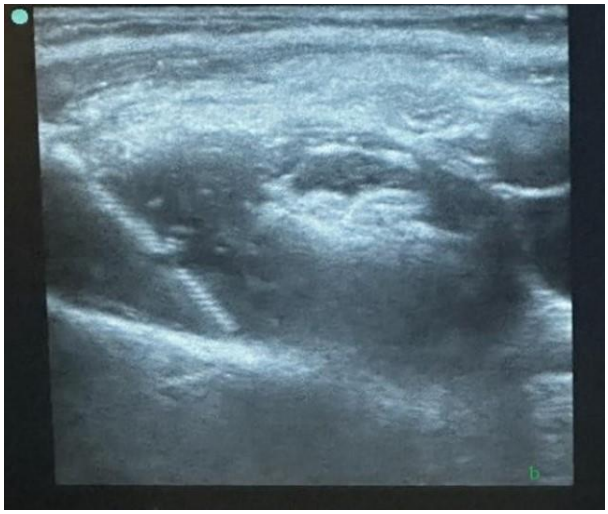
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Introduction - Purpose: Anesthesia planning for elderly patients undergoing hip fracture surgery revolves around managing perioperative pain and selecting the ideal anesthesia technique. Peripheral nerve blocks, particularly the PENG (Pericapsular Nerve Group) and L-ESP (Lumbar Erector Spinae Plane) blocks, are vital in this context. This study aims to compare the effectiveness of preoperative PENG and L-ESP blocks in elderly patients undergoing hip fracture surgery under spinal anesthesia.

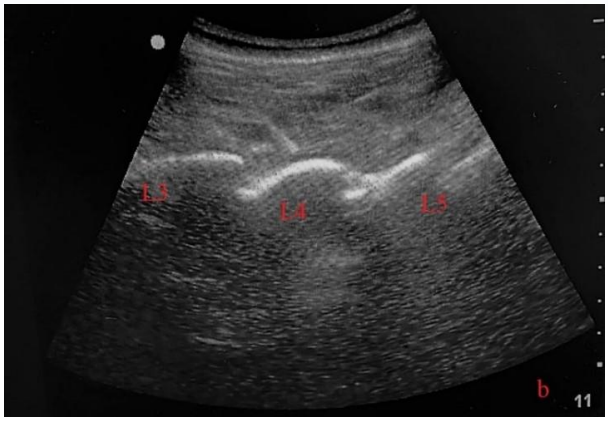
Materials and Methods: In this prospective, double-blind study, 120 ASA I-III patients scheduled for hip fracture surgery were divided into two groups. Group 1 received the PENG block, and Group 2 received the L-ESP block before spinal anesthesia. The study evaluated positional pain during spinal anesthesia, intraoperative hemodynamics, postoperative pain, additional analgesic needs, time to first opioid requirement, patient and healthcare provider satisfaction, hospital stay, and complications.

PENG BLOCK



PENG Bloğu iğne ve lokal anestezik uygulama sonrası görüntüsü PT: Psoas Tendonu, AIIS: Anterior İnferior İliak Spina FA: Femoral Arter, FV: Femoral Ven, IPE: İliopubik Eminens.

L-ESP BLOCK



. L-ESP Bloğu İğne ve Lokal Anestezik Uygulama Sonrası Görüntüsü L3: Lomber 3. Vertebra, L4: Lomber 4. Vertebra, L5: Lomber 5. Vertebra, ESM: Erektör Spina Kası

Results: Both groups exhibited similar pain scores during spinal anesthesia and comparable additional analgesic requirements. However, Group 1 had lower systolic and mean arterial pressures during surgery and required more ephedrine. Postoperatively, there were no significant differences in pain scores, opioid needs, complications, or hospital stay. Patient satisfaction was similar, but surgeon and anesthesiologist satisfaction favored the L-ESP block group

Discussion - Conclusion: Both PENG and L-ESP blocks offer effective pain relief during spinal anesthesia and in the postoperative period for elderly hip fracture patients. However, L-ESP blocks were associated with better intraoperative hemodynamics and higher satisfaction among healthcare providers. The choice between these blocks should consider the surgical context, with PENG blocks more suitable for PFN surgery and L-ESP blocks for endoprosthesis operations. Ultimately, L-ESP blocks are deemed as effective and safe as PENG blocks in hip surgery, catering to varying surgical needs

Keywords: Hip fracture, PENG and L-ESP

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Pub No: S-106

After Intracranial Surgery Sodium Thiopental Infusion and Hypokalemia

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Giriş - Amaç: Hypokalemia is a common electrolyte disorder in intensive care units(ICU) and affects mortality and morbidity in patients. The causes of hypokalemia in intensive care include insulin infusion, primary hyperaldosteronism, corticosteroid use, inadequate potassium intake, gastrointestinal losses and diuretic use.(1) In this case, we wanted to describe a patient with hypokalemia due to sodium-thiopental infusion, which is not seen very often.(2)

Phenomenon: A 39-year-old male patient with no diagnosis other than epilepsy was operated on for cerebral arteriovenous malformation. The operation lasted in 8 hours. Because of the cerebral edema, at the end of the operation, the surgery was terminated by decompression surgery. Postoperatively, the patient was taken to the intensive care unit, intubated and sedated (by sodium-thiopental 5mg/kg/h). In this process he was receiving dexamethasone 4x4mg, %20mannitol 6x100ml, levetiracetam 2x500mg, pantoprazole 1x40mg, meropenem 3xgr, enoxaparin 1x6000IU. The patient's intensive care follow-up revealed profound hypokalemia despite adequate potassium replacement (K:1.55-2.14mmol/lt). ACTH, TSH, prolactin, cortisol, sodium in spot-urine were sent from the patient whose urine output increased during this period. The test results showed TSH 0.105mIU/L(low), cortisol 0.3µg/dL(low), ACTH 1.12ng/L(low), urine density 1015(normal), Na in spot urine 91 mmol/L(normal) and prolactin 16.9µg/L(high). The patient was consulted with internal medicine after the test results. Internal medicine thought that he had ACTH suppression due to central diabetic inspitus and dexamethasone use. The patients Na(140-148mmol/lt) and glucose(110-150mg/dl) results were normal. There was no insulin usage during this period. We thought the cause of patients hypokalemia might be sodium-thiopental infusion. For this reason; we stopped sodium thiopental infusion and started midazolam infusion for sedation. One day after this drug change, the hypokalemia disappeared and normalized with fluid replacement.

Discussion - Conclusion: In addition to the many causes of hypokalemia, which is a cause of mortality and morbidity in ICUs, sodium-thiopetal infusion should be kept in mind.

Keywords: hypokalemia, sodium-thiopental

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Pub No: S-107

Rare Endocrine Disorder; Secondary Fahr Syndrome

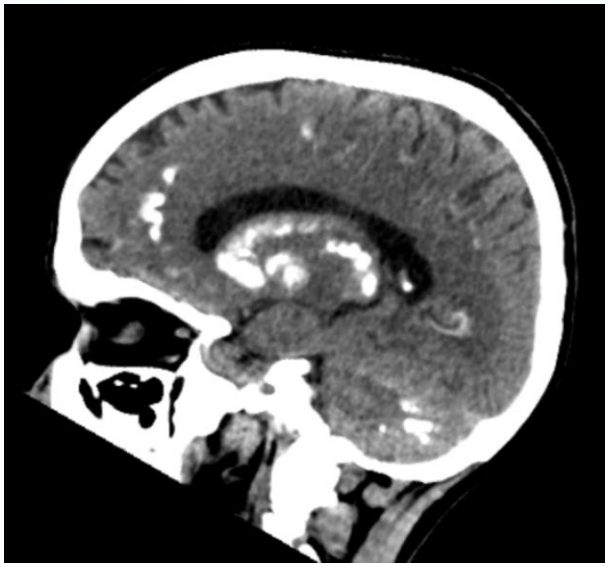
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Giriş - Amaç: Fahr Syndrome(FS), was first described by a German neurologist in1930.FS is a condition that progresses with abnormal bilateral calcifications in neurons and can be hereditary or secondary to endocrine pathologies such as hypoparathyroidism, pseudohypoparathyroidism and hyperparathyroidism. We aimed to examine the endocrine infrastructure of a rare disease by presenting secondary-Fahr Syndrome.

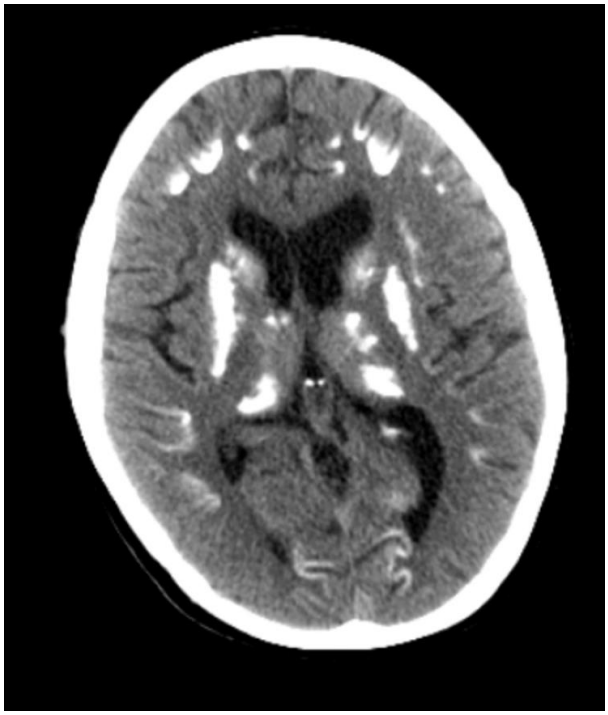
Phenomenon: A 26-year-old male from Eritrea was referred to the emergency department due to a recent worsening of oral intake,nausea over the past week and developed changes in consciousness.His medical-history have epilepsy for the past three-years.No-pathological findings were observed in the neurological-examination except he was confused(GCS:13/15(E3M6V4).His systemic examination revealed abdominal tenderness,reduced diuresis,and hypotension(Norepinephrine0.05-0.1mcg/kg/min-infusion),with no-other pathological findings.He didn't get any surgery and there are no hereditary-diseases in his family.Brain-computer tomography(CT) revealed bilateral calcifications consistent with FS.Significant electrolyte imbalances (Na+:139mEq/L,K+2:1.28mEq/L,Ca:5.31mg/dL,Mg:2.05mg/dL,Alb:3.9g/dL,Creat:4.58mg/dL) and metabolic acidosis were observed in his laboratory-exam.Secondary causes ofFS were investigated.The patient had hypothyroidism and hypoparathyroidism(TSH:125uIU/mL"0.27-4.20,"Parathormone:1.59pg/mL"15-65"),as-well-as vitamin-D deficiency,and secondary adrenal insufficiency.Genetic examination to detect FS doesn't have any mutations.The patient diagnosed with hypoparathyroidism-related secondary-FS.The treatment of hypothyroidism was started with Hydrocortisone200mg (equivalent dose of Dexamethasone 2x4mg), L-thyroxine1x1000mcg and triiodothyronine 3x6.25mcg.

Figure 1



Brain Computer Tomography - Sagittal Plane: Bilateral hyperdense lesions at the level of cerebellum, basal ganglia and around lateral ventricle.

Figure 2



Brain Computer Tomography - Axial Plane: Bilateral hyperdense lesions at the level of lateral ventricle.

Table 1

Parameters	Admission	Control	Reference Range
pH	7.21	7.45	7.35-7.45
Bicarbonate (mEq/L)	14	26	22-28
$PaCO_2$ (mmHg)	35	37	35-45
So2 (%)	97	97	95-99
PaO_2 (mmHg)	86	113	60-108
Lactate	2.4	0.6	<1
Haemoglobine (g/dL)	12.5	9.4	10-15
Platelets count ($x10^9$/L)	343	149	150-400
WBC count ($x10^9$/L)	9.7	6.4	3-11
C-Reactive Protein (mg/L)	8.8	7.6	0.5-5.0
Urea (mg/dL)	66	4	13-43
Creatinine (mg/dL)	4.91	0.54	0.7-1.2
e-GFR (mL/min/1.73m^2)	16	>90	>90
Sodium (mEq/L)	132	141	135-145
Potassium (mEq/L)	1.44	2.79	3.5-5.1
Calcium (mg/L)	5.3	5.5	8.6-10
Albumine (g/dL)	3.9	4.2	3.5-5.0
Cloride (mEq/L)	95	98	98-106
Phosphorus (mg/dL)	3.5	5.6	2.5-4.5
Magnesium (mg/dL)	2.0	2.2	1.6-2.6
Parathormone	1.59	4.30	15-65
ACTH (ng/L)	88.5	-	7-63

Cortisol	44	43	
Thyroid Stimulating Hormone (uIU/mL)	125	0.77	0.27-4.20
Free Thyroxine-T_4 (ng/dL)	0.32	1.95	0.93-1.70
Free Thiiodothyronine-T_3 (pg/mL)	0.7	2.1	2.6-4.4
1-25 dihydroxyvitamin D (pg/mL)	17	-	15-90

Blood Test Results: Hospital Admission and Before Discharge

Discussion - Conclusion: In contrast to other cases in the literature,the patient has no-history of previous surgery or radiotherapy and secondary-FS associated with central hypothyroidism and hypoparathyroidism was identified.The diagnosis of FS is typically made in two ways: incidentally with CT or genetically when they have family history. There is no-definitive method for treatment; the goal is to improve the quality-of-life for patients, prevent secondary complications and treat underlying diseases.Endocrine pathologies are rare in intensive care, and when appropriately treated, they generally have a good outcome. In our patient diognosed with hypoparathyroidism, hypothyroidism,and secondary adrenal insufficiency intensive care admission was required due to severe electrolyte imbalance and hypotension.The patient was appropriately treated and is charged in a good condition after thiryt-eight days of hospitalisation.

Keywords: Idiopathic Basal Ganglia Calcification, Hypothyroidism, Hypoparathyroidism, Rare Disease

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Pub No: S-108

Can Venovenous Ecmo Be the Gold Standard in the Treatment Management of Persistent Pneumothorax and Spontaneous Bronchopleural Fistula Accompanying Immune Deficiency-related Pneumonia?: Case Report and Literature Review

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Giriş - Amaç: Bronchopleural fistula and pneumothorax may occur as separate clinical presentations due to secondary causes. These are often associated with obstructive pulmonary diseases or post-operative complications. Less commonly it may occur in immunocompromised individuals when pneumonia is complicated by opportunistic infections. As in our case, according to tracheal aspirate culture results, it was determined that pulmonary complications developed secondary to pneumocystis carinii pneumonia(PCP).

Phenomenon: Our patient is a 32-year-old male patient, and there is no feature in his history other than smoking and HIV positivity. The patient, who comes to the emergency room with fever, dyspnea, tachypnea and confusion; is first intubated and then a tube thoracostomy is performed due to severe hypoxic respiratory failure, pneumothorax and pneumonia. A serious bronchopleural fistula was detected in the right apical lobe in the CT scan. It was decided that the patient, who had severe ARDS according to the Berlin criteria, Horowitz index <90 and Murray score > 3, would be placed on VV ECMO for both primary treatment and preoperative bridging with a multidisciplinary approach. The patient underwent wedge resection under venovenous extracorporeal membrane oxygenation(VV-ECMO) support in the operating room on the same day. On second post-operative day, patient was weaned off ECMO and extubated. During the follow up pneumothorax recurred and necrotizing invasive aspergillosis was detected as a result of pathology. The patient was re-intubated and an early bedside tracheostomy was performed 2 days later. The patient died on the 19th day of hospitalization due to the development of profound pancytopenia, pneumosepsis and acute respiratory distress syndrome (ARDS) during follow-up.

Discussion - Conclusion: Management of complicated pneumosepsis and persistent air leakage requires urgency and is important in patients with immunodeficiency. A proactive treatment approach can be lifesaving. We think that our management in this case will shed light on the treatment of future patients.

Keywords: spontaneous bronchopleural fistula, spontaneous recurrent pneumothorax, immunodeficiency-associated necrotizing pneumonia, immunodeficiency-associated bronchopleural fistula, VV ECMO

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Pub No: S-109

Our Experiences with Percutaneous Endoscopic Gastrostomy in the Intensive Care Unit

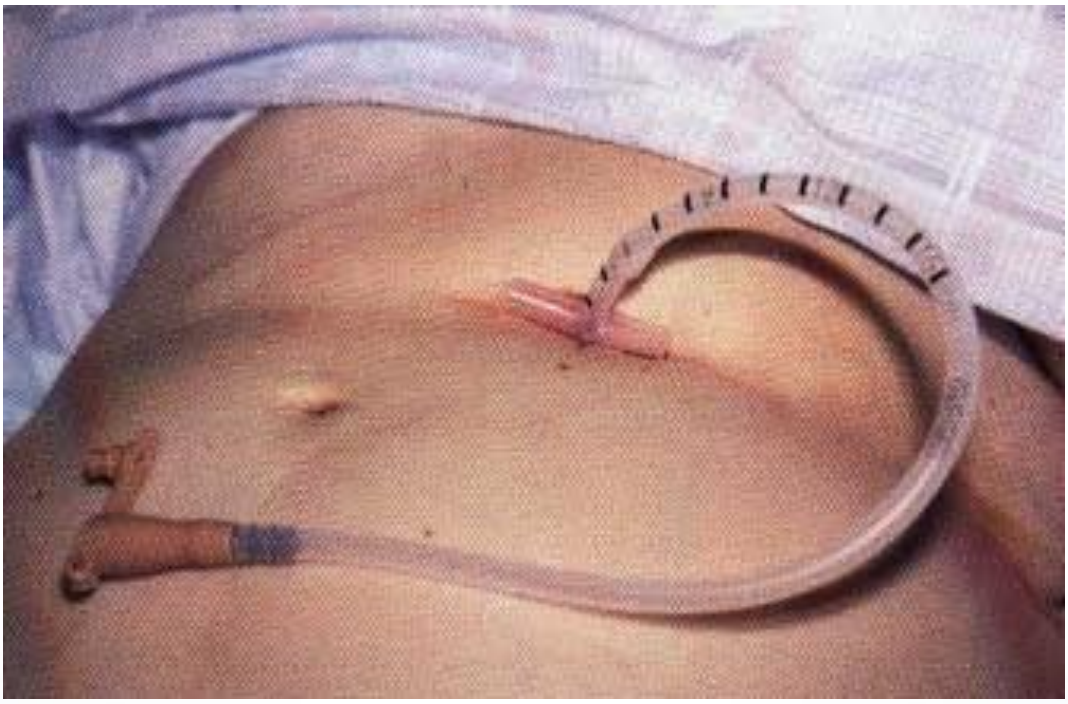
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Introduction - Purpose: Although nutrition is important for intensive care patients, most of them have difficulty in oral feeding due to indications for hospitalization. Nutrition can mostly be provided by nasogastric tube, percutaneous endoscopic gastrostomy (PEG) and parenteral nutrition. In this study, we aimed to retrospectively evaluate patients who underwent PEG for nutritional purposes in intensive care.

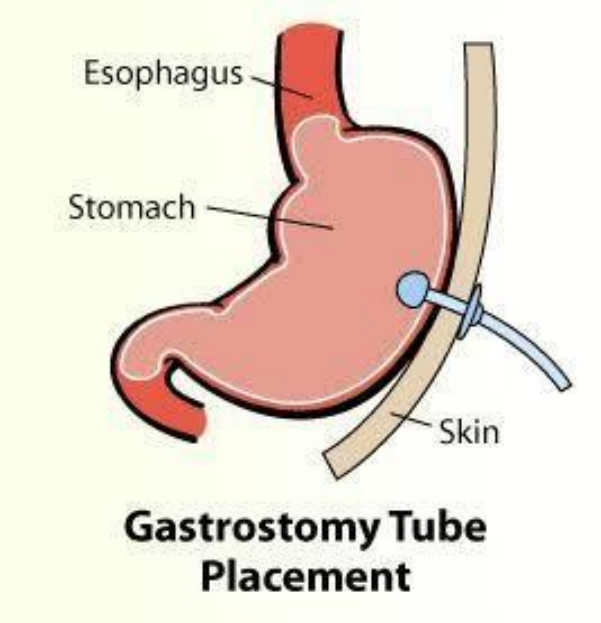
Materials and Methods: Patients who underwent PEG surgery in Bursa City Hospital Intensive Care Unit between July 2019 and October 2023 were included in the study. The patient's age, gender, primary hospitalization diagnosis, hospitalization duration, APACHI score, comorbidities, intensive care unit where treatment was given, PEG procedure-related complications and mortality were evaluated retrospectively.

PEG takılması



PEG'in dıştan görünümü

PEG



PEG takılması

Results: A total of 72 patients, 36 (50%) of whom were female and 36 (50%) of whom were male, were included in the study. The median age of the patients was 74.5 years. The mean APACHI score was 22.26 ±9.66. The primary hospitalization diagnosis of the patients was cerebral in 41 patients, cardiac in 6 patients, and pulmonary diseases in 25 patients. The most common accompanying chronic disease in the patient's history was hypertension. The median length of stay of the patients was 58.5 days (Range: 9-151 days). PEG was performed on 57 patients hospitalized in neurology, internal medicine, coronary and anesthesia intensive care units. After the procedure, complications that could be treated conservatively were observed in 9 patients (12.5%). Mortality due to PEG opening was not observed, and mortality was observed in 58 patients (80,6%) due to other reasons.

Tablo: 1- PEG İsteyen Birimler

	PEG yapılma yeri	Yüzdesi
Genel YB A Blok	3	4,2
Genel YB B Blok	11	15,3
Genel YB C Blok	11	15,3
Reanimasyon	21	29,2
Cerrahi YB	11	15,3
Dahiliye/Nöroloji/KoronerYB	15	20,8
Total	72	100

PEG İsteyen Birimler

Tablo: 2- Yatış Tanıları

	Yatış Tanısı	Yüzdesi
Serebral Patoloji	41	56,9
Kardiyak Patoloji	6	8,3
Pulmoner Patoloji	25	34,7
Total	72	100

PEG takılan hastaların YB Yatış Tanıları

Tablo: 3- Mortalite

	Mortalite Sıklığı	Yüzdesi
Sağ	14	19,4
Exitus	58	80-6
Total	72	100

PEG takılan hastaların mortalitesi

Discussion - Conclusion: PEG should be preferred in patients requiring long-term enteral nutrition because it has a low complication rate, provides effective nutrition for the patient and is a bedside procedure that can be applied in intensive care.

Keywords: Intensive care unit, PEG, Nutrition

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Pub No: S-110

A Trip From Ptosis to Pituitary Apoplexy: A Case Report

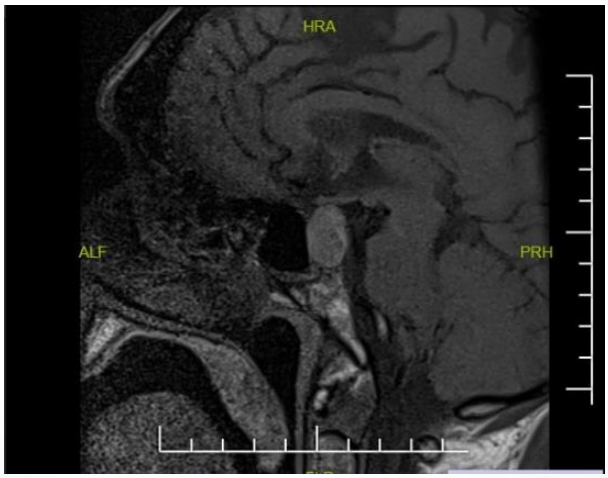
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Giriş - Amaç: Pituitary apoplexy is a rare and life-threatening emergency clinical condition characterized by acute infarction or hemorrhage of the pituitary gland. Headache, vomiting and visual impairment are called 'apoplexy triad'. Ptosis, limited eye movements, and mydriasis occur due to oculomotor nerve paralysis. Signs of secondary adrenal insufficiency such as nausea, vomiting, hypotension, hypoglycemia, hyponatremia; gonadotropin deficiency and central hypothyroidism may be observed. In this report, we aimed to indicate that a minor physical examination symptom may be a sign of a critical illness that may extend to intensive care.

Phenomenon: A 58-year-old man with known diagnoses of hypertension and chronic renal failure was admitted to our hospital for sudden headache, redness in the eyes, tendency to sleep, and drooping eyelid in the right eye. Due to respiratory failure, he was transferred to the intensive care unit.On physical examination, Glasgow Coma Scale was 14 (E4V4M6), light reflexes were +/+, pupil diameters were 4 mm/2 mm. Eye movement was restricted in the right lateral, medial, superior, inferior directions but was free in all directions in the left eye. Vital signs showed hypoxemia and hypoglycemia. Admission test results are shown in table 1.The patient had headache, droopy eyelids, central hypothyroidism, and a tendency to hypoglycemia. Pituitary insufficiency and an intracranial mass compressing the 3rd cranial nerve were considered. Endocrinology and neurosurgery were consulted. Anterior pituitary panel, cortisol, contrast-enhanced brain MRI and pituitary MRI were requested. (Table 2, Figure 1). After respiratory failure was regressed, patient was transferred to neurosurgery for operation.

Figure 1: MR, Pituitary



There was a significant increase in pituitary gland size (26x26x23 mm). There were hypointense areas in the non-contrast T1 sequence, hyperintense areas in the T2 sequences, and hypointense areas superior to the optic chiasm, which could be due to bleeding. It was reported that the findings may belong to pituitary apoplexy.

Figure 2: Mr Pituitary

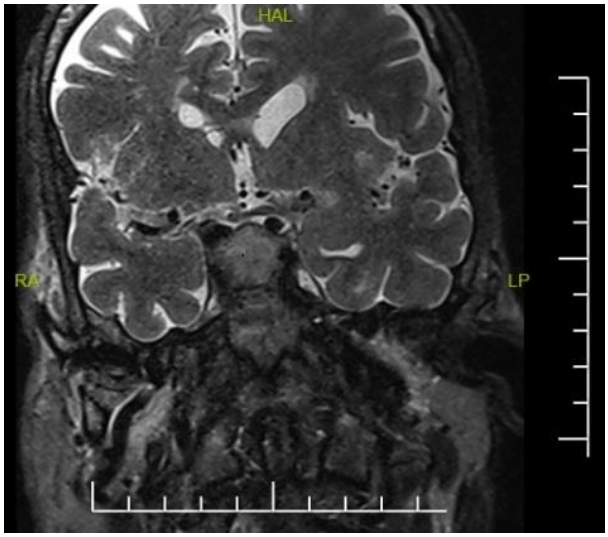


Table 1: Tests of biochemistry and hemogram

Test	Result	Normal Range of Value
Glucose	59	70-100 mg/dL
BUN	55	6-20 mg/dL
Cr	7,79	0,7-1,20 mg/dL
Na	130	136-145 mmol/L
K	4,5	3,5-5,1 mmol/L
AST	34	0-40 IU/L
ALT	14	0-41 IU/L
TSH	0,01	0,27-4,20 mIU/L
fT3	0,78	2,04-4,44 ng/L
fT4	0,74	0,93-1,71 ng/L
WBC	8,94	3,91-10,9 10^3/µL
Hb	7,4	13,5-16,9 10^3/µL
PLT	279	150-450 10^3/µL

(BUN, Blood Urea Nitrogen; Cr, Creatinin; Na, Sodium; K, Potassium; AST, Aspartat Aminotransferase; ALT, Alanine Aminotransferase; TSH, thyroid-stimulating hormone; fT3, free triiodothyronine; fT4, free thyroxine; WBC, White Blood Cell; HB, Hemoglobin; PLT, platelet)

Table 2: Hormone test results

Test	Result	Normal Range of Value
IGF-1	15,1	62,3-192 ng/ml
TSH	0,01	0,27-4,20 mIU/L
GH	0,35	0,03-2,47 mcg/L
Cortisol (08:00)	7,17	8 AM: 6,02-18,4 mcg/dL
FSH	1,4	1,5-12,4 IU/L
LH	0,8	1,7-8,6 IU/L
Total Testosterone	0,13	1,93-7,40 mcg/L
ACTH	<1,5	7,2-63,3 ng/L

(GH, growth hormone; ACTH, adrenocorticotropic hormone; LH, luteinising hormone; FSH, follicle stimulating hormone; TSH, thyroid-stimulating hormone.)

Discussion - Conclusion: The combination of ptosis and central hypothyroidism may indicate pituitary adenoma/apoplexy which may have life-threatening consequences.A minor symptom may be a small sign of an iceberg.

Keywords: ptosis, pituitary apoplexy, intensive care

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Pub No: S-111

Should all the Acute Intoxiatons Be Observed in Intensive Care Unit?

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[1]Haydarpaşa numune eğitim ve araştırma hastanesi

Giriş - Amaç: Rational usage of intensive care facilites is a very popular and major problem. Acute intoxication due to suicidal attemps can cause reduntant traffic in intensive care units(ICU). Poison Counceling Center(PCC) supplies information about poison and make recommendations about ICU stay and treatment. In this study, we aim to search our acute intoxications treated in ICU between February 2018 and May 2021

Phenomenon: A single center, retrospective observational study was conducted among the patients followed up in ICU originated from acute intoxication. Data was derivated from Health Information Sytem and patients files. Patients who took drugs and substance to commit suicide and were treated in ICU, were included.

Discussion - Conclusion: 30 patients have been treated in ICU, %50 of patients was female and only %16,6 needed mechanical ventilation. None of the patients required vasoactive agents or hemodialysis. Mechanically ventilated patients stayed longer than PCC recommendation.In recent years numbers of suicides have been increased. According to Turkish Statical Instution datas, %3,3 percentage of suidices occured by chemicals. In some cases, respiratory failure and hemodynamical instabilisation may occur. According to our findings, these PCC recommendations were resulted with 92 ICU bed days. Despite shorter ICU stay in these patient group,high costs of ICU stay and fullness of ICU beds sould be kept in mind and these patients can be admitted to less expensive units for “observation”. ConclusionSome new medical poisinig scores can estimate the “real” critical patients and these patients should be treated in less expensive units.

Keywords: Intoxication Intensive Care Unit ICU Poisoning

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Pub No: S-112

Intraoperative Neuromonitoring in Thyroid Surgery with Bilateral Vocal Cord Paralysis

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Giriş - Amaç: Bilateral vocal cord paralysis, complication resulting from recurrent laryngeal nerve injury during thyroid surgery, is one of the most life-threatening problems that closely concern anesthetists. In recent years, intraoperative neuromonitoring (IONM) based on endotracheal tube has been widely used to reduce complications. Purpose of this presentation is examines role of the anesthetist and important considerations in thyroid surgery with IONM.

Phenomenon: A 67-year-old, 85kg female patient, evaluated as preoperative ASA2, had thyroid ultrasound showing enlarged thyroid tissue on the right (26-22mm), left (25-25mm) sides.Diffuse reduction in parenchymal echo, several solid hypoechoic nodules, the largest measuring 21mm on the right, 22mm on the left. Total thyroidectomy operation was planned. The patient was evaluated by an ENT specialist, and bilateral vocal cords were found to be mobile with an open rima glottis. Following standard monitoring in operating room, intravenous propofol (2.5mg/kg), rocuroniumbromide (0.5mg/kg) were administered during induction. Patient was intubated with size 7 endotracheal spiral tube suitable for neuromonitoring using a videolaryngoscope. Operation lasted for 150 minutes, with no additional muscle relaxant administered perioperatively. Following extubation, patient experienced laryngospasm, inability to speak, breathlessness. A bilateral vocal cord paralysis diagnosis was made through a vocal cord examination with an ENT specialist in the operating room. The patient was sedated again, intubated, transferred to intensive care unit. Anti-edema treatment was administered, extubation attempts on the 3rd and 4th postoperative days were unsuccessful.With a consensus from ENT, general surgery, anesthesia clinics, tracheostomy was performed by the ENT clinic under operating room conditions on 5th postoperative day. Patient was admitted to general surgery clinic on the 11th postoperative day, discharged on the 22nd day with a tracheostomy in place.

Discussion - Conclusion: In this case, complications that may develop despite monitoring in thyroidectomy surgery performed using IONM and importance of close postoperative patient follow-up are discussed by reviewing relevant literature

Keywords: vocal cord paralysis, intraoperative neuromonitoring, thyroid surgery, Preoperative preparation

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Pub No: S-113

Cardiac Arrest Due to Tension Pneumothorax During Transport Following Neonatal Cardiac Surgery: Case Report

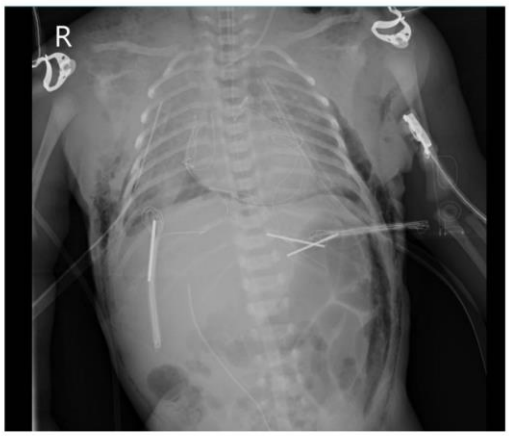
Şerife Özalp[1], Hazal Özsağıroğlu[1], Dilek Özcanoğlu[1], Funda Gümüş Özcan[1]

[1]basaksehır Cam And Sakura Cıty Hospıtal

Giriş - Amaç: Tension pneumothorax, a life-threatening condition characterized by the entry of air into the pleural space during inspiration, its inability to escape during expiration, requires urgent treatment.(1-2)

Phenomenon: A male newborn at term weighing 2935gr, was referred to our hospital due to cyanosis in postnatal period, was intubated. The diagnosis of transposition of the great arteries was made. 7th day, the surgery was decided, and he was transferred from the intensive care unit(ICU) to the operating room. During monitoring, his peripheral oxygen saturation(SpO2) was 85%, the hemodynamics were stable. Induction was performed smoothly using midazolam, ketamine, rocuronium, with 3.5mm uncuffed endotracheal tube. Central venous catheterization and arterial cannulation were done under ultrasound guidance. After the successful Arterial Switch operation, he still intubated, with cerebral oxygen saturation at 71%, heart rate of 143/min, blood pressure of 78/45mmHg, SpO2 of 99%, was transferred to the pediatric cardiac ICU on the same plane using ambu ventilation. During the transfer, he developed sudden ventilation difficulty, cyanosis, hypotension, and cardiac arrest. He was taken back to the operating room and underwent resternotomy. Subcutaneous emphysema, jugular vein distension, absence of lung sounds despite the endotracheal tube being in the trachea, and lack of ventilation led to the suspicion of tension pneumothorax. Upon opening the sternum, mediastinal shift and massive air in bilateral pleural spaces were observed. He stabilized hemodynamically after opening, and chest tube was inserted before transferring to the ICU.

Tension Pneumothorax



Discussion - Conclusion: Tension pneumothorax is one of the reversible causes of cardiac arrest and can rapidly lead to mortality in patients if not promptly addressed.(3) Therefore, ensuring the comprehensive and well-equipped monitoring of this delicate patient group during transfers, after congenital heart surgery, regardless of the proximity of the transfer distance, can enhance the quality of patient safety by enabling appropriate and early intervention, thereby reducing mortality and morbidity.

Keywords: Tension Pneumothorax, Neonatal Cardiac Surgery

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Pub No: S-114

CASE REPORT: Quadratus Lumborum Block for Postoperative Analgesia in a Patient Undergoing Total Open Nephrectomy

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Giriş - Amaç: Open nephrectomy procedures are performed under general anesthesia and often require significant postoperative analgesia. Due to the known side effects of opioid analgesics, fascial plane blocks have been increasingly used as a part of multimodal analgesia for postoperative pain management.In this case, we planned to discuss the postoperative analgesic efficacy of the quadratus lumborum block following nephrectomy operations.

Phenomenon: A 58-year-old female patient, who was being followed for hypertension and coronary artery disease, was scheduled for an open nephrectomy with a preoperative diagnosis of a left renal tumor. A preoperative Quadratus Lumborum III block was planned.The patient was brought to the preoperative block room 30 minutes before the surgery, where routine monitoring was conducted. Under ultrasound guidance using a convex ultrasound probe, a 10 cm block needle was used for an in-plane technique and 20 cc of 0.375% bupivacaine was administered to the anterior thoracolumbar fascia. At the 30-minute mark, a cold test confirmed dermatomal coverage from T10 to L1.Subsequently, the patient, who underwent routine general anesthesia, had a 20 cm left anterior subcostal incision made and a total left nephrectomy was performed via a transperitoneal approach. At the end of the operation, 1 gram of paracetamol was administered. The patient, with a postoperative Modified Aldrete Score of 10, was transferred to the surgical ward.During follow-up, the patient was planned to receive 1 gram of paracetamol four times a day. In cases where the patient reported a Visual Analog Scale (VAS) pain score exceeding 3, Contramal 50 mg was scheduled as a rescue analgesic. The patient did not require any additional analgesics during the follow-up period and was successfully discharged 48 hours after surgery.

Discussion - Conclusion: We believe that the Quadratus Lumborum III block provides somatic and visceral analgesic effects and can be a preferred method for opioid-free postoperative analgesia in abdominal surgeries.

Keywords: postoperative analgesia, quadratus lumborum block, Nephrectomy

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Pub No: S-115

Our Anesthesia Experience in a Premature Baby Operated in the 4th Hour of Life : Case report

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Giriş - Amaç: Testicular torsion is an emergency condition that occurs when the testicles rotate around the spermatic cord. Neonatal testicular torsion covers cases seen in the first 30 days of life. The frequency of neonatal testicular torsion is 6.1/100 000 and constitutes 10-12% of childhood testicular torsion.(1,2)

Phenomenon: A male baby born at 32 weeks + 2 days' gestational age, weighing 1415g, as a triamnionic trichorionic triplet from a 23-year-old mother with her first pregnancy. While the newborn was being monitored in intensive care with the need for nasal continuous airway pressure (NCPAP), in the ultrasonography taken due to swelling and color change in the testicle; Since there was no bleeding in the testicles and an inguinal hernia was detected, he was taken into emergency surgery at the 4th hour of his birth with the preliminary diagnosis of testicular torsion.The pediatric surgery operating room temperature was set at 25°C , the baby's head and extremities were wrapped with cotton, and a heating blanket was placed. A heating device was prepared for intravenous fluids. The premature baby, who was taken to the operating room with a transport incubator, was intubated after standard and cerebral oxygen saturation (NIRS) monitoring. It was observed that the testicle was intravaginally torsioned and its circulation was impaired, and the necessary intervention was performed by the surgical team. The patient with preoperative respiratory distress is transported intubated and fully monitored to the neonatal intensive care unit.

Discussion - Conclusion: Testicular torsion is a very urgent condition that requires be operated on as soon as possible. In this case of ours, who was operated on due to testicular torsion in the first hours of his life, close and uninterrupted monitoring, follow-up and a holistic team approach are required to ensure safe anesthesia and subsequent safe transfer, especially in a very fragile premature newborn.

Keywords: pediatric anesthesia, premature newborn, testicular torsion.

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Pub No: S-116

The Use of Urapidil in Pheochromocytoma Surgery

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Giriş - Amaç: Pheochromocytoma is a neuroendocrine tumor arising from chromaffin cells of the adrenal medulla and causing hypertension due to increased catecholamine levels 1*. One of the most important points in surgery is preoperative preparation 2*. Various agents are used in this preparation. Urapidil, an a-1 receptor antagonist, is an agent used in hypertensive crisis with its vasodilator activity and in cases of hypertension that do not respond despite multiple combined use of antihypertensive agent 3*.In our study, we aimed to demonstrate the stable hemodynamics provided by preoperative and intraoperative use of urapidil.

Phenomenon: A 69-year-old man had a history of hypertension and COPD and was using antihypertensive. An operation is planned after the diagnosis of pheochromocytoma. Oral antihypertensives used in the preoperative period were discontinued and urapidil infusion of 5 mg/h was started. On the day of the operation, routine anesthesia induction was performed with fentanyl, propofol and rocuronium. Remifentanil was used throughout the case and urapidil infusion was continued 3 mg/h.Mean arterial pressure did not exceed 90 mmHg throughout the case. After the 14*14 cm mass was removed, the urapidil infusion was turned off. An epidural catheter was also inserted for postoperative analgesia. During 150 minutes of surgery, no complications were observed and the patient was extubated using bridion. The patient was taken to the postoperative recovery room where the mean arterial pressure was in the range of 80-90 mmHg and when the other values were found to be appropriate, the patient was sent to the ward in a conscious, oriented and cooperative manner.

Discussion - Conclusion: In pheochromocytoma surgery, hypertension is expected in the perioperative period and hypotension is expected after removal of the mass 4*. We think that preoperative and intraoperative urapidil infusion in addition to remifentanil infusion is an easy-to-use, alternative antihypertensive agent to provide stable hemodynamics in pheochromocytoma surgery.

Keywords: urapidil, pheochromocytoma

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Pub No: S-117

Anesthesia Management In Valve Replacement Due To Infecticve Endocarditis In Pregnancy: A Case Report

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Giriş - Amaç: 25%ofmaternal(M)deaths during pregnancy are attributed to cardiovasculardiseases(1). Infective endocarditis(IE) is a rare condition during pregnancy, valvereplacement due to infectiveendocarditis can have a fatal course for both the M/the fetus(F)(2). The aim of this presentation is to discuss the anaestheticmanagement of a16week pregnantpatient who underwent mitral/aortic valvereplacement due to IE.

Phenomenon: A 34year-old patient with a twinpregnancy at11weeks, who presented to the ERwith respiratorydistress. The patient had a history of rheumaticvalvedisease, a priorhistory of penicillinuse. Upon examination, advanced insufficiency murmurs were detected inthevalves, echocardiography revealed vegetations on both the mitral/aorticvalves. The patient was admitted to the hospital for antibiotic/anticoagulanttreatment. During the follow-up of thepatient, she was admitted to the neurologyICU with a deteriorated general condition due to paraesthesia, loss of strength in the left-upper-extremity as a result ofseptic-emboli. After experiencing two more septic-SVO, it was decided to proceed with surgical-treatment.In the preoperative assessment of the patient scheduled for urgent valve replacement, the patient was conscious but had poor cooperation, left-hemiplegia, weakened swallowingfunction, no speechfunction, was at the 16thweek of gestation with twin fetuses(F); The patient's physiological class was evaluated as ASA-IVE. ECG, SpO2, İBP, BIS, NIRS were performed.During anaesthesiainduction, midazolam;0.07mg/kg, fentanyl;1.5mcg/kg, propofol;0.5mg/kg, rocuronium;0.6mg/kg, a right IJVcatheter was inserted. Maintenanceofanaesthesia was achieved with 1MACsevoflurane, a remifentanil infusion;0,01mcg/kg/min. During perfusion, MAP was monitored to be 70mmHgorhigher, the pump-flow was maintained at 2.4L/min/m2. The bypass duration was80mn. At the end of the operation, the patient was transferred to theICU while still intubated. In theICU, uteroplacental-blood-flow of theF was monitored usingDoppler-ultrasonography. On the 1.day, the patient wasextubated. On the 5.day, the patient was transferred to the neurologydepartment. Throughout these 5days, USG were performed to confirm the viabilityoftheF.

Discussion - Conclusion: In a pregnantpatient undergoing valvereplacement withCABG, the use of anaesthetics appropriate for the gestationalweek, along with proper monitoring, can ensure optimal hemodynamic-conditions while safeguarding the well-being of both theM/F.

Keywords: Pregnancy, romathysmal valve repmasment

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The Dilemma of Postpartum Thrombotic Microangiopathy and Sepsis : Case Report and Management

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Introduction - Purpose: Thrombotic microangiopathy disorders involve microangiopathic hemolytic anemia, severe thrombocytopenia, and organ injury due to microvasculature clots(1). Both disseminated intravascular coagulation (DIC) and thrombotic microangiopathy (TMA) can result in microvascular thrombosis, leading to thrombocytopenia and organ failure(2).

Materials and Methods: CASE REPORT: A 26-year-old woman with a history of Asthma and Psoriasis underwent an emergency cesarean due to fetal distress. On the day two post-operation, a red blood cell transfusion was planned according to hemoglobin levels. But the transfusion was halted 10 minutes in due to the patient's palpitations and chest pain. At the 12th hour of post transfusion, lab results revealed: Hb:7.4 g/dL, PLT:42.000 cell/mL , WBC:9.900 cell/mL, AST/ALT:78/23 U/L, Creatinine:2 mg/dL, Fibrinogen:108 kDa. Following this, pelvic ad abdominal ultrasound procedures were conducted. Potential diagnoses included such as DIC, hemolytic uremic syndrome (HUS), and thrombotic thrombocytopenic purpura (TTP).

Results: Given clinical symptoms, including hypotension, the patient was transferred to the intensive care unit. Both direct and indirect Coombs tests were negative. Peripheral blood smear analysis revealed the presence of schistocytes and a predominance of indirect bilirubin. Suspecting Thrombotic Microangiopathic Syndrome, plasmapheresis was performed.Despite initial improvements, the patient developed pulmonary edema by day four and was intubated. Elevated C-reactive protein and Procalcitonin levels indicated possible Sepsis and HUS. Treatment involved a multidisciplinary approach, and by the tenth day, the patient was extubated and moved to the general ward.

Discussion - Conclusion: Sepsis-linked DIC involves widespread coagulation activation leading to organ dysfunction(3). This case highlights the challenge of differentiating TMA from sepsis-induced DIC. Prompt differentiation of TTP from DIC is vital for effective treatment.

Keywords: Thrombotic microangiopathy disorders, Sepsis, red blood cell transfusion

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Pub No: S-119

Case Report of Upper Extremity Deep Vein Thrombosis in a Post Operative Patient

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Giriş - Amaç: Upper extremity deep vein thrombosis (UEDVT) is thrombus formation in the axillary, subclavian and brachial veins of the arm. Edema, erythema and pain in the upper extremity are common symptoms. The etiology includes trauma, central venous catheter placement, malignancy, pregnancy and coagulopathy. Doppler ultrasonography (Doppler USG) or angiography can be used in the diagnosis. Supportive treatment and etiologic treatment are applied

Phenomenon: In this case report, we present a 50-year-old woman who developed UEDVT. The patient had colon cancer and liver metastasis. She has no other comorbidities. There is a venous port in the left subclavian vein for chemotherapy. The patient underwent surgery for liver metastasectomy. Right jugular central venous catheter and left brachial artery cannulation were performed preoperatively. Blood product replacement was performed during the operation. She was taken to intensive care unit after the operation. On the 2nd postoperative day, edema, erythema and bullae were observed on the left arm. Doppler USG was performed and thrombus was observed in the left axillary vein. Low molecular weight heparin (LMAH) treatment was administered to the patient diagnosed as UEDVT. On the 7th postoperative day, the patient's symptoms resolved.

post operative 2. day



post operative 7. day



Discussion - Conclusion: UEDVT is less common than deep vein thrombosis of the lower extremities (LEDVT). Clinical suspicion is very important in its diagnosis. In this case report, we focused on the importance of early diagnosis and treatment when symptoms develop in patients with risk factors.

Keywords: upper extremity deep vein thrombosis

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Pub No: S-120

Vocal Cord Polyps And Airway Management: A Case Report

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Giriş - Amaç: Vocal cord polyps are usually unilateral benign lesions. They may be sessile or pedunculated.1 These lesions can present the anaesthetist with various difficulties in airway management. The study aimed to present the anesthetic management of a patient undergoing vocal cord polypectomy.

Phenomenon: A male patient (62 years, 70 kg, ASA II) with hypertension, diabetes mellitus and coronary artery disease was preoperatively assessed, informed of the anaesthetic management and written informed consent obtained. Standard monitoring and induction of anaesthesia were performed. The patient was intubated with a 6.0 ID endotracheal tube with an appropriate Macintosh blade. During direct laryngoscopy, the surgeon identified a small haemorrhage. However, the necrotic polyp with a pedicle in the anterior 1/3 of the right vocal cord was not observed. It was likely that the polyp was incised cut by the endotracheal tube during intubation and subsequently migrated into the tracheal lumen (Figure 1). An attempt was made to remove the polyp at the entrance to the right main bronchus using a fibre-optic bronchoscope with a working channel diameter of 1.2 mm; when this failed, the polyp was removed with forceps using a 2.8 mm diameter therapeutic bronchoscope from the Thoracic Clinic. Following the surgery, the patient was extubated and transferred to the PACU. The patient was discharged with a Modified Aldrete Score >9.

Preoperative endoscopic polyp image



Intraoperative bronchoscopic polyp image



Discussion - Conclusion: There is limited literature reporting polyp aspiration following microlaryngeal surgery.2,3 Patients with airway lesions should undergo a meticulous preoperative evaluation and the case reviewed with the surgical teambefore administerin anesthesia. Intubation should be gentle and the use of a video laryngoscope should be considered. In patients undergoing microlaryngeal surgery,autilization of different airway imaging instruments, including the videolaryngoscope are encouraged.

Keywords: vocal cord polypectomy anesthesia bronchoscope

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SÖZLÜ SUNU YARIŞMASI BİLDİRİLERİ

GÜVENLİ ANESTEZİDE MONİTÖRİZASYON

Pub No: SY-1

Investigation of the Relationship Between the Frailty Degrees of Geriatric Patients Who Had Proximal Femur Nailing (pfn) Surgery Under Hypobaric Spinal Anesthesia Due to Femur Neck Fracture and Postoperative Morbidity and Mortality

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[1]Fatih Sultan Mehmet EAH

Introduction - Purpose: Measuring and determining the degree of frailty in the geriatric patient group has an important place in determining prognosis in different patient groups. In this study, we aimed to reveal the clinical conditions that cause frailty, and to compare the mobilization, morbidity and mortality situations of the patients in the postoperative period according to the frailty status.

Materials and Methods: 80 patients over the age of 65 were included in the study. Patients with EFS between 0-7 are classified Group I; values between 8-17 are classified as Gruop II in preoperative evaluation. Hypobaric spinal anesthesia was applied before the surgery. During the perioperative period, hemodynamic changes, amount of bleeding, vasopressor need were recorded every 15 minutes. Total hospital stay, mobilization time, and in-hospital mortality rate were recorded in all patients during the postoperative period. Mortality and additional morbidity status of the patients were checked and recorded at the 1st, 3rd and 6th postoperative months through phone calls after discharge.

Results: The preoperative serum albumin value of the patients in Group I was higher than the Group II. The rate of mobilization of patients in Group I was higher in the postoperative period, the mobilization time was shorter than in Group II, and the ICU stay was longer. The rate of postoperative comorbidity development in Group II was found to be higher than in Group I. Mortality rates in the hospital and on the 90th and 180th postoperative days were also higher in Group II.

Discussion - Conclusion: In our study, in-hospital mortality was 5% and 6-month mortality was 20%. We found that in-hospital, 90th and 180th day postoperative mortality was higher in the frail group. Postoperative complication development and ICU stay are higher in the frail group. We believe that various frailty scores will be useful in determining prognosis and mortality in the geriatric age group.

Keywords: Anesthesia, Spinal, Frail Elderly, Femur Fractures, Mortality

Pub No: SY-2

Evaluation of Respiratory Complications with Integrated Pulmonary Index in Sedation Applications in Pediatric Endoscopic Procedures

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Introduction - Purpose: EtCO2 and EPI monitoring are among the monitoring methods that increase safety in complications that may develop in patients receiving sedoanalgesia outside the operating room. In our study, we aimed to evaluate respiratory complications according to age groups in sedation applications accompanied by BIS, EtCO2 and EPI monitoring in pediatric upper gastrointestinal system endoscopy.

Materials and Methods: Patients between the ages of 3 and 18 who would undergo upper gastrointestinal endoscopy were included in our prospective, observational study. The patients were divided into 3 groups according to age groups. Standard doses of midazolam and propofol were administered to all patients. A decrease in EPI value below 5 was defined as apnea, when EtCO2 and respiratory rate values were 0, as apnea, and when SpO2<90% was defined as a hypoxic state. The groups were compared in terms of complications that developed during the procedure and in the postoperative period.

Results: EtCO2 value was found to be significantly higher in Group 1 after the anesthetic agent and at the beginning of endoscopy. We observed higher EPI values in Group 3 after premedication. We found that the EPI values after the anesthetic agent and at the 2nd minute of endoscopy were lower in Group 1. The incidence of apnea and airway obstruction was similar between groups. Increased secretion was found to be significantly higher in Group 1 and hiccup was found to be significantly higher in Group 3.

Patients' Demographic Data and Procedure Times

	Group 1	Group 2	Group 3	p value
Gender, n(%) Female Male	 16(40) 24(60)	 22(51.2) 21(48.8)	 25(59.5) 17(40.5)	 0.208
ASA, n(%)				0.540

1 2	27 (67.5) 13 (32.5)	24 (55.8) 19 (44.2)	25 (59.5) 17 (40.5)	
Processing time(min)	3.54±1.92	3.29±1.81	4.48±1.37	<0.001

Distribution of EPI Values by Groups [n, (%)]

	Group 1	Group 2	Group 3	p value
After premedication 1-4 5-7 8-10	0 (0) 12(30) 28 (70)	1(2.3) 12(27.9) 30(69.8)	1(2.4) 1(2.4) 40(95.2)	0.011*
After anesthetic agent 1-4 5-7 8-10	7(17.5) 16(40) 17(42.5)	17(39.5) 16(37.2) 10(23.3)	14(33.3) 7(16.7) 21 (50)	0.017*
2.min 1-4 5-7 8-10	2(8.3) 6(25) 16(66.7)	1(4.2) 9(37.5) 14(58.3)	1(2.6) 8(20.5) 30(76.9)	0.477

Discussion - Conclusion: In our study, no difference was observed between age groups in terms of apnea and airway obstruction. Care should be taken about increased secretion in the younger age group and hiccup in the older age group. Anesthetic agent titration with BIS can be applied in pediatric procedural sedoanalgesia. With ETCO2-EPI monitoring, the patient's respiratory complications can be intervened early and the incidence of hypoxic conditions can be reduced.

Keywords: complication, monitoring, pediatrics, endoscopy, sedation

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Pub No: SY-3

Investigation of the Protective Effects of Dexmedetomidine on Bupivacaine-Induced Toxicity at the Level of Colon Cell Culture

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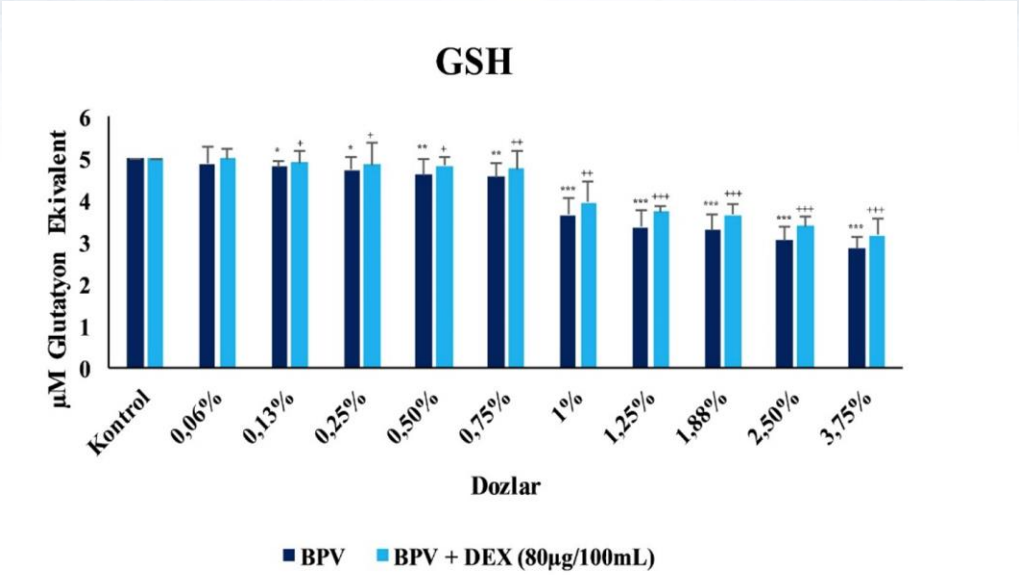
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Introduction - Purpose: The aim of this study is to demonstrate the cytoprotective efficacy of dexmedetomidine (DEX) and its safe use as an adjuvant in reducing the toxicity of local anesthetics in clinical practice.

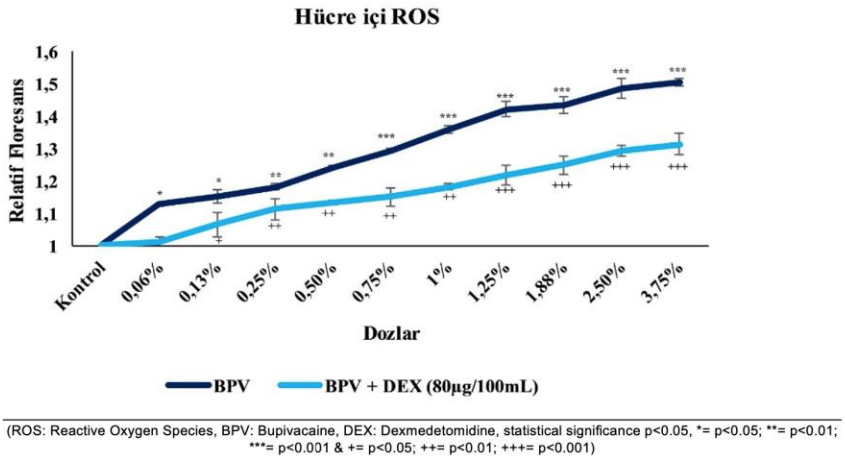
Materials and Methods: Human colon cancer cells Lovo CCL-229™ and healthy colon cells CCD18-Co CRL-1459™ were employed in our research. A luminometric ATP assay was utilized for cytotoxicity detection. To determine intracellular ROS (reactive oxygen species) production, a fluorescent signal indicator, H2DCF-DA (2,7-dichlorodihydrofluorescein diacetate), and a luminometric glutathione kit were used to measure intracellular GSH (glutathione) levels.

Results: Bupivacaine (BPV) reduced viability in both cancer and healthy cells in a dose-dependent manner. DEX increased viability in both cell types up to concentrations of 80 µg/100 mL. Beyond the 80 µg/100 mL dose, DEX, like BPV, reduced viability in a dose-dependent manner. Combinations of DEX with BPV at the concentrations where DEX exhibited the highest cytoprotective activity reduced viability in a dose-dependent manner. The BPV+DEX combined treatment reduced cytotoxicity more than BPV treatment alone. A negative correlation was observed between viability and intracellular ROS levels, and a positive correlation between intracellular GSH levels. It was determined that BPV+DEX combined treatment reduced intracellular ROS levels in a dose-dependent manner and increased intracellular GSH levels more.

The Effect of Bupivacaine and Combinations of Bupivacaine with Dexmedetomidine on Intracellular GSH Levels in Healthy Colon Cells

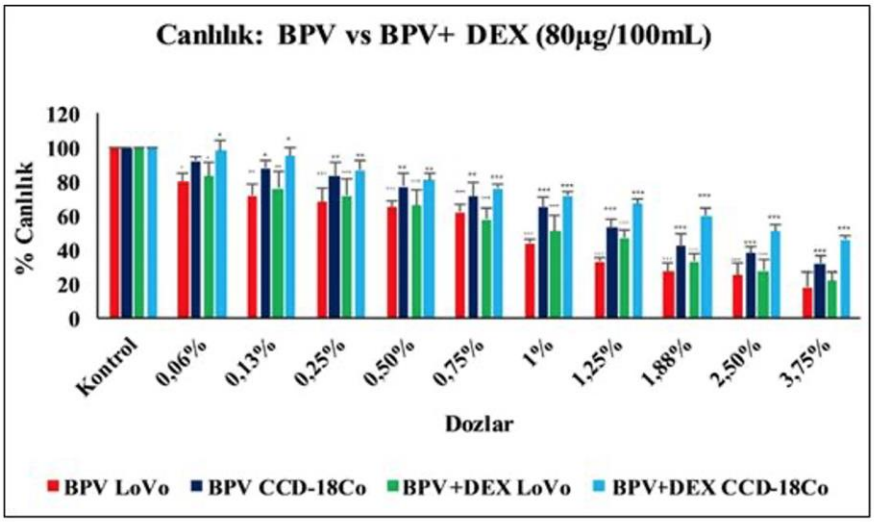


The Effect of Bupivacaine and Combinations of Bupivacaine with Dexmedetomidine on Intracellular ROS Levels in Healthy Colon Cells



(ROS: Reactive Oxygen Species, BPV: Bupivacaine, DEX: Dexmedetomidine, statistical significance p<0.05, *= p<0.05; **= p<0.01; ***= p<0.001 & += p<0.05; ++= p<0.01; +++= p<0.001)

The Effect of Increasing Bupivacaine Concentrations on Viability in Healthy and Cancer Cells in Combination with the Maximum Proliferation-Inducing Dose of Dexmedetomidine (80 µg/100 mL)



(LoVo: Human colon cancer cell, CCD-18Co: Healthy colon cell, BPV: Bupivacaine, DEX: Dexmedetomidine, statistical significance $p<0.05$, *= $p<0.05$; **= $p<0.01$; ***= $p<0.001$ & += $p<0.05$; ++= $p<0.01$; +++= $p<0.001$)

Discussion - Conclusion: Due to its cytoprotective effect, dexmedetomidine can be safely used in reducing the toxicity associated with local anesthetics.

Keywords: Bupivacaine, Dexemedetomidine, Cytotoxicity, Cytoprotective, Viability

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The Effectiveness of Capnographic Integrated Pulmonary Index in Preventing Desaturation in Pediatric Cases in Outpatient Anesthesia Practice

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Introduction - Purpose: During sedoanalgesia for outpatient endoscopic procedures, it is important to monitor respiratory parameters as well as hemodynamic parameters. Integrated Pulmonary Index (IPI) can provide a single value to easily evaluate ventilation and oxygenation through simultaneous analysis of peripheral oxygen saturation (SpO2), end-tidal carbon dioxide concentration (PetCO2), respiratory rate (RR) and heart rate (HR). We aimed to examine the importance of early diagnosis of respiratory complications that may occur in children who underwent gastroscopy with sedoanalgesia through IPI monitoring.

Materials and Methods: With the approval of the local Ethics committee, ASAI-II, 86 children between the ages of 3-18 were included in the study. Routine anesthesia monitoring was applied while patients in Group 1 received oxygen via nasal cannula; In Group 2, patients' EPI values were monitored with a microstream capnograph device in addition to routine monitoring. Statistical Package for the Social Sciences 22.0 (SPSS IBM, Chicago, IL) statistical program was used in statistical analysis.

Intarated Pulmonary Indeks Scoring

IPI	Patient Status
10	Normal
8-9	Within normal range
7	Close to normal range; requires attention
5-6	Requires attention and may require intervention
3-4	Requires intervention
1-2	Requires immediate intervention

Results: Apnea or desaturation was observed in 16 cases in Group 1 and in 10 cases in Group IPI. In the recognition of respiratory complications; While SPO2 monitoring was sufficient in 9 of 16 cases in Group 1, it was detected by IPI monitoring(IPI≤6) in 9 of 10 cases in Group 2.

Discussion - Conclusion: The objective of the IPI algorithm is to simplify patient monitoring through real-time analysis of PetCO2, RR, SpO2, and PR, providing a single number that accurately indicates a patient's respiratory status in a simple and objective manner. In conclusion, IPI monitoring provides significant clinical benefit over standard monitoring for assessing respiratory complications during sedation for endoscopic procedures.

Keywords: Paediatric, INTEGRATED PULMONARY INDEX, OUTPATIENT ANESTHESIA

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Pub No: SY-5

Investigation of the Protective Effects of Dexmedetomidine, Midazolam, Propofol and Intralipid in terms of Oxidative Stress and Inflammation with Lidocaine Toxicity in Rats

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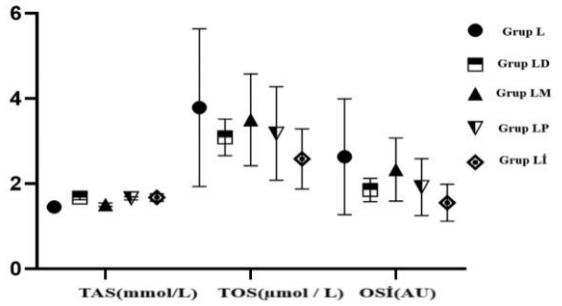
Introduction - Purpose: This study aims to compare the effectiveness of dexmedetomidine, midazolam, propofol and intralipid pre-treatment in mitigating oxidative stress and inflammatory responses induced by lidocaine toxicity.

Materials and Methods: A total of 48 Sprague-Dawley rats were randomly divided into six groups, with n=8 in each group: control (K), lidocaine (L), lidocaine + dexmedetomidine (LD), lidocaine + midazolam (LM), lidocaine + propofol (LP), and lidocaine + intralipid (LI). Dexmedetomidine (100 µg/kg), midazolam (4 mg/kg), propofol (40 mg/kg), and intralipid (10 mg/kg) were administered as pre-treatments via intraperitoneal injection. Lidocaine (90 mg/kg) was intraperitoneally injected in all groups except the control group to induce oxidative stress. Intracardiac blood samples were collected before sacrifice, and heart and brain tissue samples were obtained after sacrifice. Comparative measurements of protein analysis, total oxidant level (TOS), total antioxidant level (TAS), oxidative stress index (OSI), and inflammatory parameters were conducted on the samples

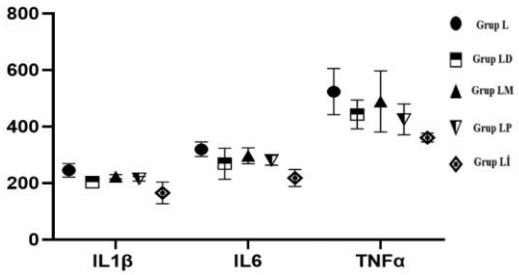
Results: In heart tissue samples, TAS was significantly higher in Group LI and Group LD ($p<0.05$). In blood samples, the protective effects of Group LD, LP, and LI were significantly higher compared to Group LM ($p<0.05$). Furthermore, the oxidative load was most significantly increased in Group LM ($p<0.05$). In brain tissue samples, despite an increase in oxidative load in all groups, it was determined that all groups had antioxidant protective effects ($p<0.05$). IL-6 and TNF-α were found to decrease more notably, especially in Group LD, LP, and LI ($p<0.05$).

Inflammatory parameters in heart and brain tissues decreased significantly in all groups, particularly in Group LI ($p<0.05$).

Comparison of serum oxidation parameters of study groups



Comparison of Groups Based on Serum Inflammatory Parameters



Discussion - Conclusion: It was observed that the oxidative load, primarily induced by lidocaine, increased most significantly with midazolam pre-treatment, while the antioxidant effect was more pronounced with dexmedetomidine and intralipid. Dexmedetomidine and intralipid used as pre-treatments were shown to be more effective in protecting against oxidative stress and inflammation.

Keywords: Oxidative stres, Dexmedetomidin, Midazolam, Propofol, Intralipid

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SAĞLIK BİLİMLERİ ÜNİVERSİTESİ

3. Uluslararası Anesteziyoloji ve Reanimasyon Sempozyumu

MERİNOS ATATÜRK KONGRE VE KÜLTÜR MERKEZİ/ BURSA

01 - 02 Aralık 2023