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ABSTRACT BOOK

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The conference is organized under the auspices of
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OP.1

Perioperative pathway for the elderly patient.

Idit Matot

Director of the Division of Surgery and Chair of the Department of Anesthesiology, Intensive Care and Pain at the Tel Aviv Medical Center
Chair of Scientific Committee ESAIC (European Society of Anesthesia and Intensive Care)

OP.2

The Pivotal Role of ESAIC in Advancing Anaesthesiology and Intensive Care Across Europe

Arta Leci

Marketing and Communication Manager, ESAIC

Abstract
Policy Advocacy. As a leading organisation, ESAIC not only uplifts the professional community but also significantly impacts patient care standards across Europe and beyond, ensuring sustained growth and innovation in the field.
Keywords: ESAIC, anaesthesiology, intensive care, education, research, policy engagement, Euroanaesthesia Congress.

OP.3

Reduce fresh gas flow more than you are applying today.

Ali Fuat Erdem

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President of TARD

Abstract
Although there is no universally accepted definition for low flow anesthesia (LFA), it is an inhalation anesthetic technique in which at least 50% of the exhaled gas mixture is returned to the patient after CO_2 removal in the next inspiration. Baker and Simionescu classified it according to fresh gas flow rate such as metabolic (0.25 L/min), minimal (0.25-0.5 L/min), low (0.5-1 L/min), medium (1-2 L/min) and high (2-4 L/min). It is well known that the lower the fresh gas flow, the higher the amount rebreathed and the smaller the excess gas portion.
Low flow anesthesia has clinical, educational, economic, and ecological benefits. Although the benefits of LFA are well known and using technologically advanced anesthesia machines which are appropriate for minimal flow anesthesia anesthesiologists still do not reduce the fresh gas flow sufficiently in general anesthesia applications due to some unnecessary concerns such as such as hypoxia, hypoventilation increase of the expiratory carbon dioxide inadequate depth of anesthesia. Understanding some basic concepts, having a gas analyzer, and a willingness to reduce FGF is sufficient.
In recent years, many reports, articles, and societies have strongly recommended

reducing the fresh gas flow. Sustainability Committee of ESAIC strongly recommends the use low flow anesthesia as a rule. The ASA has evaluated current scientific studies and concludes there is no reasonable evidence to support a lower limit of fresh gas flow when using sevoflurane. Therefore, the ASA supports the use of low fresh gas flows when sevoflurane is administered, and offers a course developed by the Anesthesia Patient Safety Foundation on low-flow anesthesia which can be accessed free of charge by any anesthesia professional. As the Turkish Society of Anesthesiology and Reanimation, we believe that only theoretical training is not sufficient to popularize low-flow anesthesia, so we have been holding practical low-flow anesthesia courses in the operating room since 2018.
As anesthesiologists, considering all the benefits of low-flow anesthesia, we should aim to reduce fresh gas flow more than we are applying today whenever safe and technically feasible.

OP.4

Hemorrhage and POC.

Guido Di Gregorio

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Abstract
Major bleeding is a leading cause of morbidity and mortality worldwide. Successful management includes early recognition and planned responses. To guide bleeding treatment, coagulation monitoring includes conventional coagulation tests and/or point of care coagulation testing (viscoelastic testing). Point of care viscoelastic testing offers bedside, rapid, global assessment of haemostasis, which is extremely useful in the dynamic setting of acute bleeding. The tailored approach that POC facilitates can reduce transufion requirements. In urgent or emergency situations POC results enable fast decision making to optimize patient care.

OP.5

How can we improve patient safety in perioperative settings?

Hilal Ayoglu

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Abstract
The perioperative environment is complex, dynamic, and error-prone; patients are more likely to experience preventable harm during perioperative care than during other types of healthcare. We usually try to move on a safe little iceberg in our daily functioning. “Safety” constitutes one of our primary goals due to the nature of the work we do. In fact, with every step we take, we may encounter many elements that may threaten patient safety under the iceberg. Patient safety advocacy has become a cornerstone of anesthesia.
What needs to be done to increase perioperative patient safety are as follows: Safety culture should be created throughout the system. Promote the idea of a “just

culture" that recognizes intentional unsafe actions as human factors while treating unintentional errors as system deficiencies. Working together must be learned. Focus should be on systems and processes, not on a practitioner's performance or errors. Fair culture must be ensured. There should be no blame, no hierarchy, safe systems should be developed. Quality must be improved. There should be a patient safety curriculum in education. Institutions should have accreditation studies. Emphasis should be placed on simulation and teamwork in education. Crisis resource management training should be provided. Leaders should know the structure of their organizations, increase communication and trust, and ensure transparency and authenticity in relationships. Must fully address the needs and interests of everyone in the organization. Listen carefully, be non-judgmental, be transparent, break down power hierarchies. One should empathize and try to inform the society. To learn from errors, data should be collected, reporting systems, mortality morbidity data, adverse event reporting should be used, and statistics should be used for this purpose. Evidence-based, simple, standardized health care systems should be developed. Technology-supported safety networks should be developed and redundancy should be provided. Communication must be ensured between partners. Information and ideas should be shared with expert associations and the state. Develop partnerships with patients and families in ensuring safety. Get patients to SPEAKUP.
Of course, in order to do all these, the well-being of anesthesiologists must be ensured, their numbers must be sufficient, working conditions must be appropriate, planning must be made to avoid causing secondary victims, research must be carried out and resources must be provided.

OP.6

Opioid-free anesthesia – our experience at Lodi Hospital

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Abstract
General anaesthesia was initially considered to be the four "A's": analgesia, amnesia, akinesia (immobility) and autonomic control. This concept evolves into the definition of General anaesthesia as a reversible state of unconsciousness, immobility, antinociception and control of autonomic nervous system, within a controlled hemodynamic physiological stability.
Balanced anaesthesia, the most common strategy used in the last decades, relies mostly upon the GABA-A
receptor and mu-opioid receptors (Opioid-based anesthesia, OBA). There is no clear evidence that preventive opioids result in reduction in pain scores. High doses of opioids during surgery are associated with an increased perception of pain and increased postoperative opioids requirements (opioid tolerance and opioid-induced hyperalgesia phenomena). The perioperative opioid administration predisposes to persistent opioid use. Opioids have other undesirable side effects: respiratory depression, pharyngeal muscle weakness, postoperative nausea and vomiting, urinary retention, constipation, ileum, pruritus. Concerned about the significant opioid side effects, a new

concept has emerged: Opioid-free anaesthesia. Opioid-free anaesthesia (OFA) can be defined as the combination of various opioids-sparing techniques leading to no administration of intraoperative systemic, neuraxial or intracavitary opioids. Nonopioid adjuvants such as NSAIDs, beta-blockers, NMDA antagonists (ketamine), alpha2-agonists, lidocaine, gabapentin, etc. can decrease the need for opioids to achieve adequate intraoperative antinociception or post-operative analgesia. OFA can also be performed with locoregional analgesia for better pain control. There are specific populations that benefit from the use of OFA, namely in opioid addiction, chronic pain syndromes, obesity, obstructive sleep apnoea, cancer surgery and colorectal ERAS.

Data were collected from medical records for surgeries conducted from January 2023 to June 2023. Outcomes measured: post-surgical pain (NRS), opioid need after surgery, PONV, length of stay (LOS).

The two groups consisted each of 49 patients, 24 undergone orthopaedic surgery, the others abdominal surgery.

Results

Post-surgicale pain: after orthopedic surgery we found non statistically significant differences between OBA e OFA group. Restricting the analysis in abdominal surgery, we found a reduction in the recorded pain scores after surgery in OFA group, in term of both maximum recorded NRS and mean recorded NRS during the stay.

Opioid need after surgery: no statistically significant difference was found in two groups.

PONV: we did not have enough cases of PONV or anti-emetic drug consumption to perform a statistical analysis. Only 2 patients required anti-emetic drugs (both in the OFA group after administration of opioid therapy). PONV prophylaxis Is the standard-of-care in our hospital. the use of rescue antiemetic drugs was significantly lower in the opioid free group.

Length of stay: we didn't find statistically significant difference between two groups.

This preliminary study suggests that OFA is at least as effective as OBA, if not superior in certain scenarios.

The opioid-free anaesthesia presents as future challenges an objective documentation of both its short-term and long-term benefits and inconveniencies using large sample sizes and development of adequate monitoring of intraoperative nociception.

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OP.8

The rational use of inotropic agent The peas moster story

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Abstract

The rational use of inotropic drugs in newborns and infants must be based on knowledge of the differences between the neonatal and adult hearts. The newborn's heart already works under normal conditions almost at the apex of the Starling curve, and consequently has a limited reserve capacity. In detail, not being able to significantly increase inotropic, it initially compensates with an increase in chronotropism. Furthermore, ventricular diastolic function is severely limited due to greater rigidity of the ventricles. On the basis of these considerations, the best choice to increase cardiac output must be oriented towards drugs that have a prevalence of lusitropy effect, such as milrinone and in second choice levosimendan, possibly associated with drugs such as vasopressin or fenoldopam which act selectively on peripheral resistance, modulating the dose to the desired effect. Recently, other agents such as thyroid hormone, or corticosteroids, have been explored as adjuvant drugs in the therapy of both cardiogenic and septic shock. Only with advanced cardiovascular monitoring can the combination of inodilating drugs and peripheral resistance modulating drugs be oriented

OP.9

New guidelines in pediatric head trauma

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Abstract

Pediatric neurotrauma is the leading cause of death in children older than 1 year. The incidence of head trauma in the pediatric population is approximately 180 - 300 per 100,000. About 80-90 % children have minor head traumas (which includes both minimal and mild head trauma), while 10 % have moderate to severe head. Throughout infancy, childhood and adolescence, traumatic brain injury (TBI) is in the top 10 causes of years lost to disability. Besides that, costs are really huge.

The optimal management of severe TBI in the pediatric population has not been well studied. In recent years, few European, American and Scandinavians guidelines appear at the scene. Reduced mortality and better outcomes from TBI has been the result of the use of evidence-based protocols which aim to minimize secondary brain injury. Like in previous, in new recommendations about the treatment of severe TBI, high-quality randomized controlled trials that could support level I recommendations are absent. Adherence to these new recommendations should be voluntary, and determination regarding their application should be tailored to each patient individually.

In our presentation, the current state of the literature for initial management, triage and treatment TBI in the intensive care unit, are summarized.
Keywords: injury, children, neurotrauma, head trauma

OP.10

Haemodinamic management of single ventricle physiology

Luca Di Chiara

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Abstract
CHD are often characterized by abnormal communications between systemic and pulmonary circulation.
The presence of an abnormal communications between the systemic and pulmonary circulations allow blood exchange depending on pressure gradients.
Shunting lesions are characterized by unidirectional blood exchange and a portion of the venous return recirculating in the same vascular bed.
The presence of a common chamber, between the two circulations, results in a blending between systemic and pulmonary blood return. This blending can be complete, when the 50% of both systemic and pulmonary venous return recirculate, resulting in equal saturation in aorta and pulmonary artery. This define the single ventricle physiology.
In both left to right shunting lesions and single ventricle physiology ,the relationship between pulmonary and systemic blood flow becomes an important determinant of the systemic oxygen deliver.
Managing of pulmonary and systemic vascular resistance may become central in optimizing systemic oxygen delivery.
In this setting the use of inodilators drugs seem to be a very promising approach.

OP.11

Keep and toss in pediatric cardiac anesthesia and ICU.

Dorela Haxhiademi

Fondazione Toscana Gabriele Monasterio, Pisa

OP.12

Pediatric cardiac emergencies.

Ermela Çelaj

Pediatric ICU Service at Mother Theresa University Hospital Tirana -Albania

OP.13

Syncopal states in children.

Numila Kuneshka

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OP.14

Perioperative anaesthetic management of D-TGA

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Abstract

Transposition of great arteries (TGA) comprises 5–7% of all CHDs. It is characterized by atrioventricular concordance and ventriculoarterial discordance, resulting in the systemic and pulmonary circulations as parallel instead of the normal in-series circulation. Survival of the baby depends on mixing of blood between these two circulations either with an atrial septal defect, ventricular septal defect, or at the great arterial level via patent ductus arteriosus. Therefore, the clinical manifestation is highly variable and influenced by the presence or absence of these associated anomalies. Patients with D-TGA without mixing of blood present with cyanosis and acidosis and are hemodynamically compromised soon after birth and require resuscitation to re-establish connection between parallel circuits by reopening the ductus with intravenous prostaglandin (0.05–0.1 µg/kg/min) or establishing interatrial flow with balloon atrial septostomy. In addition, patients may require inotropic support, ventilator support, or extracorporeal membrane oxygenation in extreme cases with refractory cardiorespiratory decompensation for survival or as a bridge to definitive therapy.

TGA is uniformly fatal in the infant period, with 30% mortality in the first week of life, and 50% within the first month, and 90% in the first year of life if untreated. Fortunately, modern medical and surgical management techniques have resulted in 90% of patients living into adulthood, typically with a vigorous quality of life. Currently, the definitive corrective surgery is the arterial switch operation (ASO), as a single-stage procedure with excellent short-term and long-term outcomes.

In our experience 16 newborns were diagnosed and treated with emergency ASO according to the criteria in the last 5 years the period 2019-2024.

This decriptive study reveals our experience in``Mother Theresa University Hospital Center`` of patients with TGA, anesthetic and cardiopulmonary bypass management, and postoperative course undergoing ASO.

Keywords: D-TGA, arterial switch operation, CPB, ECMO, prenatal diagnosis

OP.15

3D echo ssential for mitral and aortic disease.

Dionisio Colella

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President-elec board of directors ITACTA

Abstrac

Since its introduction, 3-dimensional (3D) transesophageal echocardiography (TEE) has become widely adopted in operating rooms and cardiac catheterization laboratories worldwide. 3D TEE has
been proven to be superior to 2DTEE in the assessment of both mitral valve anatomy

and mitral regurgitation, promoting its use in the operating room: 3D TEE not only allows better identification of a single prolapsed scallop but also helps identify the dominant lesion. Accurate preoperative assessment of the mitral valve is critical in the surgical management of patients. This information determines whether the patient should undergo valve repair or replacement, which has implications in terms of timing of surgery and long-term morbidity and mortality. Echocardiography improves lesion localization and quantification; it can help in understanding the degenerative mechanisms and in the identification of mechanisms of valve impairment with an impication in surgical triage too.
Moreover 3D echocardiography improves quantification of severity disease and it can change the operation performed according to the surgeon experience. The catheter-based treatments is increasing worldwide and the 3D TEE should be mandatory for these hybrid interventions because they improve en face visualization of the valve and the position of the intracardiac catheters. Whether a patient undergoes valve replacement or repair, 3D TEE plays an important role in the postoperative assessment: this always includes assessment of residual mitral regurgitation, mitral stenosis, and systolic anterior motion of the mitral valve.

OP.16

Fıbrınogen: 4 questıons, 4 answers

Aslı Demir

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Abstract
Before measuring plasma fibrinogen value, can a comment be made about plasma fibrinogen deficiency by using Hb, BE and ISS (injury severity score) values for fibrinogen transfusion?
Is there a relationship between fibrinogen and functional endothelial integrity?
Cryoprecipitate & fibrinogen concentrate in the first-line treatment of acquired hypofibrinogenemia in cardiac surgery?
What are the recommendations fort he use of fibrinogen in the ERAS and PBM guidelines?
Fibrinogen plays a key role in primary and secondary hemostasis. It is required for platelet aggregation and in the coagulation cascade as a clot substrate. Low fibrinogen levels have been associated with increased blood loss and/or transfusion in many bleeding surgeries and trauma. Scoring systems used to estimate the need for massive transfusion in patients with major bleeding, such as ABC score, TASH score, ACTA PORT score, require parameters such as age, gender, vital signs, FAST, Hb, BE, and their calculation requires time and effort. Therefore, in patients with major bleeding, an idea about fibrinogen levels can be obtained with simpler and faster indicators such as hemoglobin, base excess, injury severity score,pulse pressure(1). The glycocalyx is shed in pathologies such as hypoperfusion, shock, bleeding, hypoxia, inflammation, and sepsis. It is known that

FFP and albumin provide superior glycocalyx protection and clinical improvement than other fluids. According to fibrinogen depletion experiments, the content of FFP responsible for endothelial barrier protection is fibrinogen. A fibrinogen concentration of 2.5 mg/ml appears to be sufficient to increase cell surface syndecan-1.(2) Cryoprecipitate is not a purified product, it contains platelet microparticles, fibronectin, F 8, F 13 and VWF, there may be an increased thromboembolic risk. Cryoprecipitate may be more useful in cases of complex congenital surgery, ECMO/VAD surgery, long CPB, acquired VWS syndrome. Fibrinogen concentrate restores hemostasis without volume overload and is a safer product in terms of infection and thromboembolism.(3) ERAS and PBM protocols recommend fibrinogen replacement in cardiac surgery patients with microvascular bleeding in cases of fibrinogen level below 1.5 g/L or low clot firmness.(4)

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OP.17

Pneumonia after cardiac surgery

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Post-operative pneumonia is the most common infectious complication after cardiac surgery with extracorporeal circulation, which leads to significant morbidity and mortality. Pre-operative carriage of multi-resistant bacteria, patient comorbidities, or factors related to the surgical procedure could favor the occurrence of pneumonia.

The aim is of this study was to identify the prevalence of pneumonia after cardiac surgery and establish the association between pneumonia and bacterial carriage (nasal, anal and urinary), as well as the other risk factors.

Out of 2,318 patients studied, 171 developed postoperative pneumonia, which represented an incidence rate of 7.4%. The occurrence of pneumonia was found to be associated with anal carriage of multi drug resistant bacteria ($p = 0.009$). There was no relationship between nasal and urinary bacterial carriage and pneumonia ($p=0.112$ or $p=0.279$). After multivariate linear

regression analysis, we found these risk factors for developing pneumonia: mechanical ventilation > 48 hours (OR=20.07; IC95% [11.79; 34.16]; p=0.001), male sex (OR= 1.85; IC95% [0.68; 1.04]; p=0. 016), arterial hypertension (OR= 1.69; IC95% [1.08; 2.63]; p=0.020), auto-transfusion volume > 500 mL (OR= 1.20; IC95% [1.01; 1.42]; p=0.031), resumption surgery (OR=1.93; IC95% [1.07; 3.72]; p=0.048).
Postoperative pneumonia after cardiac surgery remains a common pathology. Anal carriage of MRB, as well as other patient and surgery related factors favor the incidence.

OP.18

Guidelines for the Use of Transesophageal Echocardiography to Assist with Surgical Decision-Making in the Operating Room

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Abstract.
Intraoperative transesophageal echocardiography is a standard diagnostic and monitoring tool employed in the management of patients undergoing an entire spectrum of cardiac surgical procedures, ranging from "routine" surgical coronary revascularization to complex valve repair, combined procedures, and organ transplantation. Utilizing a protocol as a starting point for imaging in all procedures and all patients enables standardization of image acquisition, reduction in variability in quality of imaging and reporting, and ultimately better patient care. Clear communication of the echocardiographic findings to the surgical team, as well as understanding the impact of new findings on the surgical plan, are paramount. Equally important is the need for complete understanding of the technical steps of the surgical procedures being performed and the complications that may occur, in order to direct the postprocedure evaluation toward aspects directly related to the surgical procedure and to provide pertinent echocardiographic information. The rationale for this document is to outline a systematic approach describing how to apply the existing guidelines to questions on cardiac structure and function specific to the intraoperative environment in open, minimally invasive, or hybrid cardiac surgery procedures

OP.19

Pleurotomy in cardiac surgery and clinical outcome

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Abstract
Introduction: In open heart surgery such as Coronary artery Bypass Grafting, valve repair or replacement and some congenital heart disease, patients sometimes undergo pleurotomy unilaterally or bilaterally

because of surgical reasons. patients sometimes undergo pleurotomy unilaterally or bilaterally because of surgical reasons.
We observed that patients that didn't underwent pleurotomy had better clinical outcome, in the name of recovery and mobilization time after surgery and also hospitalization time
The aim of this study is to evaluated the impact of pleurotomy on pulmonary function and clinical outcomes, after cardiac surgery
Patients and methods. 80 patients, prospectively selected that were scheduled for CABGx3 +/- valve replacement, were enrolled in this study. They were divided in two groups of 40 patients. One group underwent pleurotomy and the other group without pleurotomy.
Results: According to the primary variables (time of extubating after surgery, the amount of blood lost, need for blood transfusion, quantity of the analgesics, time of recovery after surgery, images of thorax radiography, blood gases PaO2, PaCO2 after extubating, 12 hours after and 24 hours after surgery, time of ICU staying, time of hospitalization) and also secondary variables of our study, resulted that patients without pleurotomy had better clinical outcome compared to patients that underwent pleurotomy in cardiac surgery.
Discussion: The discussion that, is pleurotomy in cardiac surgery always necessary?
Conclusion: According to our data and literature, we concluded that in cardiac surgery, patients without pleurotomy have better clinical outcome compared to patients that underwent pleurotomy.
Keywords: Cardiac Surgery CS, Coronary artery Bypass Grafting CABG, Pleurotomy, Partial pressure of arterial oxygen PaO2, Partial pressure of arterial carbon dioxide PaCO2, intensive Care Unit ICU

OP.20

Low dose of tranexamic acid is safe and effective for adult patients undergoing cardiac surgery.

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Abstract
Introduction
Tranexamic acid (TXA) is an antifibrinolytic agent that reduces postoperative blood loss, rates of erythrocyte transfusion, and rethoracotomy in cardiac surgery. However, there is no consensus on the dosing regimen of TXA to be administered. Low dosage of TXA has proved to be sufficient in reducing blood loss, whereas the evidence supporting the use of higher doses has been minimal to none according to articles and literature. In this study, we described our experience comparing low and high dose TXA in cardiac surgery at our centre.
Methods and results
In this retrospective study, we included 60 adult patients undergoing elective cardiac surgery with cardiopulmonary bypass between the years 2021-2022. These 60 patients, consisting of 34 males and 26 females ranging from 25-83 years old, of which 37 patients underwent CABG

surgery, 7 patients underwent MVR, 12 patients underwent AVR, 3 patients underwent CP (combined procedure) and 1 patient underwent ASD closure. These patients were divided into two corresponding groups, each containing 30 patients. The first group received a low dose regimen comprising of 10 mg/kg bolus, 2 mg/kg/h maintenance dose, and 1 mg/kg prime. Meanwhile, the second received a high dose of TXA of 30 mg/kg bolus, 16 mg/kg/h maintenance dose, and 2 mg/kg prime. Our study had some limitations due to the fact that patients with a higher risk of bleeding were excluded, as well as, patients with prior neurological problems such as seizures. Additionally, patients may have been deeply sedated when seizures would be expected. However, there was no significant difference recorded in the clinical outcome between low and high dose TXA. The rates of blood loss and transfusion in RBCs and FFP were similar with differences lower than 2%, hence it is insignificant. Moreover, there was also no notable difference in thrombotic events, kidney dysfunction, seizures, myocardial infarction, stroke, and no rethoracotomy done in either group.

Conclusion

The comparison between high dose and low dose of TXA in patients who underwent cardiac surgery with cardiopulmonary bypass (CPB) detected no statistically significant clinical outcome of bleeding, blood transfusion, seizures, kidney dysfunction, thrombotic events, myocardial infarction or stroke. We recommend the regimes of low dose TXA, as these are well established in terms of safety and efficacy compared with high dose TXA.

Kew Words Cardiac surgery, cardiopulmonary bypass (CPB), tranexamic acid (TXA)

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OP.21

Peripheral nerve and interfascial plane blocks of the trunk

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Neuraxial anesthesia is currently considered the "gold standard" for anesthesia and analgesia in thoracic, abdominal and pelvic surgery. The neuraxial techniques in use provide anesthetization of the thoracic, abdominal and pelvic walls as well as the organs located inside. However, spinal and epidural techniques have limitations. These techniques cannot be used in patients on anticoagulant treatment, they cannot be

used to provide analgesia for ambulatory surgery, they are associated with the risk of direct damage to central structures, the creation of haematomas, hypotension or even infection.

For these reasons, other techniques have been developed to provide analgesia in patients in whom neuraxial techniques (spinal and epidural) cannot be used.

The peripheral block of the spinal nerves in the paravertebral space (the paravertebral block - PB) was one of the first techniques used for this purpose. PB block spinal nerves selectively and have the potential for epidural spread with reduced hemodynamic response (e.g. hypotension) compared to epidural anesthesia. The PB now is considered a monolateral epidural technique and requires excellent knowledge of anatomy. The Erector Spinae Plane Block (ESP) is an alternative to neuroaxial and paravertebral block.

In recent years, there is an increasing interest in the application of interfascial blocks to provide analgesia of the thoracic, abdominal and pelvic wall, which are performed as single injections, have a long duration of action and present minimal risk or side effects. Interfascial trunk block gained in popularity due to their potential opioid-sparing characteristics. This trend runs parallel to the development of mini-invasive surgical techniques, thus allowing a faster recovery of patients.US-guided regional techniques allow to identify the layers of musculature and to visualize in real time the needle insertion and the local anaesthetic deposition between the fascial layers. The interfascial blocks aim to increase the efficiency and safety of regional anaesthesia.

In this presentation, the focus will be on the description of the paravertebral block technique, erector spine plane block (ESP), pectorals plane block (PECS,) serratus anterior plane block (SAPB), traverses abdomens plane block (TAP), rectus sheath and quadratus lumborum (QL) blocks.

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OP.22

Continus education in anesthesia: Do we provide the correct phases of pharmacological knowledge of neuromuscular blockers? Proposal for a multi centric trial.

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Abstract

At the end of the 19th century, anesthesiology was born as a specialty. The

first anesthesiologist to graduate in the subject was a woman Mary A. Ross in 1923 in the United States. Charles Suckling, in 1951, prepared the "ideal" gaseous anesthetic, introducing halothane. Enflurane, isoflurane, desflurane, and today's sevoflourane and methoxyphorane are all its derivatives. The introduction of muscle relaxants in 1940 revolutionized anesthetic practice. Especially because they allowed safer intubation, bringing profound advantages in the treatment of the airways and giving great opportunity to surgery. In the mid-1950s, non adeguate recovery of neuromuscular function at the end of surgery was common. It was termed 'neostigmine-resistant curarisation' and was attributed to mechanisms such as depression of the acetylcholine cholinesterase system rather than the failure of neostigmine to antagonize a profound block induced by d-tubocurarine. Therefore, it is not surprising that the use of neuromuscular blockers during this time was associated with a mortality rate that was six times greater (1:370 anaesthetics) than when neuromuscular blockers were avoided (1:2100 anaesthetics). Noticeably, 63% of deaths that involved the use of a neuromuscular blocker were caused by respiratory failure.

In modern era, persistence of neuromuscular blockade in the post-anesthesia care unit, i.e. postoperative residual paralysis (PORP), postoperative residual curarization, or residual neuromuscular block (RNMB) is a real problem with an incidence as high as 65%, yet it fails to attract concern among anesthesiologists worldwide.

The 2023 American Society of Anesthesiologists Practice Guidelines for Monitoring and Antagonism of Neuromuscular Blockade, provide evidence-based recommendations on the management of neuromuscular monitoring and antagonism of neuromuscular blocking agents during and after general anesthesia. The guidance focuses primarily on the type and site of monitoring and the process of antagonizing neuromuscular blockade to reduce residual neuromuscular blockade. The authors propose a multicenter study aimed at evaluating the applicability of international guidelines in the Balkan reality.

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OP.23

Our experience in postoperative outcomes following Whipple surgical procedures.

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Abstract

Introduction: Whipple operation or Pancreaticoduodenectomy, is one of surgical procedures for pancreatic malignancies and neoplasms of the periampullary region of the duodenum that perhaps has the most perioperative morbidity and mortality amongst surgical procedures depends of age, comorbid disease, nutritional status, obstructive jaundice, cholangitis and need for stent, intraoperative factors such as surgical technique, stress response, blood loss, duration of surgery and fluid administration. The authors aimed to determine perioperative factors affecting patient outcomes following a part of the Whipple procedures performed in surgical ICU of HUC "Mother Theresa".

Material and Methods: Patients hospitalized in the surgical ICU for Whipple procedure performed in the first clinic of general surgery from October 2021 to March 2024 were retrospectively reviewed. We sought to determine perioperative variables that may impact outcomes. In that material was recorded outcomes (mortality, prolonged ICU recovery more than 14 days or ICU readmission) of patients who performed pancreaticoduodenectomy.

Results: Around 24 patients recruited almost 3-years period which included 16 males (66.6%) and 8 females (33.4%); mean age was 61.4(±14.2) with mean acute physiology and chronic health evaluation (APACHE) II score14.5 (±7.1). 22 patients remained intubated at the end of procedures (91.6%). Median ICU stay was 4.87 days (2-15 days). A male patient age 65 years old was readmitted in ICU. Unfavorable ICU outcomes were 1 in number and 1 hospital deaths occurred. Pulmonary complications occurred in 4 patients (16.6%) and non-pulmonary complications occurred in 10 patients (41.6%). In a multiple logistic regression analysis, the APACHE score 1.34 (1.09–1.64) and pulmonary complications 15.3 (2.1–145) were variables that were identified as predictors of outcomes.

Conclusion: Patients should be followed closely after the Whipple procedure. Fluid volume treatment and respiratory support play a significant role in patient recovery. The APACHE II score may reliably predict adverse outcomes following Whipple procedure. Although non-pulmonary complications are common, pulmonary complications in these patients adversely impact patient outcomes.

Keywords: Intensive care, Whipple procedure, Fluid volume, Pulmonary complication.

OP.24

Anesthesia role in tracheal and main bronchus resection

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Abstract
Introduction.Resection of trachea and main bronchus needs good: knowledge, skills, collaboration and teamwork.
Of course there are clinics that have sufficiently qualified staff
Here we tried to show are experience about: are similar cases and our choices were correct (excluding the results) that can be reference
Presentation of cases and results.
The first case iwas 39yo M with thyroid cancer with infiltration of trachea, latero-cervical metastatic lymph nodes and right cord paresis(first surgery before 2month) . After preoperative evaluation and exams , the surgery was done
without any major complication.
Ventilation was performed by 2 ways : oro-tracheal and from the area of intervention.
The patient was discharged on the 9th day.
The second case was 58 yo M with endoluminal mass in the distal part of the left main bronchus.
It was made a few months before a endobronchial resection but mass starts to grow . So the goal was to remove the mass with preservation of parenchyma.
We used a right double lumen tub(DLT) under flexible bronchoscopy position.
The 6th day after intervention the patient was discharged.

Discussion and conclusion.
In first case the dilemma was
- if the tracheostomy is an option (right vocal cord paralysed)
- the patient should extubated fully awake and after aspiration with bronchoscopy to reduce coughing.
-preoperative education “no cough”.
-Asepsis any case of course but in this case was crucial (ventilation from surgery area).

The patient with endobronchial mass:
The need of bronchoscopy for
-position DLT
-to help the surgeon for level of bronchial resection to preservation of parenchyma.

The right indication , perioperative evaluation ,well knowledge and experienced staff, and of course skilled anesthesia team are keys of good outcome.
In these operations surgeons and anesthetists working together in the same (VITAL) area.

OP.25

Thoracic Spinal Segmental Anesthesia – case serie

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Abstract
Background: Thoracic spinal segmental anesthesia is a medical technique that involves targeting specific segments of the thoracic spinal cord to provide anesthesia for surgical procedures or pain management. In theory, spinal anesthesia

can be performed at most of the thoracic and lumbar levels but is considered dangerous and it is not advisable if it is performed above the termination of the spinal cord e.g. lumbar vertebrae L2, because of the iatrogenic injury to the cord that can happen during the procedure. Methodology: 10 patients with grade of American Society of Anesthesiology ASA III-IV diagnosed with co-morbid disease severe COPD and ischemic heart disease, performed was spinal anesthesia in the thoracic level (Th 10-12 and Th 4-6) while had to undergo operations e.g. laparoscopic cholecystectomy or radical mastectomy. Results: In all of the patients successful analgesia was achieved with thoracic spinal anesthesia, and in none of them we didn't had to initiate general anesthesia. The drop in BP, HR, was lower than in spinal anesthesia in lumbar level. Conclusion: Thoracic segmental spinal anesthesia, even not a routine procedure, and not explained as a procedure in anesthesia books, it might be a useful tool, to use it in certain cases (ASA III-IV), when general anesthesia is not a preferred option, or it is contraindicated.

Keywords: Thoracic spinal anesthesia, bupivacaine, aortae

OP.26

Upper extremity blocks: Supraclavicular brachial plexus block versus Axillary brachial plexus block. Our experience

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Abstract

Background: The brachial plexus can be blocked by several techniques, but the most commonly used are the Supraclavicular (SCB) and Axillary (AXB) blocks. Since ultrasound introduction in the clinical practice, it has become a valuable adjunct for peripheral nerve blocks. Initially used in conjunction with nerve simulation, ultrasound guidance has now increasingly been used as a sole modality to locate and anesthetize brachial plexus by allowing the operator to visualise in real time the nerves, needle and local anesthetic spread.

Objective: To compare the two techniques with regards to the performance time, needling time, anesthesia-related time, block-related complications, number of needle pass and block related pain.

Methods: After obtaining a written informed consent from patients, this prospective, randomized, interventional study was done to patients undergoing scheduled arterio-venous fistula creation with/without graft Gortex and emergency brachial artery thrombectomy. 40 patients were randomly allocated into two equal groups. Under ultrasound guidance, the SCB and AXB were done for the two groups, respectively. The needling time, performance time, anesthesia-related time,onset time, number of first needle pass in each group and block-related complications were noted.

Results: Longer needling, performance, anesthesia-related time, onset time was observed in the AXB group than in SCB and less complication have occurred with AXB than SCB group.The number of failures to anesthetize the brachial plexus was greater in the AXB group than in SCB group.

Conclusion: Supraclavicular block of brachial plexus is a good alternative to Axillary block in emergency thrombectomy and in the upper limb surgery in general. On the other hand, Axillary block is considered very safe and reported to be the least one of the brachial plexus approaches to have complications, although it needs more needling and performance time and subsequently more anesthesia-related time. The choice of the block is made according to the requirement of each case.

OP.27

Assessment of sodium status in outpatients and hospitalized patients

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Abstract

Introduction Sodium disorders (hyponatremia, hypernatremia) are common disorders electrolytes in clinical medicine and are associated with an increase in the rate of morbidity and mortality.

Methods We conducted a retrospective study including outpatients and inpatients, presented near the "Our Lady of the Good Council" Catholic Hospital and the Father Luigji Monti polyambulance during the period January - December 2023, who have performed the Natremia laboratory test.

Results During the 1-year period studied in our laboratory, we have had 552 patients who have measured serum electrolytes, of which 516 outpatients and 36 hospitalized. the average age is 57 years old (1-96 years old). From the answers received, it appears that hypernatremia is encountered in 1% of cases and hyponatremia in 4% of cases. The prevalence of hyponatremia in outpatients resulted 3.1% and in hospitalized patients approximately 14%.

conclusions Hyponatremia is the most common electrolyte disorder and the most important one to look for

special attention of clinicians

OP.28

Clinical nutrition in ICU

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Abstract

Most critically ill patients are unable to provide their own nutrition, so clinical nutrition therapy and nutritional assessment are essential parts of intensive care unit (ICU) patient treatment.

The purpose of this lecture is to summarize the new evidence with nutrition support and provision of clinical nutrition to critically ill patients and in this way improve the ICU patients quality of care. We intend to help ICU healthcare professionals facilitate the implementation of new best clinical practices to ensure the best care for their patients.

We have reviewed many latest publications related to enteral and parenteral nutrition where a main goal was to reflect the current medical knowledge in the field of medical nutrition as essential therapy for critical ill patients in the ICU, with particular emphasis on the new guidelines from ESPEN and ASPEN.

The new recommendations define who the patients at risk are, how to assess nutritional status of an ICU patient, how to define the amount of energy to provide, how to adapt nutrition to various clinical conditions and comorbidities, according to the large heterogeneity of the ICU patients.
When and how to progress in the administration of an adequate provision of carbohydrates, lipids, protein, glutamine and omega-3 fatty acids. Specific conditions that we encounter on a regular basis in the ICU, include patients suffering from dysphagia, abdominal surgery, sepsis, numerous trauma patients, and obesity, provide ongoing challenges.
Recognizing acute and post-acute phases, metabolic changes caused by stress or injury, as well as calorie and protein deficiencies, and maintaining a competent immune system all play an important role in the outcome of patients.
The major goal should be to prevent the development of Prolonged Inflammatory and Catabolic Syndrome and Refeeding Syndrome as well.

OP.29

Heparin induced thrombocytopenia (HIT)

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Abstract
Heparin induced thrombocytopenia is a serious complication of heparin therapy with devastating thromboembolic complications. The mortality of patient developing HIT is approximately 10%. HIT is an antibody-mediated adverse drug reaction with a complex pathophysiology. The hallmark of this pathology is venous and arterial thrombosis occurrence and platelet consumption due to the thrombosis. The incidence of HIT 1–5% when UFH is used but < 1% with LMWH, it's more frequent in females, and more frequent with high doses of heparin used. Cardiac and orthopedic surgery patients are the mostly concerned. The most common thrombotic complications are the DVT (50%) and the pulmonary embolism (25%). The 4T scoring system is used for the diagnosis (thrombocytopenia, timing, thrombosis and other causes of thrombocytopenia). The platelet count typically drops between 5-10 days of beginning of the heparin treatment, decrease more than 50% of the baseline platelet count, usually between 40-80 G/L and only in few cases drop below 20 G/L. The laboratory assays used for diagnosis are the dosage of anti PF4 antibodies, platelet aggregation test and serotonin release assay which has the highest sensitivity and specificity. When the HIT is highly suspected or confirmed, the heparin therapy should be stopped immediately and other anticoagulants should be given. Fondaparinux, Danaproide and Argotraban are the most used molecules.

OP.30

Angiotensin II in AKI. Culpable or Savior.

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Abstract

Angiotensin II (Ang II), part of the renin–angiotensin–aldosterone system (RAS), is a potent vasoconstrictor and has been recently approved for use by the US Food and Drug Administration in high-output shock. Though not a new drug, the recently published Angiotensin II for the Treatment of High Output Shock (ATHOS-3) trial, as well as a number of retrospective analyses have sparked renewed interest in the use of Ang II, which may have a role in treating refractory shock. We describe refractory shock, the unique mechanism of action of Ang II, RAS dysregulation in shock, and the evidence supporting the use of Ang II to restore blood pressure. Evidence suggests that Ang II may preferentially be of benefit in acute kidney injury and acute respiratory distress syndrome, where the RAS is known to be disrupted.
Additionally, there may be a role for Ang II in cardiogenic shock, angiotensin converting enzyme inhibitor overdose, cardiac arrest, liver failure, and in settings of extracorporeal circulation

OP.31

Tetanus - Problems and Challenges of intensive management

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Tetanus is an infectious pathology caused by Clostridium Tetani through the tetanospasm toxin, manifested by neurological disorders, characterized by increased muscle tone and spasms. It manifests itself in several forms. Based on the clinical evolution, we have generalized and localized tetanus. According to topography: cephalic, neonatal, splanchnic, joint tetanus and recurrent or recidive tetanus; According to the course: tetanus of light, medium and severe form; According to the classification in grades I - trismus, II - muscular rigidity, III - muscular rigidity and paroxysmal spasms, IV - muscular rigidity, paroxysmal spasms and autonomic dysfunction.
Purpose: Evidence of tetanus as an old "forgotten" but current disease in our country, the challenges of resuscitation and infectious management
Material and Method. The study is retrospective, where we included 37 cases of tetanus followed in the resuscitation of the infectious disease service in the annual period 2005 - 2023. We analyzed the epidemiological, clinical aspects, treatment schemes and mortality compared to the countries of the region.

The result: In the epidemiological aspect, according to gender, 32% were women and 68% were men; with residence distribution in all districts with a predominance of cases in Tirana 24.32%. All cases were severe forms of various degrees with trismus - muscle stiffness - paroxystic spasms and autonomic dysfunction. A significant relationship was observed between age and mortality with p=0.007, as well as the correlation between the time of hospital stay and lethality p < 0.001. Treatment in the early phase within 24h consists of the administration of passive immunization with human SAT, antitetanus vaccine, metronidazole and benzodiazepines. In the middle phase (following 2-3 weeks), treatment of sympathetic hyperactivity with beta blockers or morphine, correction in case of hypotension, pacemaker/Atropine or isoproterenol in case of stable bradycardia, heparin for prophylaxis, gradual reduction of the dose of benzodiazepines. Convalescence phase (2 - 6 weeks later) physical therapy after the spasms have disappeared, supportive psychotherapy, administration of another dose of DT or DTP vaccine, the third dose of the toxin is planned to be given 4 weeks after the second dose.
Conclusions: Tetanus continues to be a reality in our country, with a very high mortality rate. It is diagnosed through its clinical forms and not laboratory or imaging of modern medicine. Fast and adequate resuscitative and infectious management is determinant on its progression. Vaccination remains the only preventive method in all age groups.
Key words: Tetanus, Adults, Reanimation,

OP.32

Assessment of fever in ICU for Trauma Brain Injury: Neurogenic or Septic?

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Abstract
The Merck Manual defines fever as an oral temperature >37.8°C (>100.0°F) or a rectal temperature >38.2°C (>100.8°F) and pyrexia or hyperthermia as >41 °C
Fever is probably the most frequent symptom observed in neurointensive care and it`s central origin (Neurogenic Fever) was first described in the journal *Brain* by Erickson in 1939.
Aggressive fever reduction may not be indicated in the population with infectious evidence, because of the enhancement of immune response. In the other hand strong evidence showed that fever after brain injury is associated with increased mortality. Pyrexia may increase intracranial pressure and worsen secondary ischemic damage after Traumatic Brain Injury.
In trauma, patients who survive longer than 3 days, infection is the second cause of death, and almost 45% of all trauma patients will acquire an infectious implication such as pneumonia during their ICU stay.
Unjustified use of antibiotics cause increase cost of treatment and the emergence of resistant strains.
Diagnosing, treating Fever in Trauma Brain Injury patients in the ICU is challenging and requires an effective care.

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OP.33

Recent views and actual considerations regarding anesthesia in obese patients.

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Abstract:

Introductions: Recently in the world we have had a rapid increase in patients with metabolic syndrome, obese patients. It effects many elements such as sedentary life, bad intake of fats and carbohydrates. Of course, these subjects have other problems and may need different surgical interventions. Besides the surgical problem, the most important problem is the anesthetic administration and the complications related to it. Induction, ventilation, operative management of these patients and withdrawal from anesthesia are many challenges. Classification of obese patients is done according to BMI ≥30. The comorbidities that accompany these patients and the consumption of alcohol and tobacco is a challenge in itself. There is a lot of value in the preoperative assessment of these patients for sleep apnea syndrome, diabetes, hypertension, renal insufficiency, etc. Among operative risks, we mention re-aspiration, cardiovascular, and metabolic ones.

Materials and methods: We have been relied on literature, studies and various presentations, experience and reviews. Nowadays, there is an extraordinary number of publications, protocols for the application of anesthesia and anesthetic substances in obese patients, due to reduce complications during and after surgery, especially in the early period. Correct preoperative assessment, management of the respiratory tract and ventilatory modes and anesthetic medications are objects of protocols and literature.

Results: The mortality of obese patients is approximately 3.9% as the result of studies, in literature and publications. It's significantly higher than non-obese patients of the same category. Respiratory complications during the induction period are hypoxia, difficult patient ventilation and aspiration. During the maintenance of anesthesia, hypoxia, barotrauma, increased pCO_2 and cardiovascular complications are observed more often. In postoperative period, desaturation and CO_2, hypertension and re-intubation are encountered. The use of c pap, good positioning of head and neck, reduces the risk of hypoxia and difficulties in ventilation. Also, the use of week intubations or video laryngoscope reduces the possibility of intubation failure. The use of volumes of 6-8 ml/kg and peep =5Cm H_2O and high frequency during the maintenance of anesthesia, reduce the risk of hypoxia and hypercapnia. During the post-operative period, we recommend CPAP and complete withdrawal from myorelaxants and prolonged extubation. The use of neuraxial anesthesia is described

to significantly reduce anesthetic complications.

Conclusions: Neuraxial anesthesia and other measures significantly reduce complications from the administration of anesthesia in obese patients, due to the latest updated literature regarding to the application of protocols.

Discussions: The application of protocols during the administration of anesthesia in obese patients, is also guided by the experience of the anesthesiologist in medical practice. Combining both of them and also based on the relevant pathology, would produce more safety for the patient and success in the intervention as well.

Keywords: Obesity, Anesthesia, respiratory complications, patient, CPAP.

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OP.34

Anesthetic management of kidney transplantation, key points

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Abstract

Kidney transplantation is considered the best replacement therapy for patients with ESRD.Despite an increasing number of high-risk patients on the waiting lists, such as those suffering from older age, ischaemic heart disease, diabetes and congestive heart failure, the postoperative complication rate is relatively low compared to other solid organ transplantation procedures

During the renal transplant surgical procedure, it is extremely important to ensure an adequate volemic status and a simultaneous hemodynamic response of the patient in order to ensure the rapid resumption of organ function at the end of transplantation. Central venous pressure (CVP)-guided volume infusion has been the traditional approach in kidney transplantation and involves intraoperative infusion of large volumes of fluid, based on maximal volume infusion to the point of no further response. of liquids. However, this can lead to excessive fluid infusion, which can damage the endothelial glycocalyx and lead to a shift of fluid into the interstitial space. For many years, during renal transplantation, a liberal attitude to fluid therapy was recommended, with infusion rate values ranging from 10-15 ml/kg/h to 30-40 ml/kg/h with a CVP of 8- 12 mmHg, in order to promote early recovery of implanted graft function. Over the last few years, this attitude has been reduced in favor of less aggressive fluid therapy and infusion is now guided by relatively accurate hemodynamic indicators (CVP, MAP) characterized by an infusion rate of 10-15 ml/kg/h with a objective. of CVP 7-9 mmHg. This has resulted in a reduction in cardiovascular complications with good graft survival.

Given the need to maintain an adequate hemodynamic status with adequate tissue perfusion in high-risk patients, it is considered appropriate to administer the necessary fluids according to standardized protocols aimed at maintaining a predetermined hemodynamic state.

Therefore, our aim is to provide greater precision in the hemodynamic and fluid management of kidney transplant recipients using a specific protocol.

Keywords: kidney transplantation; haemodynamics monitoring; fluid management;

OP.35

Awake fiberoptic intubation in a patient with a large neck mass (Case report)

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Abstract
Case report: In the preoperative anesthetic visit, it was found that the patient S.R, 76 years old, presented a large mass in the right submandibular region extending to the lateral side of the neck.
The patient was evaluated with Mallampati 4. Also, in the X-ray of the neck, it was well noticed that the mass had displaced the trachea from the midline to the left lateral direction.
So, obviously, airway management and intubation would be a challenge for us.
After induction, attempts to oral or nasal intubation failed. The surgeons refused to proceed with a tracheotomy, due to the anatomical and pathological difficulty caused by the mass.
Because of physical findings of increased risk for airway the anesthetic strategy icluded awake fiberoptic nasotracheal intubation seven days later.
A tracheal tube was inserted through nasal cavity under topical anesthesia and light sedation.
The patient was successfully intubated.
Conclusion: Difficult airway management is a dilemma for the anesthesiologist. Despite practical recommendations or auxiliary algorithms, the judgment and vigilance of the anesthetist must be at the appropriate level. Awake fiberoptic intubation is an effective method when the airway appears difficult

OP.36

Challenges of anesthesia in bariatric surgery, ERAS recommendations and our experience in laparoscopic gastric sleeve surgery.

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Abstract
Obesity is a worldwide problem, the World Obesity Atlas 2022, published by the World Obesity Federation, predicts that one billion people globally, including 1 in 5 women and 1 in 7 men, will be living with obesity by 2030.
In Albania, according to national estimates that correspond to a population survey conducted in 2018 by INSTAT, almost 21.3% of the adult population are obese (BMI > 30 kg/m2). A recent study of the Global Map of Obesity shows that Albania will have a much higher
prevalence in 2035, where about 37% of adults will be overweight, an increase of

almost 16% compared to 2023. 2 The ASMBS/IFSO Guidelines now recommend metabolic and bariatric surgery for individuals with a BMI of 35 or more "regardless of presence, absence, or severity of obesity-related conditions" and that it be considered for people with a BMI 30-34.9 and metabolic disease and in "appropriately selected children and adolescents."8But even without metabolic disease, the guidelines say weight-loss surgery should be considered starting at BMI 30 for people who do not achieve substantial or durable weight loss or obesity disease-related improvement using nonsurgical methods.

These evidences will take us to an increase of bariatric surgery requests. These requests are related to aesthetics aim or medical reasons. Our survey shows an increase of requests for gastric sleeve by patients in age over 50 years with comorbidity, especially with hypertension
and diabetes. Bariatric surgery is an effective, longer lasting strategy for morbidly obese patients to manage BP and CV risk factors and might be considered in case of failure of all of the above measures 3, particularly in patients with severe obesity. Every patient deserve the
best treatment, so we decide to use ERAS recommendation about bariatric surgery.

During preoperative optimization some ERAS recommendations are:

1. Cessation of smoking,
2. Preoperative weight loss
3. Prehabilitation and exercise
4. Preoperative fasting for solids

Intraoperative period:

1. Perioperative fluid management
2. For patients with BMI>30kg/m2 the best anesthesia is TIVA with propofol, we have chosen short-acting agents and minimal opioid, as volatile anesthetic is used sevoflurane because of our daily practice.
3. As premedication we used profilactic dose of antibiotics and PPI. To prevent PONV we used dexamethason 8mg at induction of anesthesia, 33.3% of our patients had one event of vomiting in first hour of postoperative period.
4. To reduce postoperative pain we used infiltration of bupivacain 0.5% before incision, paracetamol and NSAIDs. We have seen an overreaction of youngest patients, so 14.28 %
had to much pain, 71.4 % were free of pain and others had moderate pain.
5. Airway management, the overall incidence of difficult intubation in patients with severe obesity was 4.2% The use of simple nasal or high flow nasal cannula should be considered as an adjunct during mask ventilation in patients with a suspected or known difficult intubation. The use of a videolaryngoscope and Predicted Body Weight (PBW) is important in this kind of surgery. Patients with obesity are predisposed to develop atelectasis mainly in dependent lung regions, making the combination of recruitment manoeuvres (RMs)and PEEP a strategy to improve gas exchange and lung mechanics. Some studies have
reported an association between severe obesity and difficult intubation6, we had only 1 difficult intubation, it was male with severe obesity, BMI 49 kg/m2 and OSA

1. Abdominal drainage and nasogastric decompression
2. Early postoperative nutritional care. A clear liquid meal regimen can usually be initiated a couple of hours postoperatively before moving on to nourishing fluids, here

we have discussions, we started clear fluids in the third postoperative day.
3. Thromoprophylaxis The ASMBS guideline suggests thromboprophylaxis, including unfractionated heparin or low-molecular-weight heparin (LMWH) given within 24 h postoperatively, for all patients after bariatric surgery
Our daily practice is early mobilization and Enoxaparin use 24 h postoperatively.
1. Patients with diabetes, bariatric surgery improves glucose homeostasis, due to a variety
of mechanisms, as early as in the immediate postoperative period7. In patient with oral antidiabetics we have seen cessation of medication and in the patient with insulinotherapy we have seen reduce of dose of insulins until 50 %.
Conclusion
In the absence of our national studies and due to the not very large number of these surgical procedures, the recommendations of ERAS adapted to our clinical practice and our hospital conditions, including psychology and the approach of our patients, remain the best protocols and closer to our reality. We have shown our experience for laparoscopic gastric sleeve surgery, but we all need to confront our experiences and to share pro-s and con-s in aim of offering the best to our patients, undergoing this important surgery. Nowdays, patients asking gastric sleev are over 40 years old and with comorbidities, only 4.76% of our patients were undergoing to this surgery with high risks
for esthetics aims. It is important to understand that all these are recommendations...., everyone should implement all these in a multimodal approach.

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8. IFSO International Federation for the Surgery of Obesirty

OP.37

The Physiologically difficult airway

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Abstract
Physiologically Difficult Airway is a recent concept of difficult airway that accounts for difficulties associated with patients' underlying physiologic unbalance independent of their anatomical

characteristics .
Although anatomy certainly plays a role in difficult airway management,contextual and physiologic factors such as time pressure, environment, and patient's hemodynamic status and/or respi– ratory reserve all contribute to the complexity of safely securing an airway and optimizing gas exchange; the ultimate goals of tracheal intubation (TI).
We will discuss specific conditions and examples of physiologically difficult airways—hypoxemia, hypotension, severe metabolic acidosis, and more—along with strategies to mitigate the risk of complications associated with airway

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OP.38

Preeclamsia, management and anesthetic considerations

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Abstract
Preeklampsia is a complication of pregnancy that is associated with substantial maternal and fetal morbidity and mortality. The disease presents with new-onset hypertension and often proteinuria in the mother and ocurring in 2,5-7% of pregnancies.. Acording FIGO(2021) preeklampsia defined as hypertension ≥140/90mmHg, after 20 weeks of gestation, on two occasions at least 4 hours apart in a woman with previously normal blood presure whith presense of : proteinuria≥300mg /mol, maternal organ disfunction (renal, liver, neurologic, haematologic), utero-placentar disfunction, fetal growth restriction .
Classification:preeclampsia, eclampsia, hellp syndrome, cardiomyopathy.
Biomarkers:Used placenal growth factor to support diagnosis of preeklmpsia.
Blood pressure control:The aim of manangement is for Bp of 135/85mmHg or less.Haemorragic stroke is the most common stroke type associated with preeklampsia.Systolic hypertension directly correlates with riskof stroke, occur most postpartum.
Drugs:all commonly antihypertensive drugs used in pregnancy reduce the risk of severe hypertension.Labetalol may also decrease ptoteinuria and fetel death.Be careful with

sublingual nifedipine for maternal hypotension.All antihypertensive drugs have no differences in maternal and fetal outcomes.The route of administration depend on: severity of disease, likelihood of operative intervention, need of repeat blood sampling.
Rrisk of trombocitopenia:vertebral canal haematoma(anticoagulation therapy, multiple attempts).Be aware of progressive sensory and motor deficit, blader and bowel disfunction.
Eclampsia prophilaxis:magnesium sulphate stop and prevents seizures, bolus or infusion.
Eclampsia manangement: ABC, stop seizure, prevent next seizure,
Anesthesia: before performing anesthesia check BP, coagulopathia, pulmonary edema, fluids and cardiac failure.Risk of stroke in general anesthesia is 2.4 times higher versus spinal anesthesia.Women with preeclamsia develop less spinal hypotension.
Key words: preeclamsia, blood control , trobocitopenia.

OP.39

Port a Cath in Chemotherapy. Placement protocol access, complications. Our experiene.

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Abstract
The beginning of the activity of the Department of Chemotherapy in the Vlore Regional Hospital, as well as the increase in cases with nosology that require treatment with EV chemotherapy brought the need to increase the quality of service from the hospital institution as well as the quality of life of the patients who undergo chemotherapy. From the summer of 2023 in S.R. Vlore we have started to offer this service and the positioning and access of PORT Cath. Our experience in the ECO-Guide of the Central Veins makes the positioning of Port Cath more accessible to us. We have devoted a special importance to informing the patients about the procedure, its benefits, the qualification of the personnel who will deal with the access to the gate, but not only. We perform the procedure in the Surgery Operating Rooms under Eco-guide as well as with a potable television scope. The procedure for deciding on Port Cath is done by following the international Line Guides. And the post procedure management is followed by us in cooperation with the Chemotherapy department. They are usually placed in V.J I Dexter or Sinister and one case in V.S. Sinister and the port is positioned 2-3 cm subcutaneous sotoclavicular of the respective side. We have no major early complications. We have always performed cannulation under the Eco-guide of the

central vein and after positioning the Seldinger probe, we performed Ro-Scopi to check for position and at the same time to orientate on the length of the catheter to be placed. The television ro-scope control is done after the positioning of the catheter and the port in the subcutaneous pocket. The dynamic follow-up continues in cooperation with the chemotherapy department for the progress of the port wound and care during access in sterile conditions and heparinization according to international protocols.

OP.40

Vascular accesses management in ICU

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Abstract

Introduction: Peripheral intravenous catheters help for infusion of medications, fluids, blood products, nutritional supplements, and even vasopressor in septic shock during central line catheters insertion.

Material and Methods: Peripheral catheters are mainly used for shorter periods when direct access to the central circulation is unnecessary or not accessible. Peripheral access seems to be safer, easily to obtain, and less painful than central access. Central venous catheters are preferred in patients receiving medications that potentially damage peripheral veins, treating with vasopressors, large amount of fluid needed, and for longer time use. Contraindication for peripheral catheters use is only the situation that oral route is available for a certain drug, instead of central catheters that have several contraindications as blood stream infections, thrombosis, stenosis, and severe coagulopathy.

Discussions: The incidence of difficult peripheral intravenous catheter placement is approximately evaluated 8-23 %. Several situations are associated or cause the difficult or impossible peripheral intravenous catheter placement. These situations include history of difficult IV access, on-visible veins, diabetes, long-lasting peripheral vein use, sickle cell disease, cancer and chemotherapy, pediatric and geriatric ages, underweight and severe obesity.
Distal extremity veins are firstly preferred, but antecubital fossa site must preferable avoided due to the relation of brachial artery and for catheter kinking possibilities. The ipsilateral arm of previous mastectomy and/or arteriovenous dialysis fistula is present, is not preferred to be cannulated. Nowadays ultrasound guided peripheral cannulation are the actual trend especially in ICU or High Dependency Unit. In our institution for several years, we practice Mid-Line Port. and Picc-Line Port with good results.
Conclusions: In ICU daily practice, several peripheral vein cannulation modalities. The physicians must take in consideration the idea of individualizing the patients, must have general knowledges for the insertion techniques and complications as well. Ultrasound guided techniques are today's techniques of choice especially in inserting the intermediate longstanding peripheral venous cannulas.

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OP.41

Communicating issues of critical patients

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Abtract

The majority of patients in critical care units are compromised in their ability to communicate. Often, they suffer from an illness or a condition with an uncertain prognosis, usually presenting with abnormal vital signs and major complications, including the loss of consciousness so communication is challenged by patients' inability to speak owing to intubation, treatment, and illness. Specifically, they are unable to communicate orally and so cannot represent their thoughts, feelings, desires and needs clearly to others. Their critical condition requires technological support, modern facilities, and invasive and non invasive procedures for the purpose of measuring, monitoring and regulating physiological functions.These patients' inability to express themselves fully is exacerbated by the inadequate implementation of standardized and modern communication methods in critical care units.

In order to ensure quality communication between clinicians and patients within ICUs, nurses and others therefore need to use different methods of communication to enable them to understand their patients' needs, especially for non-communicative intubated patients who frequently struggle to make themselves understood. This inability of patients to communicate their needs to their caregivers and nurses leads to high level of emotional reactions including increased levels of frustration, depression, stress and anxiety.

Among the patient-related communication determinants, those which impact on physical and/or cognitive functionality are widely reported in the literature, such as physical weakness, supine position, level of consciousness, delirium, use of physical restraints, or absence of sensorial or dental prostheses.

To sustain their lives and ensure that they are cared for with dignity, critically ill patients usually require specialist care including advanced respiratory and other system and organ support.

The literature already evidences the influence of the professionals' skills, attitudes and knowledge on communication with intubated patients. The professionals' training in skills and knowledge of augmentative and alternative communication is identified as a decisive factor, and is related to greater success in the communicative exchanges between professionals and patients.

Good inter-professional communication influences quality of care and patient safety. Failure of interdisciplinary communication is linked to avoidable medical mishaps. The way in which clinical disagreements with colleagues in contributing specialities are negotiated and settled has received little

attention. Clear communication is central to clarifying and resolving these disputes, but little is known about how this might be taught or improved.

Medical staff should also be aware of the techniques and technology available for intubated patients to engage in communication, including the use of spelling boards, icon charts, and electronic aids.

Not all the impediments to good communication in the intensive care setting can be ameliorated by the doctor. A single meeting may be insufficient for a relative whose concentration is impaired by shock or anxiety and relatives may 'shut down' to receiving further information.

Communication may be the most important factor in end-of-life care in ICUs. Reaching agreement on withdrawal of care in acute situations is a unique challenge and significantly extends the skill of breaking bad news. The conduct and content of family meetings leading up to a patient's death have been studied and guidance is moving from expert opinion to evidence informed practice.

Several factors contribute to the difficulty of conversations about prognosis. As the prognosis translates into medical decisions, the process must be coordinated across medical teams. These tasks are as yet imperfectly practiced. Partnering with patients who have a serious illness to help them live and die well requires iterative conversations about their illness understanding, prognostic awareness, hopes and worries, and what matters most to them as the trajectory of the illness becomes clear. These conversations must take place over the course of the illness, in the context of trusted relationships in which the clinician is attuned to the patient's psychological coping and ability to cognitively and emotionally adapt to the reality of their mortality.

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OP.42

Two-Year Retrospective Analysis of Continuous Veno-Venous Hemodiafiltration (CVVHDF) in Acute Kidney Injury (AKI) Management: Insights from a Restrictive Protocol in the Intensive Care Unit (ICU)

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Abstract

Background: Acute Kidney Injury (AKI) remains a significant concern in critically ill patients admitted to the Intensive Care Unit (ICU), warranting advanced renal replacement therapies (RRT) such as Continuous Veno-Venous Hemodiafiltration (CVVHDF). This abstract presents findings from a two-year retrospective still ongoing from January 2023- December 2024 study aimed at evaluating the outcomes of a restrictive CVVHDF protocol in AKI management within the ICU setting.

Methods: A single-center, non-randomized, retrospective study included patients with AKI who received CVVHDF therapy in the ICU over a two-year period. A restrictive protocol was implemented, emphasizing precise patient selection criteria, tailored fluid management strategies, and careful monitoring of therapy parameters. Data collected included patient demographics, AKI etiology, CVVHDF parameters, fluid balance, electrolyte levels, hemodynamic stability, ICU length of stay (LOS), and mortality rates.

Preliminary analysis revealed until April 2024 a cohort of 73 patients with varying degrees of AKI severity, including cases secondary to sepsis, nephrotoxicity, postoperative complications, cardiogenic and DKA induced. The restrictive CVVHDF protocol demonstrated effective solute clearance, fluid balance control, and maintenance of electrolyte homeostasis. Notably, hemodynamic stability was achieved in the majority of patients, with minimal incidence of hypotension or fluid overload complications during CVVHDF therapy.

Furthermore, the study identified a trend towards reduced ICU LOS among patients managed with the restrictive CVVHDF protocol, reflecting potential benefits in resource utilization and healthcare costs. Mortality rates were comparable to existing literature, underscoring the importance of early recognition and intervention in AKI management.

Challenges encountered during the study period included vascular access issues, electrolyte imbalances, and circuit-related complications, highlighting the need for continuous quality improvement initiatives and multidisciplinary collaboration in optimizing CVVHDF therapy delivery.

In conclusion, our two-year retrospective analysis provides valuable insights into the implementation of a restrictive CVVHDF protocol for AKI management in the ICU. The findings support the efficacy and safety of this approach in achieving solute clearance, fluid balance control, and hemodynamic stability while potentially reducing ICU LOS. Future prospective studies are warranted to validate these findings and further refine protocol guidelines for optimized AKI management in critically ill patients.

Keywords: CVVHDF, AKI , fluid balance, electrolyte levels, hemodynamic stability, ICU length of stay (LOS), and mortality rates.

OP.43

Antibiotic dose optimization can improve outcome in burn sepsis

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Abstract

Background Because of progress in intensive care medicine, advances in surgery and burn care the severe burns patient's survival has been improved. Infection remains the main cause of mortality and there is high risk for developing bacterial and fungal infections.

Aims To describe how Pharmacokinetics / Pharmacodynamics(PK/PD) of drugs, including antimicrobials are affected by the pathophysiological changes after burn injury

Results During the first 48 to 72 hours after initial injury, patients with severe thermal injury may present in burn shock and will undergo large-volume fluid resuscitation.

Inflammation, both at the site of injury and systemically, causes vasodilation, vascular hyperpermeability, and decreases in interstitial oncotic pressure, shifting fluid and albumin out of the intravascular space to the interstitial space.This, coupled with massive fluid resuscitation, lead to increases in the Vd. Larger than normal doses may need to be administered to achieve a therapeutic serum concentration.

By day five post-injury, patients start to develop a postburn hypermetabolic response. During the hypermetabolic phase, systemic inflammation and oxidative stress lead to increased cardiac contractility and increased cardiac output.Blood flow to the liver and kidneys are also increased, increasing hepatic metabolism and renal clearance.

Increased cardiac output increases blood flow to the kidneys and can potentially lead to renal elimination of medications.

Also, increases in catecholamines during the postburn hypermetabolic response, specifically norepinephrine, can lead to increases in creatinine clearance, and potentially drug clearance. Additionally, patients experience non-renal clearance of drugs via exudate leakage from partial and full-thickness burns. During this phase, burn patients may need more frequent dosing of medications to maintain therapeutic serum concentrations.

Conclusion Bacterial and fungal infections are not uncommon after burn injury.Physiologic and metabolic changes after severe burns may alter the PK of antibiotic and antifungal agents.Dosing strategies may need to be altered to optimize the PK and PD of these agents.Physiologic changes that affect PK and PD be considered when designing antimicrobial dosing regimens in the burn population .

TDM has traditionally served as a mechanism to minimize the toxicity of drugs.In the context of critical illness, there is strong data demonstrating that standard dosing regimens for many antibiotics frequently fail to provide optimal PK/PD exposure

in critically ill patients.TDM can ensure the attainment of PK/PD surrogate indicators of antibiotic efficacy, and therefore potentially improve patient outcome

OP.44

Different burn fluid resuscitation regimes and relative risk of death

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Abstract

BackgroundThere are different opinions of burn experts regarding mortality after the use of colloids in the first 24 hours after-burn. According to the most recent recommendations of the American Burn Association, one option is to administer colloid-containing fluids between 12 and 24 hours post-injury to decrease overall fluid requirements during acute burn shock resuscitation.

Aims This study aims to analyze the relative risk for mortality comparing resuscitation in the first 24 hours with Parkland and resuscitation with the use of Albumin in patients with severe burns .

MethodsThis was an observational prospective cohort study conducted in the Service of Burns of the University Hospital Centre "Mother Teresa" in Tirana (UHCT), Albania. The study includes adult patients with critical burns > 40% TBSA, hospitalized in the Intensive Care Unit of the service during the period 2014 to 2019. Resuscitation in the first 24 hours is done with Ringer Lactate according to Parkland and with Ringer Lactate with the addition of Albumin after 12 hours.

Results The data for organ dysfunction and organ insufficiency were the same in the two groups without statistical significance. Mortality in the RL group was 48% (24 deaths of 50 patients)while in the RL + Colloid rehydrated group was 46%(23 deaths of 50 patients). Patients which have 40-60% burns and are rehydrated with RL + Colloids have a risk of death 0.4 times less than those rehydrated with RL(Table 1).

Table 1- Relative risk for mortality in patients with burns ≥40% TBSA(n=100)

	RL Group(n=50)	RL+Colloids Group(n=50)	RR (Relative Risk) (95% CI)	OR (Odds Ratio)	NNT (Numbers need Treat)	P
Survivors- no/ total	26/50	27/50	1.04(0.70;1.54)	0.92	50	0.841
Deaths- no/ total	24/50	23/50	0.96(0.63;1.45)	0.92	50	0.841
Mortality, % (n)	48(24)	46(23)				
Time of deaths,% (n)						
The first two days	62(15)	52(12)	0.8(0.41;1.53)	0.74	50	0.5
First week	17(4)	38(9)	2.25(0.74;6.83)	2.52	10	0.15
Second week	13(3)	0(0)				nan
Third week	4(1)	5(1)				1
More than a month	4(1)	5(1)				1
Deaths in TBSA % Groups,%(n)						
40-60%	30(9)	17.3(4)	0.44(0.14;1.34)	0.4	10	0.15
61-80%	50(4)	60(9)	2.25(0.74;6.83)	2.52	10	0.15
81-100%	91.6(11)	83.3(10)	0.91(0.42;1.94)	0.89	50	0.8

In figure 1 we are giving the analysis of survival curves for the three groups of burn sizes where we notice that patients with burns 40-60% TBSA have survival of almost 80%

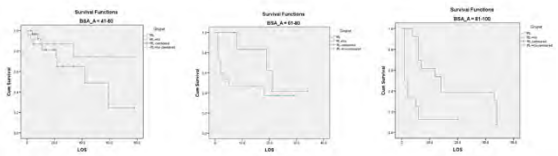

Figure 1-Survival functions in different burn sizes (% TBSA)

Conclusions Resuscitation with Ringer lactate and Albumin in the first 24 hours of thermal damage is a rehydration alternative for the treatment of burn shock. This therapy especially helps patients with major burns > 40% TBSA who during rehydration require large amounts of fluids and are associated with severe plasma hypoalbuminemia. In particular patients with burns, 40-60% TBSA had improvement in mortality from survival analysis and benefit or Number to Treat (NNT benefit) is 10 so 1 in 10 can benefit with RL + Albumin in the first 24 hours of burn shock.

OP.45

Benefits and risks of diuretics in ICU patients

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Abstract
Diuretics are one of the most used drugs in intensive care unit (ICU). Achieving fluid balance and avoiding fluid overload is the final goal in any kind of ICU patient. Fluid balance is the outcome of appropriate function of cardiovascular system, proper function of the kidneys, oncotic pressure and vascular permability.
The ICU patients that are bedresting patients, lung congestion is a common finding.
Also diuretics modulate the acido-basic and electrolytes balance in these patients.
Loop diuretics are the fist choice in the most of the patients. The way of admistration, the dossage and duration tent to increase the drug resistance and and imbalances of acido-basic and electrolytes. So is a nessecity in the critically ill patiento think about the best diuretic combination to secure the homeostasis.

OP.46

The relationship between perioperative physiotherapy and postoperative pulmonary complications in abdominal surgery

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Abstract
Introduction**:** Previous studies in Albanian patients who underwent abdominal surgery had reported that the incidence of postoperative pulmonary complications (POPC) varied from 27.3% in patients undergoing abdominal surgery to 40.57% in elderly patients who stayed more than 48 hours in the hospital. These studies revealed that comorbidity and preexisting lung diseases were independent risk factors for POPC development. Perioperative care aims at the reduction of postoperative complications, especially POPC, which are the most expensive among postoperative complications. Perioperative physiotherapy can be among the preventive measures for POPC.

The study aimed to explore the relationship between perioperative physiotherapy and the development of postoperative pulmonary complications after abdominal surgery.
Methods: Meta-analyses, systematic reviews, randomized controlled studies, and guidelines about perioperative physiotherapy were reviewed to demonstrate the relationship between perioperative physiotherapy, especially chest physiotherapy, and POPC.
Results: The reviewed literature and published guidelines about reducing risk for postoperative pulmonary complications demonstrated that preoperative inspiratory muscle training and respiratory physiotherapy, and postoperative physiotherapeutic exercises, incentive spirometry, deep breathing exercises, and other patient-driven lung expansion manoeuvres resulted effective in reducing POPC incidence. Patients undergoing elective major abdominal surgery benefit from preoperative physiotherapy and training sessions regarding breathing exercises and an early ambulation program. Especially smoking patients, obese patients, or those with comorbidities, showed a reduced risk of developing POPC and a reduced hospital length of stay.
Conclusion: Perioperative physiotherapy is an integrative part of the perioperative management of abdominal surgery patients. It should be included in perioperative care as a preventive strategy, especially in patients with comorbidities, lung diseases, smokers, and elderly patients who are the most exposed to postoperative pulmonary complications. Including a physiotherapist during the pre-admission visits can help in preoperative education regarding breathing exercises and early ambulation and their benefits in the patient's postsurgical outcome.
Keywords: physiotherapy, breathing exercises, abdominal surgery, postoperative pulmonary complications, lung disease.

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OP.47

Challenges in cardiovascular intensive care unit past and future

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Abstract
There is a growing demand for intensive care units, but there is a relative shortage of medical staff. Intensive care work is heavy and stressful. Optimizing the working conditions and processes of the intensive

care unit is of great significance for improving the work efficiency and the level of diagnosis and treatment in the intensive care unit. The intelligent intensive care unit is a new ward management model gradually developed on the basis of modern science and technology such as com- munication technology, internet of things, artificial intelligence, robots, and big data. Under this model, the potential risks caused by human factors are greatly reduced, and the monitoring and treatment of patients has been significantly improved. This paper reviews the progress in related fields.

Some questions, but no answers yet: will illnesses, diag- nostics and therapies be very different in 2050 than today? Will acute or chronic organ failure, immune or genetic problems, or sepsis be addressed with supportive care or bioartificial organ replacements, primary organ regeneration or other interventions at the genetic, cellu- lar or immunologic levels? What will technology, connec- tivity and informatics advances look like? Advances in ICU design We believe that at the generic level, ICU design will continue to be inextricably linked to patient, family and staff needs, hospital design concepts, space distribution, informatics capabilities, approaches to ICU care and unit management, technical achievements in the areas of diagnostics, therapeutics, and infection control, local and societal resources and regulatory mandates. The most dramatic changes in future ICU design will occur primarily in newly constructed hospitals and ICUs. Exist- ing ICUs with an approximate 20–30 year lifespan will continue to have occasional technology and cosmetic upgrades. However, the technology of 2050 may also allow for ICU spaces to be created virtually anywhere within or outside the hospital in very short time peri- ods; thus, our current concept of a clearly demarcated and long-term ICU space may evolve. For simplicity of our 2050 ICU design speculations, this article will focus on the future of traditional well-delineated and hospital- based ICU spaces.

Conclusion The intelligent intensive care unit is a new critical patient management platform gradually developed under the prem- ise of increasing patient demand, technological progress and concept update. The platform integrates the current advanced detection technology, communication technology, analysis technology, and intelligent technology. Based on the results of big data research, systematic, three-dimensional, and comprehensive management and assistance for wards, patients, and staff are carried out, to avoid hidden risks caused by human factors, improve the overall service qual- ity, and make accurate judgments on patients' conditions and prognosis. The future trends of the platform should be more user-friendly.

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EP.1

Observational and Retrospective Study Comparing Liberal Fluid Therapy vs. Restrictive Fluid Therapy with Vasopressors for Initial Resuscitation in Septic Patients: A Critical Evaluation

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Abstract

Optimal fluid management during the initial resuscitation of septic patients is a subject of ongoing debate, with conflicting evidence regarding the benefits of liberal versus restrictive fluid strategies. This abstract presents findings from an observational and retrospective study comparing liberal fluid therapy to restrictive fluid therapy with concurrent vasopressor use for the initial resuscitation of septic patients within 6 hours of presentation.

The study analyzed data until now from 12 septic patients admitted to the intensive care unit (ICU) over January 2024 – ongoing extracted retrospectively from medical records. Patients were divided into two groups based on the initial resuscitation strategy: liberal fluid therapy or restrictive fluid therapy with vasopressor support.

Demographic characteristics, including age, comorbidities, and illness severity scores, were collected for each patient. Key outcome measures encompassed hemodynamic parameters, organ dysfunction scores, ICU length of stay, and mortality rates. Statistical analysis was conducted to compare outcomes between the two groups.

Preliminary findings suggest nuanced differences between the liberal fluid therapy and restrictive fluid therapy with vasopressor support groups. While liberal fluid therapy initially demonstrated improvements in hemodynamic stability and organ perfusion, it was associated with a higher incidence of fluid overload and subsequent complications. In contrast, restrictive fluid therapy with vasopressor support maintained hemodynamic stability with reduced fluid requirements, potentially mitigating the risks of fluid overload.

These findings underscore the importance of individualized fluid management strategies in septic patients, considering factors such as fluid responsiveness, hemodynamic status, and organ function. The study highlights the potential benefits of a more tailored approach incorporating vasopressor support to achieve optimal tissue perfusion while minimizing fluid-related complications.

Conclusion: Further prospective studies with larger sample sizes are warranted to validate these preliminary findings and elucidate the optimal fluid management strategies for septic patients during the crucial early resuscitation phase. A nuanced understanding of fluid resuscitation in sepsis is essential for guiding clinical practice and improving patient outcomes in this challenging clinical scenario.

Keywords: sepsis, shock, fluids, vasopressors, hemodynamic resuscitation.

EP.2

Comparison of two methods of weaning patients from prolonged mechanical mentilation

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Abstract

Background Prolonged mechanical ventilation is defined as the need for continual assistance from a mechanical ventilator for at least 6 hours per day for at least 21 days. Weaning strategy in the PMV patient should be slow-paced and should include gradually lengthening self-breathing trials. Tracheostomy has become an increasingly common intervention in ICUs with the introduction of percutaneous techniques performed by the intensivist at the bedside.

Methods This study aimed to comparison between Pressure support ventilation (PSV) and Biphasic Positive Airway Pressure (BIPAP) as two weaning modes of prolonged mechanical ventilation in a period from September 2023 to March 2024 in a group of 40 patients which has been hospitalised in critical care unit.

Results As regards respiratory rate there were no significant differences between PSV/ BIPAP (P value=0.096).

As regard resistance this study showed that there were no significant differences between PSV /BIPAP (p value=0.051) .

This study showed that there were significant differences as regard static compliance between PSV /BIPAP (p value=0.021) .As regard dynamic compliance there were significant differences between PSV /BIPAP (p value=0.047) .

Conclusions

According to the study, patient-ventilator synchrony (PSV) is improved along with patient comfort since the patient controls the ventilation process, including when to start breathing, when to exhale and breathe, and the ventilator pattern. As a result, the patient has more control over the acid-base balance and PaCo2.We discovered that during the gradual withdrawal from mechanical ventilation, a strategy of progressive reduction of PSV until a threshold level was attained provided a benefit over more traditional techniques.

EP.3

Pulmonary complications in geriatric patients after abdominal surgery

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Abstract

Background: The aim of this study was to discover the most common pulmonary complications in geriatric patients after general anesthesia in abdominal surgery and their relationship with risk factors and strategies for their prevention.

Methods:In this prospective descriptive observational study included 115 patients over 65 years old who underwent an abdominal surgery and stayed more than two days in the hospital . This study was realized at the University Hospital Center of

Tirana "Mother Teresa" for the period September 2023-March 2024 .
Results: The most common postoperative pulmonary complications were: respiratory failure, pneumonia, atelectasis, pleural effusion, exacerbation of previous lung diseases, pulmonary edema, pneumothorax. Risk factors for postoperative pulmonary complications in elderly patients were identified: smoking, preexisting pulmonary diseases, ASA >2, obesity, albumin in serum <3.5 mg/dl.
Postoperative pulmonary complications were seen to affect morbidity,had more hospital stays and a higher in-hospital mortality compared to patients whithout these complications.
Conclusions: The incidence of postoperative pulmonary complications after abdominal surgery in patients over 65 years old was high.
Keywords: Geriatric patients, postoperative pulmonary complications, abdominal surgery

EP.4

Anesthesia and complications in thoracic surgery

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Abstract
Purpose and objective: The purpose of this study was to discover the most common complications in patients undergoing thoracic surgery and strategies for their prevention.
Methods: In this prospective descriptive observational study, patients of different ages who performed a thoracic intervention and remained in resuscitation were included. This study was carried out in the ICU Service and in the Thoracic Surgery Service at SUSN (Sanatorium) for the period September 2023-March 2024.
Results: The most frequent postoperative complications were: respiratory insufficiency, pneumonia, atelectasis, hemothorax, pneumothorax.
Some of the risk factors for postoperative pulmonary complications were identified: smoking, previous pulmonary diseases, ASA >2, obesity, ventilation with high VT, premature extubation
Some of the postoperative pulmonary complications were seen to be life-threatening.
Conclusions: The incidence of postoperative respiratory complications after thoracic surgery was not high compared to the total patients who were included in the study.
Keywords: postoperative pulmonary complications, thoracic surgery

EP.5

Anaesthesia in neonates requiring emergency cardiosurgical intervention

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Abstract
The presence of a distressed or obtunded infant in any adult or pediatric emergency

department can prove to be a challenging process in airway management, vascular access, and decision making. The acutely decompensating pediatric congenital heart disease (CHD) patient is one of the most anxiety-provoking patients acute care providers will encounter in their practice. The incidence of CHD is approximately 5–7 per 1000 live births.

Cardiac emergencies in the first couple of weeks of life will involve cyanosis and shock. The ductal-dependent lesions dominate this group and preserving ductal patency is crucial in managing these patients. The key to dealing with the ductal-dependent lesions is to start intravenous prostaglandin E1 (PGE1). Decreasing pulmonary vascular resistance will help in left-to-right shunting and increasing pulmonary blood flow. To treat congestive heart failure, inotropic assistance is important. Modification of preload (end diastolic volume roughly equivalent to the intravascular volume), afterload, contractility, and heart rate all play roles. Cardiac output is determined by heart rate multiplied by stroke volume. In the under 1-year-old, heart rate is the primary method of increasing cardiac output. Airway management is important and should take precedence, as a stabilized airway and mechanical ventilation can prevent respiratory decompensation.

In this study we are going to describe our experience of perioperative management of neonates requiring emergency cardiosurgical intervention. We treated 22 newborns with Coarctation of the Aorta (CoA), 7 with Tetrallogy of Fallot (TOF) and 15 with Transposition of the Great Arteries (TGA) over a period of 5 years (2019-2024).

Keywords: D-TGA, TOF, CoA, arterial switch operation, CPB, ECMO, prenatal diagnosis.

EP.6

Retrospective analysis for the acute drug overdose cases received to the intensive care unit.

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Abstract

Background: Acute drug overdose remains an important public health concern worldwide, often leading to critical illness and requiring intensive care unit (ICU) admission. Understanding the clinical characteristics, management strategies, and outcomes of these cases is essential for optimizing patient care and resource utilization.

Methods: A retrospective analysis of acute drug overdose cases admitted to the intensive care unit (ICU) during the period January 2023-January 2024. Data regarding patient demographics, ingested substances, clinical presentation, management interventions, complications, and outcomes were extracted from medical record data.

Results: A total of 84 acute overdose cases were identified, with an average age of 40 years. The most common ingested substances included benzodiazepines, organophosphorus, phototoxins, etc. Clinical manifestations varied greatly, with 26 benzodiazepine cases, 14 photoxine

cases, 10 phosphorus cases, 15 heroin cases and 19 polydrug cases.
After admission, 25% of patients required mechanical ventilation and 75% required monitoring. 35% of cases developed complications, most often cardiac complications.
Management strategies included mainly drug treatment and monitoring every 2-4 hours with HGA.
The median length of ICU stay was 10 days, with 25% of patients requiring mechanical ventilation and 15% requiring renal replacement therapy. The overall mortality rate was 25%.
Conclusion: Acute drug overdose cases requiring ICU admission represent a heterogeneous population with different clinical presentations and management needs.
Prompt recognition, aggressive supportive care, and targeted interventions are essential in optimizing outcomes in these critically ill patients.
Further research is warranted to elucidate predictors of morbidity and mortality and to improve therapeutic approaches in this challenging patient population.
Acute drug overdose remains an important public health concern worldwide, often leading to critical illness and requiring ICU admission). Understanding the clinical characteristics, management strategies, and outcomes of these cases is essential for optimizing patient care and resource utilization.
Objectives:
• Retrospective analysis of acute overdose cases admitted to the ICU.
• To examine demographic data including age, gender and co-morbidities.
• To identify common substances/drugs taken by patients and associated clinical presentations. • To evaluate management strategies used during ICU stay.
• To assess patient outcomes including length of ICU stay and mortality rate.
Methodology: Retrospective analysis of cases hospitalized in the ICU (REA) during January 2023-January 2024 Data collection on demographics, ingested substances, clinical presentations, management interventions, and outcomes. Statistical analysis to identify trends and associations.
Results: Demographics: Age distribution, gender ratio, comorbidities. Substances: Organophosphorus, phototoxin, B blocker, Antidepressant, Antipsychotic, Opioid, etc. Clinical presentations: Symptoms (cyanotic vomiting, etc., GSC, etc.), vital signs (hemodynamic, Sato2, Temperature), laboratory findings (HGA, La foefoersterza atj, mutlidurg urine test) Management strategies: Antidotes, supportive measures, management of complications. Outcomes: ICU length of stay, mechanical ventilation requirement, mortality rate.
Conclusion: Retrospective analysis of acute drug overdose cases admitted to the ICU provides valuable insights into patient demographics, clinical presentations, management strategies, and outcomes. Findings from this study can inform targeted interventions, improve patient care protocols, and help develop prevention strategies to reduce the burden of acute drug overdose in the ICU seting.

EP.7

Early nutrition in patiets with Cerebral Aneurysm: A prospetcive study based on the experience in our center

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Abstract

Background: The aim of this clinical study is to emphasize the critical significance of early initiation of feeding in critical patients with cerebral aneurysm. These patients, being unable to tolerate normal feeding, are prone to develop different complications.

Materials and Methods: This is a prospective observational study of so far 19 patients hospitalised in the Neurosurgical Intensive Care Unit (ICU) of the “Mother Theresa” University Hospital Center in Tirana between January 2023 to May 2024. We have been gaining several data records including patients sex, age, diagnosis, mechanical ventilation, comorbidities, laboratory data, physical findings etc. The final results that are being assessed
are survival rate, complications rate and number of hospitalisation days,

Discussions: Adequate calorie and protein intake is important for recovery in critically ill neuro-intesive patients. Patients experiencing ruptured cerebral aneurysm often exhibit a significant rise in energy expenditure, typically ranging from 87% to 200% above their normal levels. This increase can persist for up to 30 days due to metabolic shifts.

Furthermore, systemic catabolic alterations may result in elevated blood sugar levels, loss of protein, and heightened requirements for calories. Therefore, it is crucial to ensure that
these patients receive an optimal supply of both calories and protein during the acute phase
of their brain injury.

Conclusions: Our preliminary findings suggest that commencement of early nutrition directly impacts the survival rate, morbidity, number of hospitalisation days and complications associated with the hospitalisation.

Key words: early nutrition, SIRS

EP.8

Anesthesi and perioperative management in laparoscopic colorectal surgery

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Abstract

Background: Laparoscopic colorectal surgery is increasingly used due to its associated advantages such as reduced postoperative pain, shorter hospital stay and faster recovery. Adequate anesthesia and perioperative management play a crucial role in ensuring successful outcomes in laparoscopic colorectal surgery. This retrospective study aims to investigate the anesthesia techniques and perioperative management strategies used in laparoscopic colorectal procedures at University Hospital Center "Mother Teresa"

Methods: A retrospective analysis of the medical records of patients who underwent laparoscopic colorectal surgery at University Hospital Center "Mother Teresa" from January 2024 was performed. Data on anesthesia techniques, intraoperative parameters, postoperative outcomes and complications were collected and analyzed.
Results: Preliminary results suggest a range of anesthesia techniques used in laparoscopic colorectal surgery, particularly general anesthesia. Intraoperatively, the focus was on maintaining a stable pneumoperitoneum, optimizing patient positioning and ensuring adequate pain control. Postoperatively, strategies for pain management, early mobilization and monitoring for complications such as surgical site infections and bowel dysfunction were implemented.

Conclusion: This retrospective study provides insight into the anesthetic and perioperative management practices that apply to laparoscopic colorectal surgery at University Hospital Center"Mother Teresa." Understanding these practices and their impact on patient outcomes is critical to optimizing perioperative care for laparoscopic colorectal surgery. Further research, including prospective studies, is warranted to validate these findings and improve the quality of care for patients undergoing laparoscopic colorectal surgery.
Keywords: Laparoscopic colorectal surgery, pain management, CO2 insufflation, complications, side effects.

EP.9

Retrospective Single-Center Study on Anesthesia and Monitoring in Endarterectomy.

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Abstract
Objective: This retrospective study aimed to evaluate the anesthesia management and monitoring practices in patients undergoing endarterectomy at a single center, focusing on perioperative outcomes and adherence to established guidelines.
Methods: Medical records of 190 patients who underwent endarterectomy between July 2023 – ongoing June 2024 were reviewed. Data pertaining to anesthesia management, intraoperative monitoring modalities, perioperative complications, and surgical outcomes were collected and analyzed. Descriptive statistics were used to summarize the findings.
Results: Until now the study included 190 patients . General anesthesia was the predominant technique . Intraoperative monitoring predominantly involved standard parameters such as electrocardiography (ECG), pulse oximetry (SpO2), invasive monitoring, with radial artery catheterization being the most common , carotid stump pressure (CSP) < 50 mmHg, and superficial temporal artery monitoring . Perioperative and post operative complications included : persistent hypertension , transient ischemic attacks (TIAs) a percent developing new neurologic stroke event with cognitive

deficits , motoric deficits and cerebral Hyperperfusion Syndrome.
Conclusion: This retrospective study provides insights into anesthesia management and monitoring practices in endarterectomy, highlighting the predominance of general anesthesia and utilization of standard monitoring modalities. Goals of anaesthetic management for CEA include the prevention of ischaemic injury to the brain and heart through modification of risks (if possible) and by maintaining adequate cerebral perfusion and haemodynamic stability. Ideally appropriate monitoring enables prompt intervention to prevent potentially catastrophic neurological and/or cardiovascular events. How is the future? It is being worked on so that in the future monitoring can be ensured through Near Infra-Red Spectroscopy (NIRS) a non-invasive monitoring modality which measures regional tissue oxygenation and may provide an early warning of impaired tissue perfusion.
Keywords: Endarterectomy, anesthesia, monitoring, perioperative outcomes, retrospective study.

EP.10

Peripartum hemorrhage, anesthetic consideratios dhe menagement

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Abstract

Peripartum hemorrhage (PPH) continues to be the leading cause of maternal morbidity and mortality in most countries, accounting for 27% of maternal deaths, occurring after 5% of all live births.

Postpartum hemorrhage is defined as a cumulative blood loss of 1000mL or greater, or blood loss accompanied by signs or symptoms of hypovolemia within 24 hours of birth, regardless of the mode of birth. This definition was introduced by the American College of Obstetricians and Gynecologists' reVITALize program in 2014 in order to standardize obstetric definition.
The most common causes of third trimester bleeding are:placenta previa/ acreta(22%), abruption placenta(31%).The remainin 47% include:uterine rupture, local genital tract lesions and marginal placental sinus bleeding.
Classification and clinical staging of hemorrhagic shock refered to ATLS: I blood loss <750ml (15%), HR<100, BP normal, RR 14-20, urinary output >30ml/h, mental: status slightly anxious. II blood loss 1200-1500ml (15-30%) with HR 100-120, BP normal, RR 20-30, urine output 20-30ml/h, mental status: mildly anxious. III blood loss 1800-2100ml(30-40%) HR 120-140, BP decreased, RR 30-40, urine output 5-15ml/h, confused/anxious. IV blood loss 2400ml (>40%), BP greatly decreased, HR >140, RR>40, confused/lethargic , anuria.
Assessment ,monitoring and management
Preanesthesia evaluation: Large-gauge iv, lab.studies, airway assessement, aspiration prophylaxis, supplemental oxygen, arterial catheter, CVP catheter, urinary catheter, arterial blood gases
Initial stabilization: blood transfusion, fluid resuscitation, hemodynamic assessement,

treatment of coagulopathies, uterotonics, tranexamic acid.
Adjunct Therapy: Fibrinogen Concentrates. Fibrinogen replacement is typically recommended to maintain levels above 200 mg/dL, and has traditionally been replaced with cryoprecipitate. Each unit of cryoprecipitate, containing 150–350mg of fibrinogen, is expected to raise serum fibrinogen levels by 10 mg/dL. The standard therapeutic dose of fibrinogen contains approximately 2.8g of fibrinogen, with a volume of 1070 mL.Definitive treatment: Surgical and medical.
We made a randomised prospective study, including 50 pregnant women with peripartum bleeding during 2023-2024 in University Obstetric Gynecologic Hospitals.We assessed the amount of blood lossed, lab.studies, volume resusication, blood transfusion, adjunct therapy.
Key words: Bleeding, hypovolemia, resuscitation.

EP.11

Analysis of hypernatremia cases >14 years old patients in intensive care unit, at “Mother Theresa” University Hospital Center Tirana, Albania.

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Abstract
Overview: Hypernatremia is a medical condition characterized by an abnormally high level of sodium (salt) in the blood. Sodium is an important electrolyte that helps regulate fluid balance in the body. When the level of sodium in the blood rises above normal (>145 mmol/L), it can lead to various symptoms and health complications.
Causes of hypernatremia may include inadequate water intake, excessive sodium intake, excessive water loss (through sweating, diarrhea, or excessive urination), certain medications, and medical conditions such as diabetes insipidus.
Hypernatremia is diagnosed through blood tests that measure the level of sodium in the blood. Treatment involves addressing the underlying cause and correcting the electrolyte imbalance.
If left untreated, hypernatremia can lead to serious complications such as brain swelling, organ damage, and even death. Therefore, it is important to seek medical attention if experiencing symptoms or risk factors for hypernatremia.
Objective: This study aims to provide a broader overview and analyze hypernatremia symptoms and its causes in patients >14 years old hospitalized in intensive care unit (ICU), at “Mother Theresa” University Hospital Center Tirana (UHCT), Albania.
Methodology: This retrospective study will collect and analyze data records of patients > 14 years old hospitalized in ICU at UHCT, for a period of 3 years from 2020 to 2023. An Excel spreadsheet was created to include patient’s information on;
Personal data (age, gender)
Clinical signs Results of clinical analysis
Patient’s release status
Conclusions: The findings produced by these data can be used to identify the risk groups, reasons that lead to this condition

and to define recommendation on how to prevent it.
Key words: Hypernatremia, retrospective study, patients >14 years old.

EP.12

The analgesic effects of the combination of parasternal block and serratus anterior plane block for coronary artery bypass surgery

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Abstract
Introduction: Severe pain occurs after cardiac surgery in the sternum and chest tubes sites. Although analgesia targeting the sternum is often prioritized, the analgesia of the drain site is sometimes overlooked(1). In this study, it was aimed to provide analgesia for both sternum and the chest tubes area by combining parasternal block (PSB) and serratus anterior plane block (SAPB).
Methods: The study was conducted with a prospective, observational design after obtaining approval from the Ankara Bilkent City Hospital Ethical Committee (E.Kurul-E2-24-6176, 07/02/2024) and written informed consent was obtained from all subjects participating in the trial. (Clinicaltrials NCT06326333). Twenty patients between the ages of 18-80, with ASA II-III, undergoing coronary artery bypass grafting (CABG) with sternotomy, were included. While the patients were under general anesthesia, PSB was performed through the second and fourth intercostal spaces, and SAPB was performed over the sixth rib. The primary outcome were resting and coughing VAS (Visual Analog Scale) during the first 12 hours after extubation. Patients' demographics, remifentanil consumption, extubation time, block related complications, additional analgesic requirements, monitoring of hemodynamics, as well as laboratory values such as C-reactive protein (CRP), lactate, Neutrophil/Lymphocyte ratio (NLR) in the postoperative period(48th h) were recorded.
Results: The mean age of the patients was 64 years. Five patients were female, and 15 were male. For sternum area, only one patient had resting VAS scores of 4, while the VAS scores for resting for the other patients were below 4. For chest tubes area, only two patients had resting VAS scores of 4 or above, while the resting VAS scores for the other patients were below 4. The patients' intraoperative remifentanil consumption averaged 2.05 mg. No side effects related to analgesic protocol were observed in any of the patients.
Conclusion: In this preliminary study where PSB and SAPB were combined in patients undergoing CABG, effective analgesia was achieved for the sternum and chest tubes area. in this preliminary study where PSB and SAPB were used together in patients undergoing CABG, effective analgesia was achieved. When evaluated alongside limited increases in inflammatory parameters, this combination may contribute to multimodal analgesia as an effective analgesic method. We believe that this study will shed light on the evaluation of drain/chest tube pain, which is often overlooked but significantly discomforting for patients, guiding

prospective randomized trials to be conducted.

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EP.13

Evaluation of the Analgesic Efficacy of Intravenous Magnesium Sulfate in Thoracotomy with the Analgesia Nociception Index Monitor

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Abstract

Introduction: Magnesium sulfate is used as a part of non-opioid anesthesia or multimodal analgesia as an adjuvant that reduces pain scores and analgesic consumption (1). Analgesia nociception index (ANI)(Mdoloris medical systems, France) is a noninvasive index that shows the patient's pain level in the range of 0-100 points by taking advantage of the heart rate variability caused by parasympathetic tone. It allows patients to be treated effectively by obtaining objective data about their pain conditions (2). In this case series, we aimed to evaluate the effect of intravenous magnesium sulfate application on hemodynamic variables, anesthetic-analgesic consumption, pain scores and postoperative recovery parameters with a multimodal pain management approach under the guidance of an ANI monitor during thoracotomies.

Cases: Total intravenous anesthesia was planned for 10 ASA II-III patients, aged 18-65, who would undergo thoracotomy, after being monitored according to ASA standards. Patients with a history of allergies, neuromuscular diseases, heart blocks, use of beta blockers and calcium channel blockers, and renal failure were excluded from this case series. The patients were taken to the operating room without premedication and a unilateral paravertebral block was performed under ultrasound (US) guidance (L12-3, EPIQ 7C, PHILIPS, USA) in a sitting position before induction. A linear probe in a sterile drape was placed 2–3 cm lateral to the spinous process of the fifth thoracic (T5) vertebra. A 22-gauge and 8-mm nerve block needle (Pajunk, SonoPlexSTIM, Germany) was advanced into the paravertebral space with an in-plane technique. 30ml 0.25% bupivacaine was injected into this area and pleural collapse was observed. Following block application, preemptive 40 mg/kg iv magnesium was infused over 15 minutes before anesthesia induction. Anesthesia induction was achieved with 2mg/kg propofol and 0.6mg/kg rocuronium. Patients were intubated with an appropriate double-lumen endotracheal tube and the location of the tube was confirmed with a fiberoptic bronchoscope. In patients ventilated with 50% O2+air, initially tidal volume was set as 8 ml/kg, PEEP as 5 cm-H2O, driving pressure as 10-15 cmH2O, and after switching to TAV, TV was adjusted to 3-5 ml/kg. For anesthesia maintenance, 6-9mg/kg/h iv propofol, 10mg/kg/h iv magnesium sulfate and intermittent 0.2

mg/kg rocuronium bromide were administered. Magnesium, propofol infusion and rocuronium bromide were titrated to BIS 40-50, ANI: 50-70, and TOF>4. 50mcg fentanyl IV was planned as intraoperative rescue analgesic. A total of 10 measurement periods determined: After induction (T1), after intubation (T2), in lateral decubitus position (T3), after surgical incision (T4), 15th minute of the incision (T5), 30th minute of the incision (T6) , 45th minute of incision (T7), 1st hour of incision (T8), 2nd hour of incision (T9), at the end of surgery (T10) Mean invasive arterial blood pressure, heart rate, SpO2 and ANI values were recorded at that periods. Additionally, the total amounts of propofol, rocuronium bromide and magnesium sulfate used were recorded. At the end of the surgery, all patients were administered 1mg/kg tramadol and 4mg onasetron iv. The patients were transferred to the PACU in a postoperative extubated state. VAS passive, VAS active, nausea-vomiting, arrhythmia, sedation levels and Modified Brice Score (MBS) were recorded at 1, 2, 4, 8, 12 and 24 hours postoperatively.

Results: General data of the patients are shown in table 1. Demographic, intraoperative and postoperative data are given in table 2. The hemodynamic data of the patients were stable in the intraoperative period (figure 1). It was observed that the patients' ANI ranged between 50-70 with mean magnesium sulfate infusion of 3.4±1.1 mg/kg/h (figure 1). No patient required intraoperative opioids. Postoperative passive-active VAS values are shown in figure 2. During the first 24 hours postoperatively, patients experienced allergy, arrhythmia, nausea-vomiting, sedation (assessed with RASS score 0-1) and anesthesia awareness (according to MBS - dreaming, hearing voices, not being able to move, not being able to breathe, feeling the breathing tube, etc.).) was not observed. While no morbidity-mortality was found, the mean hospital stay was 7.8±3.8 days. Written consent was obtained from all patients.

Discussion: It was observed that iv intraoperative magnesium sulfate application in addition to paravertebral block within the scope of a multimodal pain management plan was effective in pain management. It was determined that the magnesium amounts used under the guidance of ANI monitoring were lower than those recommended in the literature (3.4mg/kg/h & 20mg/kg/h) (3). By monitoring the analgesia nociception index, precise analgesia management is provided in the intraoperative period. Randomized controlled studies evaluating larger samples are needed.

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EP.14

When should bronchial blocker be the first choice in one lung ventilation?

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Abstract

Introduction: One lung ventilation (OLA) is a part of anesthesia management in minimally invasive cardiac surgeries (MICS). A double lumen tube (DLT) or endobronchial blocker (BB) may be preferred to provide OLA. In this case report, we aimed to present our BB application in a difficult airway patient who was planned to have MICS and failed DLT.

Case: Ascending aortic surgery was planned with MICCS for a 65-year-old, male, 178cm height and 80 kg weight, ASA III patient whose consent was obtained for presentation. The patient, who had diabetes and hyperlipidemia, had previously undergone shoulder arthroscopy. In the preoperative evaluation, when tracheal deviation was seen on chest X-ray and CT (Figure 1), ENT and thoracic surgery departments were consulted regarding the risk of difficult intubation, but no problems with the upper airway and larynx were detected during the examination of the clinics. During the anesthesia examination, the patient was evaluated as Mallampati 2, head and neck extension was comfortable, sternomental and thyromental distance and mouth opening were normal. During the operation, invasive arterial, central venous pressures, BIS, NIRS, temperature and TEE monitoring were performed in accordance with ASA standards. After induction of anesthesia, a double lumen tube number 37 was tried, but it could not be advanced beyond the vocal cords. The patient was intubated with a number 8 endotracheal tube under the guidance of a videolaryngoscope. 7F Tappa BB was placed into the right main bronchus without any problems using a fiberoptic bronchoscope (FOB). The patient underwent a right serratus anterior block with 30cc of 0.25% marcaine. The patient's cross-clamp time was 104 minutes, cardiopulmonary bypass time was 171 minutes, and anesthesia time was 255 minutes. After the sternum was closed, the BB was removed. He was taken to the intensive care unit (ICU) with 5 mcg/kg/min dobutamine infusion. The patient was extubated 3 hours later and a control bronchoscopy was performed before extubation; Tracheal stenosis and laceration due to thyroid compression were observed (Figure 2). The patient was followed up in the ICU for 3 days and in the ward for 2 days and was discharged without complications.

Discussion: Preoperative evaluation of MICS is important for anesthesiologists in terms of the respiratory system and airway. In addition to the evaluation of lung functions in terms of OLA, a detailed anatomical evaluation of the entire respiratory system should also be performed. In our case, the chest clinician found the respiratory function tests normal, and the thoracic surgery and ENT clinicians did not point out a problem. However, detailed postoperative examination revealed that the thyroid gland was enlarged and there was tracheal deviation due to airway compression. Although it is thought that the necessary research has been done

before the surgery, a difficult airway may be encountered during laryngoscopy. It is recommended that bronchial blockers be preferred in patients where the use of DLT is not appropriate or in patients with difficult intubation. However, even if difficult intubation is not predicted, we think that it would be essential for clinics where OLA is performed to have a bronchial blocker for cases where DLT cannot be placed.

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OP.15

Severe dermatological conditions treated in the burn service

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Abstreact

Acute and severe necrotizing diseases of the skin and underlying tissues can cause significant morbidity and mortality in persons affected. Erythema Multiforme (EM), Steven Johnson Syndrome (SJS), and TEN(Toxic Epidermal Necrolysis) are severe exfoliative diseases that are accompanied by great controversy regarding classification, pathophysiology, and terminology. It is termed SJS if less than 10 percent of the body surface area is involved, and TEN if greater than 30 percent, with the middle percentage considered an overlap syndrome.

This study aims to analyze epidemiologically (data for the frequency, factors related to age, gender, and exposure to drugs) and clinical data about patients with SJS/TEN during a decade in the tertiary University Hospital Center, Tirana, Albania.

Material and methods This study is an observational retrospective cohort study in the Service of Burns, University Hospital Center “Mother Teresa”, Tirana, Albania (UHCT). This study observed patients with SJS/TEN hospitalized in the ICU of the Burn Service in University Hospital Center Tirana during 2008-2018.

Results The incidence of SJS/TEN in Albania is 0.3 patients per million population in a year. It ranges from 0.6 to 0 patients per million population. There was a predominance of female adults (9 patients or 90%). The mean age was 44.1±15.9 years with a predominance of the group aged 40-60 years. The cause of the disease was antiepileptics in 5 cases or 50%, followed by antimicrobials in 3 cases or 30%, and NSAIDs in 2 cases or 20%. Mean TBSA was 48.8±31.7% (from 10% to 100%). Skin involvement varies from diffuse generalized epidermal detachment, absence of target lesions, and large confluent plaques. Sepsis was present in 1 case with SJS/TEN and all cases with TEN. Blood

analysis consists of the presence of anemia, neutropenia in a part of patients, hypoalbuminemia, transient decreases of CD4+ T lymphocytes, and reduced values of NK cells in the acute phase. Also alterations of Prothrombin time/international normalized ratio (INR) as well as Platelets. In patients with severe sepsis and septic shock were more abnormalities in laboratory test results
Conclusions The incidence of SJS/TEN in Albania is 0.3 patients per million population in a year, it's a life-threatening disease, frequently associated with serious complications and a mortality of about 20%.

EP.16

Aluminum Phospide intoxication complicated with toxic myocarditis in an 18-year old patient

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Abstract
Background: Alluminum phosphide intoxication reprents an important share of suicide attempts in our center, with a very high mortality rate (70-100%) and to this date no specific antidote. As soon as it is ingested, the release of phosphine gas can cause a myriad of complications including: severe metabolic acidosis, refractory hypotensive shock, toxic myocarditis, cardiac arrythmias, AKI etc.
Case Presentation: We present a case of an 18 year old male who ingested a tablet of Aluminum Phosphide with suicidal intent. At presentation the patient was hypotensive with hypoperfusion cutaneous marks ,and with the distinctive aluminum phosphide smell. In the second day of hospitalisation the patient developed signs of toxin induced myocarditis.
Discussion: Unfortunately, this toxin remains readily avaiable and can be easily purchased in our community. In the early stage of the intoxication the patient sometimes refuses to reveal he ingestion of the toxin, which delays the diagnosis. Treatment remains supportive with iv liquids, inotropes etc. Emergent therapies include Venoarterial extracorporeal membrane oxygenation (VA-ECMO), intra-aortic balloon pump (IABP) for the hemodynamic support, or Continuous Renal Replacement Therapy (CRRT) for the filtration.
Key words: Aluminum Phosphide Intoxication, suicide attempt, toxic myocarditis

EP.17

Case report: Acute rhabdomyolysis in a 16-year-old patient following the use of synthetic drugs

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Abstract

Synthetic drugs, including cannabinoids and cathinones, are increasingly abused by adolescents, leading to a spectrum of adverse effects. We present the case of a 16-year-old girl with a history of Hashimoto's thyroiditis who presented to the emergency room with physical weakness, fatigue when walking, difficulty breathing, cough, a temperature of 37.4 degrees for a week, and dark-colored urine, in addition to muscle pain.
The patient presented to the emergency room for infectious diseases after tests were performed in a private laboratory, which revealed an increase in liver enzymes and profound metabolic lactic acidosis. Laboratory tests revealed elevated creatine kinase levels and myoglobinuria suggestive of acute rhabdomyolysis. The patient received aggressive fluid resuscitation and supportive treatment, which led to resolution of the rhabdomyolysis and a successful recovery. This case not only underscores the importance of vigilance against synthetic drug abuse in adolescents, but also emphasizes the need for prompt recognition and treatment of the complications of acute rhabdomyolysis with the goal of preserving renal function.

Conclusion: Management of rhabdomyolysis caused not only by synthetic drugs, as in our case, but also by trauma, physical activity, various medications, and acute dehydration, primarily involves aggressive fluid resuscitation and the use of diuretics to prevent acute renal damage secondary to myoglobinuria. Close monitoring is essential to avoid electrolyte imbalance, compartment syndromes and other complications. Fortunately, with proper treatment, patients with rhabdomyolysis usually have a good prognosis and outcome, as shown in this case.
Keywords: rhabdomyolysis, synthetic drugs (Spice, K2), cathinones (e.g. bath salts).

EP.18

A Case of Diabetic Ketoacidosis with Refractory Metabolic Acidosis Successfully Treated with Continuous Hemodiafiltration

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Abstract
Background: DKA is one of the most common and serious acute complications of diabetes, and is characterized by abnormalities in electrolyte, acid-base, and volume status.
Case presentation: A 59-year-old woman with respiratory insufficiency was brought to our hospital in a stuporous state. She was 36°C in temperature, 114 beats per minute in pulse rate, 130/70 mmHg in blood pressure, and 44 breaths per minute in respiratory rate. Severe metabolic acidosis was revealed by the first arterial blood gas examination (pH = 7.100, pCO2 = 12.0 mmHg, pO2 = 95.0 mmHg, HCO3 - = 10.0 mmol/L. Her serum glucose readings were 543mg/dl.
Upon the diagnosis of DKA, insulin was infused at 6-10 U/h and isotonic saline was given at 1000 mL/h for two hours. Thus, we administered sodium bicarbonate 250 mEq and continued the infusion of intravenous insulin. However, arterial blood pH remained as low as 7.12.

Therefore, we started continuous veno-venous hemodiafiltration (CVVHDF) using the Prismaflex system on the first day of admission.

Conclusion: Correction of systemic acidemia can be achieved with renal replacement therapy. Patients who are too hemodynamically unstable to tolerate hemodialysis have been treated with continuous renal replacement therapy (CRRT). In our instance, the patient experienced hypotension and refractory metabolic acidosis. Following CRRT, the acidosis was restored without any side effects, including cerebral or pulmonary edema. Consequently, the DKA patient with persistent metabolic acidosis responded well to CRRT as well.

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EP.19

Takotsubo cardiomyopathy during transsphenoidal prolactin secreting hypophysial macroadenoma resection.

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Abstract

Background: Hypophysial macroadenoma may be often an indication for neurosurgical removal. The reason for neurosurgical removal may be due to tumor mass effect and/or if excessive hormone secretion is verified.

A 22-year-old woman was diagnosed of prolactin secreting hypophysial macroadenoma based on her clinical signs (fatigue, alopecia, sleepiness, weight gain, dysmenorrhea) and on IMR examination findings (hypophysial macroadenoma 14 x12 mm). A high prolactin level of 1046 ng/ml was verified. Cabergoline (Dostinex) was unsuccessfully administered, and prolactin level reached 15250, making neurosurgical procedure the only option. Previous medical and anesthetic history were uneventful. The preoperative evaluation revealed no other abnormality. The induction of anesthesia and endotracheal intubation were uneventful. The neurosurgeon administered intranasal spry of oxymetazoline for decongestion and to reduce bleeding tendency. Immediately after this unexpected hypertension 170 mmHg/11o mmHg was verified. The patient developed classic pulmonary edema, sero-hematic bronchial secretions, static rallies, and hypoxemia. Immediate pulmonary edema treatment was instituted, the surgery was postponed, and the patient was transferred in ICU. Chest CT-scan examination confirmed the diagnosis due to the presence of characteristic floccular opacifies of pulmonary edema. Transthoracic echocardiography was performed reporting a decreased cardiac function of EF 35%, basal and septal hypokinesia (preoperatively cardiac function was normal), and typical ballooning left ventricle sign. Takotsubo cardiomyopathy was diagnosed after the cardiology team consultation. To better reverse pulmonary edema, hemodialysis was begun, and 2.5 l was removed. 12 h

later EF was 45%, and the day after 55-60%. The patient was successfully extubated and referred to endocrinologist after hospital discharge.

Discussion:

This rare case presents an unusual situation of a cabergoline combination with oxymetazoline. Both drugs can induce hypertension having pharmacodynamic synergism, excessive adrenergic response inducing Takotsubo cardiomyopathy. Transsphenoidal hypophysial resection is often uneventful, but the anesthesiologist must be aware of oxymetazoline administration and the possible side effects with other drugs combination.

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3. Even transsphenoidal hypophysial resection is often uneventful, the anesthesiologist must be alert when a decongestion drug is to be administered by the neurosurgeon.
4. Takotsubo is rare reported but can be fatal, and knowing drug combinations side effect is crucial for the anesthesiologist.

EP.20

Cardiac Surgery-associated Acute Kidney Injury. Prediction, prevention and management.

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Abstract

Acute kidney injury(AKI) is common after cardiac surgery and is associated with worse outcomes than patients who do not develop post–cardiac surgery AKI. Although the pathogenesis of cardiac surgery–associated AKI is complex and multifactorial, the common consequence is renal tubular injury with a decline in glomerular filtration rate. The risk factors for cardiac surgery–associated AKI have been well characterized and used to develop predictive models. These models have performed well in predicting the need for renal replacement therapy but have less discriminatory ability to predict milder forms of AKI that are also associated with worse outcomes. Novel biomarkers of kidney function, inflammation, and injury (*neutrophil gelatinase-associated lipocalin, cystatin C, interleukin-18, kidney injury molecule-1, tissue inhibitor of metalloproteinase insuline-like growth factor-binding protein 7, C-C motif chemokine ligand 14*) may allow earlier detection of cardiac surgery–associated AKI, better prediction models for developing cardiac surgery–associated AKI.

Discontinuing nephrotoxic medications, optimizing chronic medication conditions,

and treating anemia are recommended before elective cardiac surgery. During the intraoperative and postoperative phases, utilizing balanced crystalloids for resuscitation and using a goal-directed hemodynamic strategy to optimize cardiac output and kidney perfusion pressure have been shown to improve kidney outcomes. Cardiopulmonary bypass is associated with nonpulsatile flow, altered hemodynamics, decreased oxygen delivery, inflammation, and oxidative stress, each of which can contribute to AKI. Renal perfusion while on cardiopulmonary bypass is directly proportional to mean arterial pressure (MAP) and pump flow rate, suggesting that normal autoregulatory mechanisms may be impaired during this period. Atherosclerotic disease is also prevalent in patients undergoing cardiac surgery and elements of the surgical procedure are associated with atheroembolic events, including placement of intra-aortic balloon pumps, manipulation of the left atrium, and both clamping and declamping of the aorta. Rewarming from cardiopulmonary bypass provides a period of time when the kidney is susceptible to hypoxic injury. During this time, oxygen consumption increases with temperature in the renal medulla and can exceed available supply. Cardiac surgery patients are also susceptible to pre-renal and postrenal causes of AKI throughout the perioperative period. Aggressive preoperative diuresis, hemofiltration during cardiopulmonary bypass, hemorrhage, and vasoplegia can contribute to an absolute or relative hypovolemia and impaired renal perfusion. Postrenal AKI can result from urinary catheter obstruction (*e.g.*, from blood clots or kinking of the catheter tubing) or from urinary retention after the catheter is removed in the postoperative period.

Compared to patients undergoing CABG surgery, those undergoing isolated valve or aortic surgery have a higher incidence of cardiac surgery–associated AKI. Postoperative tissue hypoperfusion defined by elevated serum lactate levels and the use of inotropes have been associated with cardiac surgery–associated AKI. Additionally, re-exploration after surgery is a strong, independent predictor of cardiac surgery–associated AKI.

Preoperative risk factors frequently identified include advanced age, female sex, higher body mass index, proteinuria and the presence of systemic comorbidities including hypertension, diabetes, chronic kidney disease, chronic obstructive pulmonary disease, left ventricular dysfunction and perioperative anemia.

Preventing AKI requires the identification of patients with modifiable risk factors and mitigating this risk using evidence-based interventions throughout the perioperative period. Prevention and mitigation of cardiac surgery–associated AKI include : rewarming temperature on CBP (32grade to 34grade), goal-directed oxygen delivery on CBP (280-300ml/min m2), vasopressors (vasopressine vs norepinephrine), perioperative hypotension (MAP=>65mmHg), anemia and tranfusion, hemolysis and removal of its products.

Recent novel exploratory studies of cardiac surgery-AKI prevention and management recommand the use of urine oximetry intra and postoperatively, haptoglobin administration, nitric oxyde administration on CBP circuit and thé use of acetominophen.

In our daily practice, the use of dopamine and mannitol has been shown useful in stage 1 of cardiac surgery-AKI, and renal

replacement therapy is started in stage 2 and 3 of cardiac surgery-AKI (according to AKIN criteria).

EP.21

Frailty and implications on surgical process in the elderly.

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Abstract

Longevity has increased the proportion of the elderly in the population, and as a result ageing has become the leading factor for diseases such as cerebrovascular and cardiovascular disorders. It also makes surgical procedures more complex with potential life-threatening complications. In order to further investigate the role of ageing in modern healthcare, the term 'frailty' has been proposed to describe a condition of reduced functional reserve that leads to an increased risk of adverse health outcomes. The aim of this study was to review the pathophysiology of frailty and to highlight the most important tools to diagnose it, and their ability to predict the postoperative outcome. There are two major conceptual models that provide guidance for the detection of frailty: the Fried Phenotype Model and the Cumulative Deficit Model. These two main models have provided a base from which the assessment of frailty has developed. Two frailty assessment tools, the modified frailty index and the simplified frailty index play a key role in the preoperative setting because of their predictive power for postoperative risk quantification. Assessments of independence and/or cognitive function represent the main components that an ideal frailty tool should have to identify elderly people who are at risk of postoperative functional and cognitive deterioration. Cognitive impairment undoubtedly has a high association with frailty, but cognitive status is not included in many frailty assessments. In this regard, comprehensive geriatric assessment is a more complete evaluation tool, and it should be used whenever a frailty tool screening gives a positive result. Finally, frailty assessment is useful to explore the cumulative effect of comorbidities on the ageing patients' functional reserves and to identify the appropriate level of in-hospital and postdischarge care.

Due to the steady growth in the number of the elderly, old age has a key role in increasing the risk of adverse health outcomes in most clinical settings including surgery.[1] Age is the primary risk factor for numerous morbidities such as cerebrovascular and heart disorders, and in association with surgical procedures may be life-threatening. Experts in gerontology agree there is a distinction between biological and chronological age. While chronological age relates to how long a person has existed, biological age does not increase at the same rate for everyone. The latter is more predictive than the former in determining an individual's ability to cope with any severe stress because it is the product of pathophysiological ageing processes, comorbidities and hereditary variables.

Conclusions:The term 'frailty' has been introduced to resolve the discrepancy between chronological and biological age. Frailty is a multidimensional syndrome related to the accumulation of age-related and disease-related deficits. It refers to a condition of reduced functional reserve that leads to a vulnerable state with an increased risk of adverse health outcomes when exposed to both endogenous and exogenous stressors. Hence, frailty increases the peri-operative risk of morbidity and mortality in the elderly, now a daily challenge for anaesthesiologists. Frailty increases the peri-operative risk of morbidity and mortality in the elderly. Performing comprehensive geriatric assessment (CGA) is the best frailty predictor for postoperative complications. Following positive screening for frailty, regardless of the screening tool used, elective surgical patients should be referred to a peri-operative frailty team expert for comprehensive geriatric assessment. The frail patient should undergo such specific preoperative treatments, in order to minimise POD, LOS, post-Op complications and mortality. Frailty increases the peri-operative risk of morbidity and mortality in the elderly. Performing comprehensive geriatric assessment (CGA) is the best frailty predictor for postoperative complications. Following positive screening for frailty, regardless of the screening tool used, elective surgical patients should be referred to a peri-operative frailty team expert for comprehensive geriatric assessment. The frail patient should undergo such specific preoperative treatments, in order to minimise POD, LOS, post-Op complications and mortality.

EP.22

Niguardaexperience: 40 years of Fontan operation

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Abstract

Introduction/Background : The beginning of Fontan surgery in 1971 marked a turning point in the treatment and prognosis of the most complex congenital heart diseases. The Fontan procedure provides a palliative treatment option for pediatric patients with functionally single ventricle congenital heart disease, with an estimated incidence of 0.08 to 0.4 per 1000 live births.Today, it is a preferred palliative surgery method in congenital heart diseases with single ventricular anatomy and physiology and in other complex groups that do not allow biventricular repair.

Methods : This is a single-center, retrospective study, we reviewed the records of 79 patients who had their initial Fontan operation at the Pediatric Cardiac surgery Unit of Niguarda Hospital between 1981 and 2023. The information of the patients regarding demographic, anatomic, operative variables and follow-up were collected retrospectively from the medical records and surgical reports, abstracted into a secure electronic database Red-Cap. About half of patients had no recent follow-up at our institution. Current vital status and follow up was obtained via a medical questionaire and an attempt was made to

contact the patients . Two surgical eras were defined based on relevant changes in surgical practice at our institution: 1981 to 2003 (First Era, Historical Era,26 patients),and 2003 to 2023 (Second Era ,Modern Era,53 patients).In the first Era , Fontan operations performed were classical FO, RA-PA and the LT variety, whereas in the second Era, the EC type predominated. All statistical analyses were performed using IBM SPSS version 24.0 software (SPSS, Inc., Chicago, IL, USA).

Results: The first Fontan operation in Niguarda was performed in 1981.Between 1981 and 2023, 79 patients underwent an initial Fontan operation at Niguarda Hospital (26 patients in the first era and 53 patients in the second era), this is not the number of patients that are followed in our hospital. Because of the missing data of follow-up, short term and long-term complications data, the patients of first era are excluded of the study. Our study is concentrated in the second Era of Fontan operations.The age range :2–17 years (mean age: 5.3 years, SD 3.42).Classic Fontan or lateral tunnel surgery on 26 patients 1981 - 1998 First Era. Extracardiac Fontan surgery with Gore-Tex conduit in 53 cases between 1998 and 2023, Second Era. The univentricular heart defects, HLHS was most frequent diagnosis of Fontan (27/53 patients). Systemic right ventricles predominated, with 54.7%. Fenestration was performed in 5 high risk selected patients.The early death rate was 1.8% (1/53), while complications occurred in 38%.The follow-up period was 3 months–12 years. At the last follow-up: 31(39.2%)patients' data were missing, 5 patients from 79 (6.3%) were known to be dead, 3 patients underwent transplant but without good results . Of the 43 patients known to be alive, transplant-free survival was verified in 43 patients (54.5%) with follow-up information within the year of the study termination date. The oldest survivor after the Fontan operation was 57 years of age (Fontan at age 15 years). It was found that the length of hospital stay and mortality were statistically signifcantly reduced in patients who underwent extracardiac Fontan surgery.

Discussion and Conclusions: Our study according to the type of Fontan operation showed that Extra cardiac conduit and especially the expanded ones lead to reduction of mortality and improvement of quality life the last decades (Iyengar et al, NHLBI-funded Pediatric Heart Network, Australia-New Zealand Fontan (ANZFR))

When considering the clinical impact of ventricular dominance, we could not find any statistically significant difference, immediate result is based on the good systolic and diastolic function of the ventricular chamber, independently of the morphology. (Rossiet al)

The actual advancement for reducing Fontan early morbidity has been the accurate and staged pre- Fontan pathway preparation, which starts soon after birth in these patients.

Most commonly occurring complications in our series are "minor"(as defined above), while major complications remain at an acceptable rate (14.2% of the population), comparable to 17%the composite adverse early outcome reported by Iyengar.

Fenestration showed no evidence of a difference between onset of overall complications.

In conclusion:Fontan operation is a palliative surgery for children with complex heart disease. Most commonly occurring complications in our series are

"minor"while major complications remain at an acceptable rate (14.2% of the population)
Keywords:Fontan operation, Lateral tunnel, Extracardiac condiut, Long term survival

EP.23

Anesthetic mangement in electrophysiology laboratory: Our experience

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Abstract

Keywords: monitored anesthesia care, general anesthesia, supraventricular tachycardia

Abstract
Anesthesiology plays a very critical role to ensure patients comfort, as well as maintains operator's convenience in electrophysiology (EP) laboratory, because the procedures performed are often long, complex, associated with serious potential complications and necessitate patient immobility at certain critical times. The choice of anesthetic modality, monitored anesthesia care (MAC) or general anesthesia (GA), should be made on the basis of the patient's risk factors and procedural concerns. MAC can range from anxiolysis to deep sedation and is considered during cardiac devices implantation/extraction and ablation of supraventricular tachycardias (SVT) and atrial flutter (AFL). GA may be preferable in prolonged, complex cases and when the patient has significant comorbid conditions, where is a higher likelihood of hemodynamic instability such as atrial fibrillation (AF) and ventricular tachycardia (VT). Regardless of the type of anesthesia used, the appropriate balance between patient comfort and a level of sedation that will not suppress arrhythmia induction should be a primary focus.
Our practice in EP laboratory includes ablation of SVT and cardiac devices implantation/extraction. Supraventricular tachycardia (SVT) is a term that covers atrioventricular nodal re-entrant tachycardia (AVNRT), atrioventricular re-entrant tachycardia (AVRT) and atrial tachycardia. Induction of tachycardia is necessary for establishing the diagnosis, mapping of arrhythmia, and for assessment of ablation success. This requirement and the relatively short ablation time therefore support the use of light sedation over general anesthesia in SVT ablation in adults.
Conclusions: Cardiac anesthesia departments should develop a special concept for qualifying their approach in EP laboratories. Coordination between the anesthesiologist and the electrophysiologist is essential to ensure an optimal balance of patient comfort, arrhythmia inducibility, hemodynamic tolerance, patient safety, and to maintain operator convenience.

EP.24

Comparing the effect of protamine-heparin neutralization ratio in postoperative blood loss, after cardiac surgery/Our experience.

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Abstract

Introduction: The blood heparinization is very important in cardiac surgery,to prevent the formation of the thrombus,during CPB. On the other side, is also very important to neutralize this effect by the use of protamine, in order to prevent postoperative hemorrhagic complications. Protamine dosing is subject of controversity with a large range of neutralization ratio, based mainly on individual experience.The excessive dose of protamine in absence of heparin, is often the reason of postoperative microvascular bleeding, related with her anticoagulant effects, through interaction with platelet function, coagulation factors and clot lysis.

Methods:This is a retrospective study,conducted in Mother Teresa Hospital,Clinic of Cardiovascular Surgery,included 50 patients,in the period december 23-march 24.All of them underwent not combined,elective cardiac surgery;Euroscore <1.5;no evident preoperative hemorrhagic risk factors;aortic clamping time 60+_15 min. Post neutralization ACT was 120+_5 sek in both groups.In the first was administrated 1:1 protamine-heparin dose,and in the second group 1,2-1 ratio. Was compared the blood loss and the need of transfusions,in the first 12 hours following the surgery.

Results:In the first group,mean postoperative blood loss was 260 ml,significantly lower than the second group,340 ml.As well,82% of the patients remained transfusion free, in the first group,compared with 62% in the second one.

Discussion and conclusion:This study brings out that protamine-heparin 1:1 neutralization ratio,is associated with a lower postoperative blood loss and need of transfusion,compared with 1,2:1 neutralization ratio.In the same time, was demonstrated that post-protamine ACT test,doesn't truly reflect the concentration of residual heparin and the excessive protamine may be the reason of early postoperative bleeding in these patients.

EP.25

A retrospective study comparing the cardioprotective effect of volatile anesthetics vs propofol,in patients undergoing off-pump CABG.

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Abstract

Introduction:Myocardial protection is a key point in all cardiac surgeries,with or without CPB. There are a lot of studies underlying the protective role of volatile aesthetics vs propofol during and after CPB.They act in direct and indirect ways: by reducing the

contractions and consumption of O2 by myocardium;activating K+ ATP dependent channels and decreasing mitochondrial calcium;protective effect against ischemia-reperfusion injuries, following CPB.But,there is not much evidence about their role in off-pump cardiac operations.In this study is been investigated the impact of volatile anesthetics(sevoflurane) and propofol on patients undergoing off-pump CABG. There are evaluated arterial lactate, the use of inotropic drugs and the incidence of AF, 12 hours following the surgery.
Methods:This is a retrospective study,including 22 patients,in a 2 years period,conducted in Mother Teresa Hospital,Clinic of Cardiovascular Surgery.All of them underwent monovasal OP-CABG;Euroscore<1.5;preoperative EF>0.5. In the first group was used sevoflurane as anesthetic vs propofol in the second one.
Results:In the second group,the mean level of arterial lactate was 5.3 mmol/l vs 3.4 mmol/l in the first group.The percentage of patients we needed the use of inotropic drugs was higher(48%) in the second group vs 33% in the first one.As well, the incidence of AF was higher (37% vs 24%) in the second group.

Discussion and conclusion:Volatile anesthetics(sevoflurane) are superior vs propofol, as cardioprotective, in patients undergoing OP-CABG,particularly in the first 12 hours following the surgery.

EP.26

Portacath migration into the pleural space

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Abstract
Background: Undergoing chemotherapy. Portacath inserted weeks ago without complication, now not flushing. Right sided pleuritic chest pain
Case presentation: We present a case of a 62 -year-old woman of portacath dysfunction due to a rare catheter extra-vascular migration into the pleural space, diagnosed by computed tomography. We decided on observation with full examination of patient and replacemt of portacath after a discussion with patient and his primary care oncologist.
Conclusion: Our case highlighted the importance of proper evaluation of Portacath location before its usage or replacement

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EP.27

The history and evolution of anesthesia in the treatment of varicose veins of the limbs.

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Abstract

Surgery for the treatment of varicose veins of the lower limbs is one of the most frequent interventions in clinical practice due to the frequency of the pathology. The history of the treatment of this pathology is very early, since ancient times, before the invention of anesthesia. Of course, even the treatment could not be complete without anesthesia. The classical surgery that we know today has its beginnings at the beginning of the 20th century, when the methods of anesthesia were already complete. Correcting the surgical technique and making it less invasive on the one hand and new anesthetic medications make this operation much easier and in most developed countries this has become routine in daily surgery.

In Albania, the beginnings of this surgery belong to the smell of ether in anesthesia. From the year 2000, in our practice at QSUT, we switched almost completely to lumbar spinal anesthesia, as simpler, faster to optimize the number of interventions in a busy service. However, for the majority of patients, this type of anesthesia represents a kind of fear, of course not justified, port associated with superstition.

In this quarter of the last century, important modifications have been made in the strategy and technique of treating varicose veins. The introduction of thermal ablation with Laser or Radiofrequency, which replaces surgical stripping, has made many procedures to be performed with infiltrative local anesthesia. For cosmetic purposes, varicose veins are also treated with miniphlebectomy or other techniques such as CHIVA or ASVAL. The latter, being procedures in limited areas, for uncomplicated and more superficial veins, can be performed with infiltrative local anesthesia. The use of local anesthesia reduces the cost, enables ambulatory treatment without the need for hospitalization, and avoids the need for the patient to disconnect from work or his daily activity.

EP.28

Perioperative Application of IABP in cardiogenic schock

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Abstract

Introduction:IABP is used as a primary mechanichal circulatory support in our cardiac surgery unit during perioperative treatment. The intra-aortic balloon pump (IABP) is the most widely used mechanical circulatory support (MCS), with an implantation rate in USA of around 50,000 per year Most of cases is applied in operation room and also in intensive care.Aim of this study is to show the real patients and related problems and complications.
Methods:In this study are included all patiens that received IABP in our institution for a period of 2007-2022.Outcomes : ICU mortality, length of ICU stay, cardiovascular risk factors,congestive heart failure,most frequent diagnosis,complications linked to IABP .
Results: A total of 96 patients were enrolled, 4 patients underwent IABP placement before cardiac surgery and 92 after open-heart surgery.ICU mortality within 24 hours 23 patients,within 72 hours 12 patients.Time of treatment up to 24 hours is found in 42.5% of the patients.Length of stay 18 ±8 days in ICU.86% of patients underwent CABG surgery and others combined with valvular replacment.In 60.6 % of patients was impossible to wean off extracorporeal circulation.Inotropic usage in the same dosage for more than 72 hours was linked with higher mortality.
Conclusion: Intra-aortic balloon pump (IABP) had a cruciall role in the therapy of cardiogenic shock.Our study shows effectiveness of IABP depends on previous myocardial situation,especially if patients were under high doses of inotropes the success rate is of no significance.

EP.29

Strange complications

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Abstract
Introduction: Neurosurgical operations of posterior cranial fossa can be done in the prone position but also in the sitting position. There are several surgical reasons why neurosurgeons prefer sitting position. In the sitting position surgical exposure is better, the ventilation of the patient is more comfortable and physiological, but we may suffer hemodynamics because of the significant reduction of venous return from position, mechanical ventilation, and vasodilating effects of anesthesia. This is why the transducer of the arterial line is placed at the level of the skull base or otherwise at the level of meatus acoustics extern. Venous gas embolism is the most possible complication.
Material and method: The literature reports from 5% to 76%, and from these in craniotomy 24%, tumor resection 67%, and 9% in closing. ASA 3-4 has less incidence than ASA1-2 at young ages and without accompanying disease. The longer and more frequently VAE increases the opportunities for cardiopulmonary complications, quadriplegia, and other neurological deficits. Perioperative measures that are taken consist of filling with fluids, avoiding negative venous pressures, applying PEEP in the hall, head lifted 30 degrees - 45 degrees.
Discussion: At American Hospital 3, are performed 37 neurosurgery cases in adults in seated position and 20 cases in pediatric

ages were made between 2020 and 20 in pediatric age. Gas embolism is found in 22% of adult cases and 14% in pediatric cases. In four patients, we also developed bilateral pleural effusions, and in a case of prolonged respiratory assistance. No death is recorded in our serial.

Conclusions: Neurosurgical operations of posterior cranial fossa, done in the sitting position, require close cooperation between team members, and a very good preparation of the anesthesiologist.
Key points: neurosurgery, gas empathetic, sitting position.

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EP.30

Anaesthezia for laparoscopic urological surgery

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Abstract
Laparoscopy for urological surgery is a relatively recent surgical innovation .
Some centres have substantial experience with comprehensive range .
Our programe began with nefrectomy .
Perioperative care issues , in common with other abdominal laparoscopic procedures ,relate to operating positions .
The consequences of carbon dioxide under presure in the abdomen , and postoperative analgesia .
There is only a small requirement for regional anaestezia supplementation and invasive analgesia .
Significants differences were found in the spectrum of the urological patient population , and comorbidity ,notably , renal function or disfunction, and complication.
Key words: Laparoscopy for urological surgery, regional anaestezia, carbon dioxide

EP.31

Cardiac Lead extraction using a laser system: Techniques, indication, efficacy and imitations.

Alk Shehu

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Abstract
With the high need to implant increasingly complex cardiac devices with different probes, the requirement to remove cardiac probes has also increased exponentially. There are various ways to remove heart probes, from traditional methods to more complex methods with the assistance of laser instruments. The reasons for the removal can be very different, such as: Infections, non-functioning probes, etc.
Study goal.
In this study, our aim is to analyze one of the most current removal techniques and

help standardize protocols in reference countries.

Study population.

In this study, we enrolled 204 patients at the referral hospital center in Germany, Bad Segeberg, and in Tirana, Albania. In 92% of the cases, tube removal in recruited patients was performed by the cardiologist, whereas 8% by the cardiac surgeon.

All patients completed a consent form and answered questions related to the study. The questions that the patients had to answer, such as: personal data, whether there are other pathologies, if the patient suffers from diabetes, if the patient has undergone heart surgery, if the patient has coronary artery problems, if the patient suffers from kidney failure, if the patient has cardiac arrhythmias such as atrial fibrillation or other. A very important point in patient recruitment was the patient's cardiac function (EF<30%, EF-30-44%, EF:44-54%, EF >54%), the causes that led to the extraction such as:

- Local infection,
- Systemic infection,
- Chronic pain,
- Upgrade
- Venous occlusions
- Probe malfunction

The average age of the recruited patients is 68 years. Patients with cardiac function <30% are 25% of the stud study. Patients suffering from arterial hypertension make up 70.23% of those recruited. In the studied group, 24.16% had already had heart surgery and it is very important to emphasize that 31.7% of the study group is pacemaker dependent.

Three main indications for laser removal of the probe were found:

1. Probe malfunction 30.68%.
2. Local infection 35.33% .
3. Systemic infection 28.5%.According to preliminary information:

-Intervention was successful in 97.79% of cases.

- Serious complications occurred in 2.05% of cases.
- There was an intraoperative mortality of 0.55%.
- Post-interventional hospital mortality of 3.55%.

Complications: The complications that occurred in the study group were divided into minor complications, major complications, blood vessel damage, and complications requiring sternotomy surgery.Based on the data processed so far, we can say that this procedure has a high success rate with very low mortality. However, it is very important to emphasize that all deaths involved ongoing systemic infection. According to the available data, even with successful extraction, there is a risk of death for patients with a systemic infection.

LECTURE 1

ECMO era

Dorela Haxhiademi

LECTURE 2

Enteral vs Parenteral nutrition

Zamira Hysenaj

LECTURE 3

Vascular access: The right line, the right patient, the right time. How to decide what device to use?

Jason Ram

LECTURE 4

Examples of device use (PICCS & Midlines) in different countries.Case studies from UK & Spain.

Jason Ram

TRAINING COURSE 1

Airway assessment for predicting difficult intubation!
Usage of fibrobronchoscopy and video laringoscopy!

Ervin Bejko
Jonela Burimi
Engjell Lazaj
Esmerilda Bulku

TRAINING COURSE 2

Hands On Picc Line

Jason Ram

TRAINING COURSE 3

Hand On Midline

Jason Ram

LIVE CASE

The importance of Cerebral Oxymetry in Carotid Endarterectomy.

Sokol Xhepa
Stavri Llazo
Marsela Sopiqoti
Alfred Ibrahimi

Saimir Kuci
Tomislav Dabac
Luka Vidaković