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Focus on
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and not only...

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08-09 November 2024



8th Albanian Congress of Trauma and Emergency Surgery (ACTES 2024)

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08 - 09 November, Hotel Tirana International, Tirana, Albania



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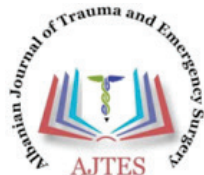
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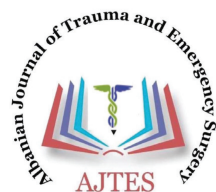


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Abstracts Book

**8th Albanian Congress of Trauma
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ACTES 2024

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Our aim is to promote interest, knowledge and quality of care in emergency and trauma surgery. ASTES was formed in 2017, it seeks to promote best practice in the provision of emergency and trauma surgery and acute care surgery, from pre-hospital care through diagnosis, intervention and intensive care to rehabilitation. This is supported by Countrywide & International collaboration, scientific research, development and delivery of training courses, and the work of the specialist sections (Polytrauma, Visceral & Chest Trauma, Skeletal Trauma & Sports Medicine, Neurosurgical, Anesthesia - Reanimation, Acute Care Surgery, ENT & Ophthalmology & Maxillofacial, Radiology, Nurse service, Disaster & Military Surgery...etc.) ASTES holds an annual scientific meeting – the Albanian Conference for Trauma and Emergency Surgery (ACTES) and produces a bi-annual journal – the Albanian Journal for Trauma and Emergency Surgery

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OP – 01

Pathophysiology of Polytrauma

Michel Teuben

Trauma Surgeon, Department of Traumatology at the University Hospital of Zurich. SWITZERLAND.

Abstract

Introduction: Polytrauma, defined as the simultaneous occurrence of multiple traumatic injuries, poses significant challenges to both diagnosis and management. Understanding its pathophysiology is crucial for effective treatment and improving patient outcomes.

Purpose: to elucidate the underlying mechanisms involved in polytrauma and their clinical implications, emphasizing the interplay between various organizational systems and the resultant physiological changes.

Pathophysiological Mechanisms: The initial injury in polytrauma triggers a cascade of physiological responses, including the release of inflammatory mediators, activation of the coagulation cascade, and alterations in hemodynamics. The body's response is characterized by the systemic inflammatory response syndrome (SIRS), which can lead to multiple organ dysfunction syndrome (MODS).

Clinical Implications: A thorough understanding of the pathophysiology of polytrauma is essential for guiding resuscitation strategies and optimizing the management of these complex cases. Early recognition of the physiological derangements can inform the timely initiation of interventions, such as fluid. Resuscitation, surgical intervention, and supportive care are vital to mitigating the consequences of polytrauma.

Conclusion: The pathophysiology of polytrauma involves a complex interplay of local and systemic responses that can lead to significant morbidity and mortality. By enhancing our understanding of these

mechanisms, healthcare professionals can develop more effective treatment protocols, ultimately improving outcomes for patients suffering from polytrauma.

Keywords: Polytrauma, inflammatory response, multiple organ dysfunction syndrome,

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OP – 02

How to Clear Polytrauma Patients for Fracture Fixation

Roman Pfeifer

Trauma surgeon, Department of Traumatology, University Hospital Zurich, SWITZERLAND

Abstract:

Introduction: The decision to proceed with fracture fixation in polytrauma patients is critical, as it directly impacts patient outcomes. This study, which explores the protocols and considerations for clearing polytrauma patients for fracture fixation, provides significant insights that can guide clinical practice and improve patient care.

Material and Methods: Factors evaluated included hemodynamic stability, organ function, traumatic brain injury (TBI), and Damage Control Resuscitation (DCR). The decision-making process for fracture fixation was based on standard clinical guidelines, incorporating the "polytrauma triad" of hypothermia, acidosis, and coagulopathy. Timing of fixation,

outcomes, and complication rates were compared between patients undergoing early total care (ETC) and those managed with Damage Control Orthopedics (DCO).

Results: The study's findings underscore the critical role of hemodynamic stability in the decision-making process for fracture fixation. Hemodynamically unstable patients benefited from the DCO approach, which focused on temporary stabilization and delayed definitive fixation. In contrast, patients cleared based on stable physiology had better outcomes with early total fracture fixation. The critical factors influencing the decision to proceed with fixation included normalized coagulation, absence of acidosis, stable organ function, and the resolution of shock.

Conclusion: The clearance of polytrauma patients for fracture fixation should be based on a comprehensive assessment of hemodynamic stability, organ function, and resolution of the 'lethal triad.' As medical professionals, trauma surgeons, and researchers in trauma management, you play a crucial role in implementing these findings. Damage Control Orthopedics is essential in unstable patients, while Early Total Care is suitable for those who have been successfully stabilized.

Keywords: polytrauma, fracture fixation, Damage Control Orthopedics, Early Total Care, hemodynamic stability, trauma management, lethal triad.

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OP – 03

Late Outcome After Polytrauma

Alba Shehu

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Abstract:

Introduction: Polytrauma refers to multiple traumatic injuries that co-occur, often leading to complex medical challenges. Understanding the late outcomes of polytrauma patients is essential for improving long-term care and rehabilitation strategies.

This study aims to evaluate the late outcomes of polytrauma patients, focusing on physical, psychological, and functional recovery over time.

Materials and Methods: We analyzed a cohort of polytrauma patients who received treatment at our institution from 2015 to 2020. Data was collected on demographics, injury severity, treatment modalities, and follow-up assessments at 6 months, 1 year, and 2 years post-injury. Standardized outcome measures, including the Functional Independence Measure (FIM), the Glasgow Outcome Scale (GOS), and the Post-Traumatic Stress Disorder Checklist (PCL-5), were utilized to assess physical and psychological recovery.

Results: The study included 150 patients with a mean age of 36.5 years. At the 2-year follow-up, 70% of patients showed significant improvement in FIM scores, indicating enhanced functional independence. However, 35% reported persistent psychological symptoms consistent with PTSD, as indicated by elevated PCL-5 scores. Additionally, a significant correlation was found between injury severity (measured by the Injury Severity Score, ISS) and long-term functional outcomes.

Conclusions: The late outcomes after polytrauma demonstrate a complex interplay between physical

recovery and psychological well-being. While many patients achieve functional independence, a notable proportion experiences long-lasting psychological effects. These findings emphasize the need for comprehensive rehabilitation programs that address both physical and mental health in polytrauma survivors to optimize their long-term recovery.

Keywords: Polytrauma, late outcomes, functional recovery, psychological effects, rehabilitation.

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OP – 04

Polytrauma and Spinal Injury; Challenges and Management

Michel Teuben

Trauma Surgeon, Department of Traumatology at the University Hospital of Zurich. SWITZERLAND.

Abstract:

Introduction: Polytrauma, defined as the simultaneous occurrence of injuries to multiple body regions or organ systems, often includes spinal cord injuries (SCI) as a critical component. Spinal injuries in the context of polytrauma pose a unique set of challenges for diagnosis, management, and rehabilitation due to the potential for permanent neurological deficits and life-threatening complications.

Materials and Methods: A review of recent literature and case studies focused on polytrauma cases, including spinal cord injury. Data sources included

major trauma registries, clinical guidelines, and published studies on the outcomes of various treatment modalities. Special attention was given to the initial trauma assessment, imaging protocols, surgical interventions, and rehabilitation strategies.

Results: The review highlights several key findings:

Early Diagnosis and Stabilization: The rapid identification of spinal injury in polytrauma cases through advanced imaging techniques like CT and MRI is vital for preventing secondary damage.

Surgical Intervention: Surgical stabilization of spinal injuries often reduces long-term neurological impairment, mainly when performed within the "golden hours." The role of minimally invasive techniques in reducing recovery time and complications has gained prominence.

Multidisciplinary Approach: Managing polytrauma with spinal injury requires an interdisciplinary team, including trauma surgeons, neurosurgeons, orthopedists, and rehabilitation specialists.

Rehabilitation and Long-Term Care: Early initiation of tailored rehabilitation programs significantly improves functional outcomes and quality of life for spinal injury patients.

Conclusion: Spinal injuries in polytrauma cases demand a comprehensive, multidisciplinary approach that emphasizes early diagnosis, prompt surgical intervention, and long-term rehabilitation. Although surgical techniques and critical care advancements have improved outcomes, significant challenges remain, especially in preventing complications and optimizing functional recovery.

Keywords: Polytrauma, Spinal Injury, Spinal Cord Injury, Trauma Management, Multidisciplinary Care, Rehabilitation, Surgical Stabilization.

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OP – 05***Management of Surgeries in Albania:
Experience of the South Region,
Evidence-Based Report***

Rudina Degjoni, Ermira Pajaj

Fier Memorial Regional Hospital, Albania

Abstract

Introduction: Albania, with a population of 2.7 million, has 216 surgeons who perform over 63,000 surgical interventions annually. Effective management of these interventions according to evidence-based protocols is essential for optimal treatment outcomes and patient safety.

This study evaluates surgical interventions in the southern region of Albania, focusing on implementing the referral system and evidence-based management of surgical patients.

Material and Method: We analyzed official statistics of surgical procedures performed in the South Region over the past four years. To assess patient perceptions regarding surgical management barriers, we conducted focus groups with 900 residents and semi-structured interviews with 326 participants. A grounded theory approach guided data coding and content analysis.

Results: In 2020, surgical residents conducted 29,178 interventions, which increased by 5,356 in 2021, reaching 39,238 in 2022, an additional 2,063 in 2023, and 925 cases in the first nine months of 2024. Patients reported no significant personal, staff, or institutional barriers affecting their management at regional hospitals. Patients positively perceived overall service quality, communication with surgeons, and medical staff reception.

Conclusions: The referral system has markedly improved service quality, evidenced by reduced waiting times and efficient functionality. Residents in the

southern region received timely surgical services at public hospitals.

Keywords: Surgery, Surgical Management, Southern Region, Procedures, Interventions.

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OP – 06***Challenges in Trauma Education***

Juan Carlos Puyana

Professor of Surgery, Clinical Translational Science, and Critical Care Medicine. Director Global Health - Surgery, University of Pittsburgh, USA. O'Brien Chair of Global Surgery - Royal College of Surgeons in Ireland

Abstract:

Introduction: Trauma education is critical in preparing healthcare professionals to manage complex and life-threatening injuries, yet it faces numerous challenges in today's rapidly evolving medical landscape. This paper explores the essential obstacles of trauma education, including the need for a standardized curriculum, the integration of simulation-based training, and the knowledge gap between theory and practice. Limited access to hands-on training in high-volume trauma centers further complicates the learning process, particularly for junior surgeons and residents. The growing demand

for multidisciplinary trauma care also requires interprofessional education that aligns various specialties in a coordinated approach to patient care. Moreover, keeping trauma education up to date with technological advancements and evolving clinical guidelines poses a continuous challenge. However, there is hope. This study advocates for more innovative and collaborative educational models, such as virtual reality and telemedicine, which have the potential to revolutionize trauma education. By addressing these challenges and embracing these innovative models, we can better equip healthcare professionals with the skills and knowledge necessary for effective trauma management, ultimately improving patient outcomes.

Conclusion: The challenges in trauma education significantly impact the preparedness of healthcare professionals to manage critical injuries effectively. Addressing these obstacles—such as the need for standardized curricula, enhanced simulation training, and improved access to practical experiences—requires a concerted effort to innovate and adapt educational practices. By fostering interprofessional collaboration and incorporating advanced technologies, we can create more effective training environments that bridge the gap between theoretical knowledge and clinical application. Ultimately, overcoming these challenges will enhance the competence and confidence of healthcare providers, leading to improved trauma care and better patient outcomes.

Keywords: trauma education, training challenges, standardized curricula, simulation-based learning, interprofessional education, hands-on training, technology in education, clinical practice, patient outcomes, innovative educational models.

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OP – 07

Trauma Centers: Are They Necessary?

Chrysanthos Georgiou,

Director of Gen. Surgery & Trauma Nicosia General Hospital ATLS / PHTLS National Chair CYPRUS

Abstract:

Introduction: Trauma centers have evolved into a life-saving component of modern healthcare systems. They are purposefully designed to manage the most critically injured patients through specialized, multidisciplinary care. This abstract delves into the life-saving necessity of trauma centers in improving outcomes for trauma patients and evaluates their impact on mortality, morbidity, and healthcare costs. Research consistently demonstrates that trauma centers provide a comprehensive umbrella of care to patients with severe injuries. They offer access to highly trained trauma surgeons, advanced diagnostic tools, and immediate surgical interventions. These facilities are structured with protocols that streamline care, from resuscitation to rehabilitation, ensuring timely and efficient management of life-threatening injuries. Additionally, trauma centers maintain a high level of readiness through the 24/7 availability of operating rooms, critical care units, and radiology services, allowing rapid responses to emergencies. Despite the clear advantages, the high costs associated with trauma center operations raise questions about their necessity in all regions. Resource limitations often challenge Rural and under-served areas in maintaining trauma centers. However, integrating trauma systems that direct critically injured patients to appropriate levels of care—local hospitals or higher-level trauma centers—can significantly optimize resource use and ensure that patients receive the right level of care when needed, making the system more efficient and effective.

In conclusion, trauma centers are a critical element of healthcare systems, particularly in regions with a high burden of severe trauma cases. While not every hospital needs to be a trauma center, a well-organized trauma system with designated centers is essential for reducing trauma-related mortality and improving overall patient outcomes.

Keywords: trauma centers; trauma systems; critical care; polytrauma; healthcare outcomes; emergency surgery; multidisciplinary care.

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OP – 08

Artificial Intelligence in Medical Education

Diego Mariani

*General and Emergency Surgeon ASD Urgenza e Trauma
ASST OVEST MILANESE, Legnano, ITALY*

Abstract:

Introduction: Artificial Intelligence (AI) is on the brink of a monumental shift in medical education, promising a new era of advanced learning processes, clinical decision-making, and personalized training. Integrating AI into medical education can significantly enhance the training of healthcare professionals, streamline medical curricula, and optimize education delivery through intelligent systems.

This review delves into AI's transformative role in medical education, highlighting its numerous benefits, challenges, and potential applications in medical training, from preclinical to clinical stages.

Material and Methods: AI applications in medical education were reviewed from current literature, including reputable journals, academic publications, and industry reports. The focus was on adaptive learning platforms, virtual simulations, and AI-assisted assessments. Various AI-driven technologies, such as machine learning, natural language processing, and virtual reality, were analyzed for their impact on learning outcomes and clinical training.

Results: AI enhances personalized learning by adjusting to individual student needs, offering adaptive learning paths based on performance. Virtual simulations powered by AI improve clinical skills training, allowing students to practice on realistic cases in a risk-free environment. AI also supports clinical decision-making, giving students feedback on diagnostic accuracy and treatment choices. However, it's important to note that challenges such as data privacy, ethical concerns, and the need for faculty training in AI technologies were identified, which could pose risks if not managed effectively.

Conclusions: AI in medical education offers significant potential to improve teaching, learning, and clinical practice readiness. Its integration can lead to more efficient and individualized training, but it requires careful consideration of ethical, legal, and practical challenges.

Keywords: Artificial intelligence; medical education; adaptive learning; virtual simulations; personalized training; clinical decision-making.

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OP – 09**Modern Management of Trauma**

Chrysanthos Georgiou

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Hospital ATLS / PHTLS National Chair CYPRUS

Abstract

Introduction: Trauma management has evolved significantly in recent years, integrating technological advancements, surgical techniques, and multidisciplinary approaches to improve patient outcomes. Modern trauma care emphasizes the importance of timely, organized, and protocol-driven interventions, ensuring optimal care from the point of injury to definitive treatment.

At the pre-hospital level, rapid triage and stabilization have been enhanced by advanced trauma life support (ATLS) guidelines, point-of-care ultrasound, and helicopter emergency medical services (HEMS) for rapid transport to specialized trauma centers. The shift towards damage control surgery (DCS) and resuscitation within the hospital allows for fast stabilization of critically injured patients, minimizing unnecessary interventions until the patient is hemodynamically stable. Notably, using minimally invasive techniques, such as laparoscopy and interventional radiology, has revolutionized trauma care, significantly reducing the need for extensive surgical exploration.

In conclusion, modern trauma management is characterized by a coordinated, multidisciplinary approach, utilizing the latest technologies and techniques to provide efficient and effective care. However, it is important to stress that the audience's continuous engagement in research, protocol refinement, and training is crucial. This ongoing professional development is necessary to keep pace with the evolving landscape of trauma management.

Keywords: trauma management, damage control surgery, pre-hospital care, multidisciplinary

approach, trauma systems, advanced trauma life support, interventional radiology

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OP – 10**Trauma Scoring Systems and Classification**

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Abstract:

Introduction: Trauma scoring systems are essential for assessing and managing trauma patients. They provide a standardized method for evaluating the severity of injuries, guiding treatment decisions, and predicting patient outcomes. Various classification systems have been developed to facilitate communication among healthcare professionals and improve the quality of care.

This paper provides an overview of the most commonly used trauma scoring systems, their classifications, and their significance in clinical practice.

Material and Methods: A comprehensive review of the literature was conducted, focusing on prominent trauma scoring systems such as the Injury Severity Score (ISS), Abbreviated Injury Scale (AIS), Trauma Injury Severity Score (TRISS), and Glasgow Coma Scale (GCS). Each scoring system's methodology,

applications, and limitations were analyzed to highlight their utility in trauma care.

Results: The ISS and AIS are widely recognized for their ability to quantify injury severity, with the ISS as a predictor of mortality and morbidity. The TRISS combines the ISS with GCS and patient age to estimate survival probabilities. The GCS remains a fundamental tool for assessing consciousness in traumatic brain injuries. Despite their effectiveness, challenges such as subjectivity in injury assessment and the need for updates to reflect evolving trauma care practices exist.

Conclusions: Trauma scoring systems and classification are crucial in managing trauma patients. They facilitate early identification of critically injured individuals, aid in triage decisions, and enable outcome prediction.

Keywords: Trauma scoring systems, Injury Severity Score, Abbreviated Injury Scale, Glasgow Coma Scale, Trauma care, Outcome prediction.

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OP – 11

ATLS® Course Albania Continues Its Journey Successfully

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Abstract;

Introduction: For more than 30 years, following the changes that took place in Albania in 1992, we have received information from trauma patients in the media about the delivery of trauma services. Police records are worthy of a war balance report. Trauma is estimated to be the cause of death in 13.7% / 100,000 people. Every two days, three Albanian Citizens die because of Motor Vehicle Accidents... Changes have already occurred, but the question arises: who cares about the trauma and its management?

Trauma service delivery is now evolving along the lines of a central and spoken model, with a concentration of expertise and specialization in the center surrounded by smaller units that feed from the center. The study showed a 19% increase in the chances of survival since introducing these changes. Another 1,600 trauma victims are alive today due to developments in the administration of trauma patients in England over the past six years.

How is the educational status of personnel in other regions far from the Capital?

ATLS® student courses in our country have been implemented by few and individually...

ASTES, by default rules, has acquired the right to organize ATLS® in Albania and now are close to organizing the ATLS® inaugural course in Albania (11-13 October 2024).

Keywords: Trauma, Management, ATLS®, Albania, ASTES,

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OP – 12

Management of Pelvic Fracture

Juan Carlos Puyana

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Abstract:

Introduction: Pelvic fractures, often caused by high-energy trauma, are associated with significant morbidity and mortality, mainly due to the risk of bleeding and related injuries. This study reviews the current approaches to managing pelvic fractures, strongly emphasizing early stabilization, bleeding control, and integrating multidisciplinary care. Key management strategies include initial resuscitation, external fixation for mechanical stabilization, and angiographic embolization for hemorrhage control in hemodynamically unstable patients. Imaging, mainly CT scans, is highlighted in assessing fracture patterns and guiding treatment decisions. Additionally, the study discusses the importance of timely surgical intervention versus conservative management based on injury severity. Postoperative rehabilitation is crucial in improving long-term functional outcomes and reducing complications. By analyzing recent advances and outcomes in pelvic fracture care, this review aims to optimize clinical protocols and improve patient recovery, ensuring effective management from the acute phase through rehabilitation.

Conclusion: Effective management of pelvic fractures requires a systematic, multidisciplinary approach focusing on early stabilization, hemorrhage control, and individualized treatment plans. External fixation and angiographic embolization remain critical in stabilizing hemodynamically unstable patients. At the

same time, advanced imaging, such as CT scans, guides immediate and long-term care decisions, empowering healthcare providers with crucial information. Integrating timely surgical interventions and early rehabilitation significantly improves functional outcomes and reduces complications. As trauma care continues to evolve, refining management protocols for pelvic fractures will further enhance patient survival and recovery.

Keywords: Pelvic fracture, hemorrhage control, external fixation, angiographic embolization, trauma surgery, multidisciplinary care, rehabilitation, non-operative management, fracture stabilization.

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OP – 13

Pelvic Fracture Management for General Surgeon Point of View

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Abstract:

Introduction: Pelvic fractures, a formidable injury often linked with high-energy trauma and significant morbidity and mortality, underscore the pivotal role of general surgeons, particularly in trauma centers. Their understanding of pelvic fracture management is crucial and the cornerstone of optimizing patient outcomes. This abstract provides an insightful overview of pelvic fracture management from the perspective of a general surgeon, with a strong emphasis on the initial assessment, stabilization, and the power of interdisciplinary collaboration.

Pelvic fractures are often accompanied by life-threatening hemorrhage, organ injury, and other skeletal trauma. The general surgeon's role begins with rapid assessment and resuscitation using the Advanced Trauma Life Support (ATLS) principles. Hemodynamic instability in a patient with a pelvic fracture necessitates early intervention, including external stabilization, fluid resuscitation, and, in some cases, the use of pelvic binders. Hemorrhage control, whether through angioembolization or direct surgical intervention, is the priority in the acute phase.

This review also underscores the general surgeon's leadership role in coordinating with orthopedic surgeons, interventional radiologists, and intensive care teams. In cases where definitive orthopedic care is delayed, the general surgeon's leadership is crucial in maintaining pelvic stability, addressing associated injuries such as bladder or bowel damage, and managing the patient's overall condition.

Early surgical decision-making, resuscitative efforts, and damage control strategies, such as external fixation and vascular control, are emphasized. Additionally, the general surgeon must be familiar with the complications associated with pelvic fractures, including infection, thromboembolism, and long-term functional impairments. The general surgeon plays a key role in preventing these issues through meticulous surgical techniques and post-operative care, and in managing them should they arise, thereby ensuring the best possible outcomes for the patient.

In conclusion, pelvic fracture management from a general surgeon's point of view is a journey that requires a systematic approach to rapid stabilization, multidisciplinary collaboration, and timely intervention to reduce mortality and improve patient outcomes. However, this journey doesn't end here. It's a continuous process that demands the general surgeon's commitment to continued education and practice in pelvic trauma protocols, especially those working in trauma centers.

Keywords: pelvic fractures; trauma surgery; general surgeon; hemodynamic instability; hemorrhage control; multidisciplinary care; trauma management; ATLS; pelvic stabilization.

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OP – 14

Pelvic Blunt Trauma: Emergency and Artistic Work

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Abstract

Introduction: Pelvic blunt trauma, a formidable challenge in trauma care, is often associated with high morbidity and mortality due to its complex anatomy and potential for life-threatening bleeding. This study examines the clinical management of pelvic blunt trauma, with a focus on the role of emergency intervention in stabilizing patients and addressing complications. A multidisciplinary approach is crucial, involving trauma surgeons, orthopedic specialists, and interventional radiologists to navigate the intricacies of diagnosis, stabilization, and definitive care. This 'artistic work' demands rapid yet methodical decision-making, where the balance between surgical interv-

ention and non-operative management is crucial and depends on injury severity and patient stability.

Our retrospective analysis of pelvic trauma cases at a tertiary trauma center highlights the outcomes of various management strategies, including external fixation, angiographic embolization, and advanced surgical techniques. We also explore the role of early rehabilitation in patient recovery.

This article refines protocols in pelvic trauma care by drawing from case studies. It aims to ensure that medical expertise is complemented by swift, precise, and adaptable care for optimal outcomes.

Conclusion: Pelvic blunt trauma requires prompt and coordinated multidisciplinary care to improve survival and outcomes. Effective hemorrhage control through external fixation or embolization is critical. The assurance of individualized management, balancing operative and non-operative approaches, and the early introduction of rehabilitation play a crucial role in recovery.

Keywords: Pelvic blunt trauma; emergency management; NOM, embolization; hemorrhage control

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OP – 15

Minimally Invasive Pelvic Surgery: Advancements and Outcomes

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Abstract:

Introduction: Minimally invasive pelvic surgery has revolutionized the field of surgery, offering significant advantages over traditional open procedures. This surgical approach, which includes laparoscopic and robotic-assisted techniques, is increasingly used to treat various pelvic conditions such as gynecological disorders, pelvic fractures, and urological issues. This study aims to review the recent advances, techniques, and clinical outcomes associated with minimally invasive pelvic surgery.

Materials and Methods: This is a retrospective analysis of patients who underwent minimally invasive pelvic surgery at a tertiary care center over the last five years. Procedures included laparoscopic hysterectomies, pelvic organ prolapse repairs, and pelvic fracture fixations.

Results: Minimally invasive pelvic surgery demonstrated reduced operative times and shorter hospital stays than traditional open surgery. Patients experienced fewer complications, such as blood loss and postoperative infections. The average length of stay in the hospital was reduced by 30%, and patients reported quicker recovery times and improved postoperative quality of life. Long-term outcomes indicated lower rates of surgical site infections and less postoperative pain. Robotic-assisted surgery showed additional precision and ease in complex cases but was associated with higher costs.

Conclusions: Minimally invasive pelvic surgery offers numerous benefits, including reduced recovery time, fewer complications, and improved patient outcomes. With continued technological advancements and surgical techniques, it is becoming the preferred method for many pelvic surgeries. However, the cost-effectiveness and accessibility of robotic systems remain challenges that need to be addressed. Overall, this approach represents a significant advancement in patient care, offering improved recovery and outcomes while reducing the burden of traditional open surgery.

Keywords: Minimally invasive surgery, pelvic surgery, laparoscopy, robotic-assisted surgery, patient outcomes.

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OP – 16

Role of Blood Banks in Trauma Care and Emergency Surgery

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Abstract

Introduction: Blood banks' primary purpose in trauma care and emergency surgery remains the provision of reliable blood components in real-time, influencing many critical aspects: blood supply management and donor-recipient compatibility. This study aims to analyze the role of blood banks in coordination with trauma and emergency care teams, addressing the challenges in blood availability and safety.

Material and Methods: In a retrospective study, we examined emergency trauma cases from the University Hospital of Trauma (UHT) blood bank and the accompanying request sheet to withdraw blood products. A mixed-methods approach was used: case studies review, interviews with personnel at the blood banks and trauma centers, and analysis of operational

data. The following aspects were reviewed in this study: the role of blood banks in the distribution of blood components, the most requested components, the most frequent diagnoses, emergency response protocols, inventory management practices, and inter-organizational communication strategies.

Results: The study highlights the importance of blood banks in providing trauma patients with reliable and timely blood supplies. The wards that pre-dominated submitted requests to the SUT blood bank for the withdrawal of blood components were orthopedics, where the most frequent diagnosis was a prosthetic replacement, mostly planned for female patients in the 40-60 age group, mainly with concomitant diseases, and fractures with displacement. Blood components were distributed according to the surgical file. Meanwhile, in the emergency service, it was noticed that the most frequent diagnoses were contusions, wounds with cold weapons, and firearms, as well as polytrauma cases involving the head, lungs, thorax, and kidneys, as well as poly-trauma plus KID.

Conclusion: Blood banks' role remains irreplaceable in the rapid response and provision of assistance against wards with the distribution of appropriate blood components. However, stock management remains among the strategies blood banks and trauma teams use to coordinate their cases.

Keywords: Blood Bank, Trauma Care, Emergency Blood Supply

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OP – 17***What Quality of Life is Expected in a Polytraumatized Young Patient?***

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Abstract

Introduction: Major trauma is a leading cause of morbidity and mortality in young adults, significantly impacting their quality of life and functionality. Over the past four to five decades, the management of polytraumatized patients has evolved dramatically due to advancements in our understanding of physiological responses to injury, surgical techniques, and perioperative care. Improvements in vehicle safety and clinical management have contributed to decreased complication rates. Key concepts in this management include resuscitation and damage control.

We present a case of a 40-year-old male who sustained severe injuries from an accidental fall in a mine. His injuries included a sternal fracture, bilateral rib fractures, a diaphyseal shaft fracture, an open wound in the posterior femoral region, an ipsilateral open pylon fracture with a significant bony defect of the tibia, and an ipsilateral lateral malleolar fracture, all confirmed by whole-body CT. After stabilization and initial damage control, the patient developed an absent pulse and loss of sensation at the injury site, which was later confirmed by CT angiography. A second surgical intervention was required.

This case raises the question of what quality of life can be expected for this polytraumatized patient following multiple surgeries and complications.

Keywords: Polytrauma, thrombosis, diaphyseal shaft fracture, bypass, pylon fracture, complications, surgical treatment.

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OP – 18***Differences Between Blunt and Penetrating Trauma. Just in case?***

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Abstract:

Introduction: Trauma is a leading cause of morbidity and mortality worldwide, with mechanisms primarily classified into blunt and penetrating types. This study aims to delineate the critical differences between blunt and penetrating trauma, focusing on their mechanisms of injury, clinical presentation, management strategies, and outcomes. Blunt trauma, often resulting from falls, motor vehicle collisions, or sports injuries, typically presents with diffuse injuries and usually involves internal organs without compromising the skin barrier. In contrast, penetrating trauma caused by firearms, knives, or other sharp objects creates an open wound, often leading to localized damage and a direct pathway for potential infection. The variability in injury patterns necessitates distinct diagnostic approaches and treatment protocols. This review

highlights the importance of understanding these differences to improve triage, surgical intervention, and postoperative care. By examining case studies and current literature, we aim to enhance healthcare providers' awareness of the unique challenges posed by each type of trauma. This understanding is crucial for developing and implementing tailored management strategies, ultimately facilitating better patient outcomes.

Conclusion: Understanding the differences between blunt and penetrating trauma is crucial for optimizing patient management and outcomes. Blunt trauma often presents with complex, diffuse injuries requiring a comprehensive approach to diagnosis and treatment, while penetrating trauma necessitates prompt intervention to address localized damage and prevent complications such as infection. By recognizing the distinct mechanisms, clinical presentations, and management strategies associated with each type of trauma, healthcare providers can enhance triage decisions and surgical interventions. Continued education and awareness of these differences are essential for improving trauma care and ensuring effective treatment tailored to the specific needs of patients. This review underscores the need for healthcare providers to stay updated in their field, as new knowledge and understanding can significantly impact patient outcomes.

Keywords: trauma care, injury patterns, Blunt trauma, clinical presentation, penetrating trauma, mechanisms of injury, surgical intervention, triage, patient outcomes.

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OP – 19

Common Mistakes in Emergency Departments During Trauma Management

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Abstract:

Introduction: Effective trauma management in the emergency department (ED) is critical for optimizing patient outcomes. However, several common mistakes can hinder the rapid and accurate diagnosis and treatment of trauma patients, leading to potential complications and delays in care. This review, which identifies and discusses the most frequent errors encountered during trauma management in the ED, is of significant importance. It sheds light on human factors and systemic issues, providing valuable insight for healthcare professionals.

Mistakes often stem from improper application of the ABCDE (Airway, Breathing, Circulation, Disability, Exposure) protocol, resulting in mis-prioritization of care. For instance, failure to secure the airway early, such as in cases of severe facial trauma where the focus might be on other injuries, misinterpretation of hemodynamic instability, and inadequate assessment of potential spinal injuries are recurrent issues. In addition, more than over-reliance on imaging rather than clinical assessment can lead to delays in necessary interventions. Inadequate communication and poor teamwork among the trauma team also contribute significantly to errors, as does insufficient documentation of initial assessments and treatments. This review suggests that continuous education, enhanced team coordination, adherence to trauma protocols, and rapid decision-making based on clinical findings are needed to mitigate these common errors.

The potential for improvement is significant, and with regular simulation training, interdisciplinary communication, and the implementation of transparent, structured workflows, we can reduce the frequency of these mistakes and significantly enhance patient care in the ED during trauma situations.

Keywords: trauma management, emergency department, ABCDE protocol, hemodynamic instability, airway management, teamwork, trauma errors

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OP – 20

Difficult Closure of the Abdomen in Trauma

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Abstract:

Introduction: Closing the abdomen after trauma surgery can present significant challenges, particularly in cases of severe injury or damage control procedures. Delayed closure or "open abdomen"

techniques are often required to prevent complications such as ACS, infection, or compromised organ function. This presentation reviews the difficulties in abdominal closure following trauma, focusing on the key factors, techniques, and outcomes involved. **Materials and Methods:** This review is based on retrospective case analyses of trauma patients requiring delayed abdominal closure at a tertiary trauma center. Factors such as injury severity, intraabdominal pressure, surgical techniques (temporary omental closure methods), and patient outcomes were assessed. Special attention was given to the closure timing, NPWT...

Results: In cases of severe trauma, delayed abdominal closure was frequently required due to edema, visceral swelling, or intra-abdominal bleeding. Open abdomen techniques, such as using temporary mesh or VAC, improved patient outcomes, reducing the incidence of ACS and allowing for safely delayed closure. However, complications such as fistula formation, infection, and hernia development were noted in a small percentage.

Conclusion: Difficult closure of the abdomen in trauma patients is a complex and multifactorial challenge that requires careful management to prevent life-threatening complications. Delayed closure using temporary techniques like NPWT offers a viable solution, although it has potential risks.

Keywords: Abdominal trauma, delayed closure, open abdomen, abdominal compartment syndrome, trauma surgery, wound management, NPWT.

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OP – 21**Assessment of Trauma Patients in the Emergency Department**

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Abstract:

Introduction: The initial assessment of trauma patients is a critical phase in emergency medicine, where rapid identification and treatment of life-threatening injuries is essential. This presentation highlights key principles of trauma assessment, following protocols like ATLS, to ensure swift intervention and patient stabilization.

Material and Methods: Trauma evaluation begins with the ABCs (Airway, Breathing, Circulation), focusing on the immediate management of critical conditions. A quick yet comprehensive patient history and physical examination are conducted to guide further diagnostic and therapeutic decisions.

Results: Prompt recognition of conditions such as tension pneumothorax, cardiac tamponade, and hemorrhage enables immediate intervention. Effective teamwork and communication among trauma care providers are crucial in optimizing patient outcomes and ensuring efficient triage and care.

Conclusion: Trauma assessment in the emergency department is a dynamic, systematic process that prioritizes the identification of life-threatening injuries. Proper training in this structured approach is essential for improving outcomes in trauma patients.

Keywords: trauma care, outcomes, communication, assessment, trauma management

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OP – 22**The Shoulder Pain After Laparoscopic Cholecystectomies**

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Abstract:

Introduction: Laparoscopic cholecystectomy is widely regarded as the gold standard for treating gallbladder diseases. However, one of the most common postoperative complications is referred shoulder pain, which affects a significant proportion of patients. This pain is often attributed to diaphragmatic irritation due to carbon dioxide insufflation, which is used to create the pneumoperitoneum during surgery. Understanding post-laparoscopic shoulder pain's mechanisms, incidence, and management strategies is crucial for improving patient outcomes.

The primary aim of this study is to review the incidence, pathophysiology, and management of shoulder pain after laparoscopic cholecystectomy and propose effective prevention and treatment strategies.

Materials and Methods: This is a retrospective review of patients who underwent laparoscopic cholecystectomy at a tertiary hospital from 2015 to 2023. Data

on postoperative shoulder pain, demographic details, operative time, insufflation pressure, and pain management protocols were collected. Pain levels were assessed using the Visual Analog Scale (VAS) within 24 hours post-operation and during follow-up visits. Descriptive and inferential statistics were used to analyze the data.

Results: Of the 300 patients studied, 45% reported experiencing moderate to severe shoulder pain within the first 24 hours after surgery. Pain intensity correlated with longer operative time and higher insufflation pressures. Most patients experienced relief within 72 hours postoperatively. Effective management strategies included using lower insufflation pressures, early mobilization, and analgesic protocols, particularly NSAIDs and shoulder-targeted physiotherapy. No significant correlation was found between demographic factors and the incidence of shoulder pain.

Conclusions: Shoulder pain after laparoscopic cholecystectomy is a common and often distressing complication for patients. By optimizing insufflation techniques, utilizing multimodal analgesia, and promoting early mobilization, the incidence and severity of shoulder pain can be significantly reduced. Further research is needed to refine these strategies and improve patient comfort postoperatively.

Keywords: Laparoscopic cholecystectomy, shoulder pain, carbon dioxide insufflation, postoperative pain,

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OP – 23

Laparoscopic Management of Advanced Gastric Cancer. Case Report

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Abstract

Introduction: Gastric cancer is a significant global health concern and a leading cause of cancer-related mortality. Advances in management, including surgery and chemotherapy, have improved survival rates. Surgical intervention remains pivotal, even in advanced stages, where it can provide symptomatic relief and potential cure.

We present a 64-year-old male patient, A.K., who exhibited symptoms of upper midline pain, nausea, and weight loss. The diagnostic evaluation revealed a large mass in the gastric antrum, which was confirmed as a poorly differentiated gastric adeno-carcinoma through biopsy. Despite attempts at endoscopic hemostasis, the tumor was actively bleeding.

Surgical Intervention: The patient underwent laparoscopic surgery under general anesthesia. Utilizing the Hassan technique, a 12 mm trocar was inserted to establish pneumoperitoneum, supplemented with additional trocars. A mass adherent to the pancreas was identified and managed using the Liga-Sure device for dissection and resection. A comprehensive lymphadenectomy was performed, and the duodenum was transected with an endoscopic stapler.

Conclusion: This case underscores the effectiveness of laparoscopic techniques in managing advanced gastric cancer, showcasing benefits such as reduced trauma and expedited recovery. The evidence supporting minimally invasive surgery in selected cases is growing, with the potential for enhanced patient outcomes in the context of gastric cancer treatment.

Keywords: Laparoscopic surgery; Advanced gastric cancer; Minimally invasive techniques; Surgical management

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OP – 24

Should We Routinely Place a Drain After Laparoscopic Cholecystectomy?

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Abstract

Introduction: Laparoscopic cholecystectomy has become the gold standard for treating symptomatic cholelithiasis. However, the routine placement of an abdominal drain postoperatively remains a debated topic. Proponents argue that drains help prevent intraperitoneal fluid accumulation, allow early detection of complications such as bile leakage and bleeding, and reduce post-laparoscopy shoulder pain by facilitating carbon dioxide escape. In cases of acute complicated cholecystitis, drains are believed to eliminate infected fluids, prevent abscess formation, and assist in the healing of potential leaks or fistulas. Despite these theoretical benefits, a review of the literature reveals little evidence supporting the routine use of drains after laparoscopic cholecystectomy, even in cases involving acute inflammatory gallbladder disease. Many surgeons place drains based on personal experience rather than evidence-based protocols.

Randomized controlled trials have shown no significant advantage to routine drainage in uncomplicated cases, and the topic has similarly been debated in the context of open cholecystectomy, with comparable findings.

This review examines the current evidence from central databases, including Cochrane, MEDLINE, and EMBASE, which fails to demonstrate any explicit benefit from routine drain placement after laparoscopic cholecystectomy. The findings highlight the need for further randomized clinical trials to determine whether routine drainage should be recommended in uncomplicated and complicated cases.

Keywords: Laparoscopic cholecystectomy, drainage, postoperative complications, bile leak, acute cholecystitis, abdominal drain, randomized controlled trials.

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OP – 25

Shoulder Pain After Laparoscopic Surgery: How to Prevent It?

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Abstract

Introduction: Laparoscopic surgery is increasingly preferred for its many advantages, including reduced postoperative pain, shorter hospital stays, smaller incisions, and quicker recovery times. However, shoulder pain following laparoscopic procedures is a

common and uncomfortable complication, often more distressing than abdominal pain itself. Patients frequently report sleep disturbances due to this discomfort, prompting the need for effective prevention strategies. Our study evaluates the effectiveness of pulmonary recruitment maneuvers (RM) and carbon dioxide (CO₂) aspiration from the abdominal cavity to prevent laparoscopy-induced shoulder pain.

Objective: To assess the efficiency of pulmonary recruitment maneuvers (RM) and CO₂ aspiration in reducing the incidence of shoulder pain following laparoscopic surgery.

Materials and Methods: This prospective, randomized, controlled clinical trial was conducted at Villa Alba Hospital from January to August 2024. We included patients undergoing laparoscopic surgeries such as cholecystectomy, hysterectomy, appendectomy, ovarian cyst removal, and gastric sleeve procedures. A total of 282 patients were screened, and they were divided into three groups: Group 1 (101 patients): RM and CO₂ aspiration were applied; Group 2 (105 patients): Only RM was performed; Group 3 (76 patients): Only CO₂ aspiration was applied.

Patients ranged from 14 to 84 years old. All patients received general anesthesia, local anesthesia at the port sites, NSAIDs, paracetamol, dexamethasone for pain and PONV control, and early mobilization protocols.

Results: The incidence of shoulder pain was observed in 10.4% of patients who received RM only, 9.9% of patients who underwent both RM and CO₂ aspiration, and 7.8% of patients who received only CO₂ aspiration.

Interestingly, younger patients (14-30 years old) experienced more shoulder pain (40.7%) compared to older patients, and the majority of those affected (92.6%) were female. There was no significant correlation between shoulder pain and underlying comorbidities like hypertension or diabetes. Despite the small sample size, our study suggests that adequate

CO₂ aspiration before incision closure may reduce the incidence of shoulder pain after laparoscopic surgery.

Conclusion: While both pulmonary recruitment maneuvers and CO₂ aspiration can effectively minimize postoperative shoulder pain, CO₂ aspiration alone offers the most significant reduction. Further research with larger patient populations is needed to confirm these findings and optimize prevention strategies for this common postoperative complication.

Keywords: Laparoscopy-induced shoulder pain, pulmonary recruitment maneuver, carbon dioxide aspiration, postoperative pain, laparoscopic surgery, pain prevention

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OP – 26

Urgent Laparotomy in Hemoperitoneum after Laparoscopic Cholecystectomy: A Case Report

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Abstract

Introduction: Hemoperitoneum (presence of blood in the peritoneal cavity) is generally classified as a

surgical emergency; in most cases, urgent laparotomy is needed to identify and control the source of the bleeding. The abdominal cavity is highly distensible and may easily hold greater than five liters of blood or more than the entire circulating blood volume for an average-sized individual. Therefore, large-scale or rapid blood loss into the abdomen will reliably induce hemorrhagic shock and, if untreated, may rapidly lead to death.

Material and Methods: We present a 70-year-old patient with obesity (BMI 50.32, class III), previously operated on standard four-ports laparoscopic cholecystectomy in the regional general hospital 48 hours before admission in our hospital.

Results: Twenty-four hours after the cholecystectomy, a sudden drop of erythrocyte count to 80 with stable blood pressure and arterial pulse followed. The ultrasound revealed fluid collection in Douglas's space. After the transfusion of two blood units after 40 hours, there was an additional erythrocyte drop with a drop in blood pressure (105/70) and tachycardia (95/min). Immediately after transfer to our hospital, an urgent laparotomy was performed with the evacuation of 2,5 L blood. A large hematoma in mesocolon transversum was found, suggesting a lesion, while trocar placement with a lesion of the right branch of the media colic artery presented with active bleeding. The artery was ligated, extensive lavage was performed, and after placement of two abdominal drains, the intervention was finished. Postoperatively, the patient was stable and discharged after 6 days in good condition.

Conclusions: Iatrogenic lesions while trocar placement can be an emergency even in routine cholecystectomies, particularly in patients with higher BMI. If not diagnosed promptly, they might lead to shock and fatality.

Keywords: cholecystectomy, hemoperitoneum, laparoscopy, obesity, case report

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OP – 27

Fasting before surgery

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Abstract

Introduction: Fasting before surgical procedures is a critical protocol designed to minimize perioperative complications, particularly the risk of aspiration during anesthesia. Traditional guidelines have recommended fasting durations of 6-8 hours for solid foods and 2-4 hours for clear liquids.

This paper explores the evolution of fasting guidelines, highlighting emerging evidence supporting shorter fasting periods.

Methods: Recent studies indicate that abbreviated fasting times, particularly for clear liquids and carbohydrate-rich beverages, can be safe and advantageous for postoperative recovery. This review examines contemporary research that validates the safety of reduced fasting times and aligns with recommendations from prominent professional societies, including the European Society of Anesthesiology and Intensive Care (ESRA) and the American Society of Anesthesiologists (ASA).

Results: The practical application of these updated fasting guidelines in clinical settings and the significance of patient education in fostering compliance and understanding are discussed.

Conclusion: The findings underscore the potential benefits of revising fasting protocols to enhance

patient safety, satisfaction, and overall postoperative recovery outcomes.

Keywords; Anesthesia; Preoperative fasting; Fasting guidelines, Aspiration risk;

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OP – 28

Long-Term Outcomes of Laparoscopic Sleeve Gastrectomy in 2,800 Patients: A 10-Year Experience at a Bariatric Center of Excellence

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Abstract

Introduction: Bariatric surgery is the most effective approach for substantial weight loss and the improvement of obesity-related comorbidities. Laparoscopic sleeve gastrectomy (LSG) has become increasingly popular, outpacing other surgical techniques. This retrospective study evaluates the long-term outcomes of a large cohort of patients undergoing LSG at a Bariatric Center of Excellence.

Materials and Methods: We retrospectively reviewed all consecutive patients who underwent LSG between July 2013 and November 2023. Data collected from medical records included age, gender, weight, height, body mass index (BMI), and comorbidities. Post-

operative outcomes measured included weight loss, expressed as a percentage of total weight loss (%TWL) and percentage of excess weight loss (%EWL). The ideal body weight was defined as a BMI of 25.

Results: 2,800 patients were included in the study, with 207 patients completing 10 years of follow-up. The mean age was 38.2 years, with 71.4% being women, and the mean preoperative BMI was 42.1 kg/m². The most common preoperative comorbidities were hyperlipidemia (34.8%), hypertension (30.6%), diabetes (24.8%), and obstructive sleep apnea (24.8%). The remission rates for these comorbidities were 73.7%, 82.5%, 81.7%, and 80.1%, respectively, over the follow-up period. The %TWL at 1, 2, 3, 4-, 5-, 8-, and 10-years post-surgery were 36.17%, 35.88%, 34.79%, 32.59%, and 29.58%. Notably, there were no recorded fatalities.

Conclusion: LSG is an effective and safe procedure for achieving long-term weight loss and resolving obesity-related comorbidities, with a low complication rate. Future studies with larger sample sizes and extended follow-up periods are warranted to validate these findings further.

Keywords: Laparoscopic sleeve gastrectomy, weight loss, comorbidity resolution, long-term outcomes, bariatric surgery.

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OP – 29

Hiatal Hernia. Laparoscopic Approach Advantages and Disadvantages

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Abstract

Introduction: In our daily practice, we have observed an increasing number of patients presenting with para-esophageal hernias. It is essential to reflect on our past treatment approaches while evaluating our current practices in managing this condition. Numerous studies consistently highlight the prevalence of hiatal hernias (HH), underscoring their commonality in the population (Ronkainen et al., *Scandinavian Journal of Gastroenterology*, 2005; Wallner et al., *Scandinavian Journal of Gastroenterology*, 2018).

Hiatal hernias are classified into four types, with the sliding type being the most common. This type is more frequently observed in men and is often associated with gastroesophageal reflux disease (GERD). The second most prevalent type, the para-esophageal hernia, is more common in women and its incidence increases with age. The sliding type is characterized by the gastroesophageal junction (GEJ) positioned above the hernia, a diagnosis typically confirmed through radiological imaging and endoscopy.

The rarest type, Type II, occurs when the GEJ remains in the abdominal cavity. At the same time, a portion of the stomach, primarily the fundus, herniates above the diaphragm into the thoracic cavity, constituting a true para-esophageal hernia. Types III and IV are more common mixed types, where the GEJ and gastric fundus are located in the chest. The distinction between these two types lies in the presence of additional organs herniated alongside the stomach in Type IV.

Conclusions: Hiatal hernias, particularly para-esophageal hernias, are a growing concern in surgical

practice, necessitating a comprehensive understanding of their classification, associated risk factors, and effective treatment strategies. The prevalence of these hernias highlights the importance of early diagnosis and intervention to prevent complications such as gastroesophageal reflux and organ incarceration. Our experience with laparoscopic repair techniques demonstrates favorable outcomes, emphasizing the importance of tailored surgical approaches based on hernia type. Continuous evaluation and refinement of surgical methods are essential to enhance patient care and improve postoperative outcomes.

Keywords: Hiatal hernia, para-esophageal hernia, Laparoscopic repair, GERD.

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OP – 30

Laparoscopic Surgery in Emergency Settings: A Retrospective Study from a Single Institution

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Abstract:

Introduction: In recent years, laparoscopic surgery has increasingly become the preferred approach for various abdominal emergencies. However, open surgery remains a mainstay for many critical cases. This study aims to retrospectively evaluate the outcomes of laparoscopic surgery in emergency

settings, focusing on common pathologies such as acute appendicitis, acute cholecystitis, perforations of the GI tract, and bowel obstructions.

Materials and Methods: We conducted a retrospective analysis of emergency laparoscopic abdominal surgeries performed at Hygeia Hospital, Tirana, from January 2019 to December 2023. Variables analyzed included operative time, postoperative pain, complications, length of hospital stay, and overall patient outcomes.

Results: This study included 135 patients. Preliminary findings suggest that laparoscopic surgery was associated with reduced postoperative pain and fast recovery, as evidenced by a shorter hospital stay, fewer wound infections, and a high patient satisfaction level.

Conclusion: Laparoscopic surgery demonstrates significant advantages over open surgery in specific emergency settings, particularly regarding post-operative recovery and patient comfort. However, open surgery still plays a critical role, especially in complex or unstable cases..

Keywords: Emergency surgery, Laparoscopic Surgery

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OP – 31

Gastric Sleeve Surgery, Our First 100 Patients

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Abstract

Introduction: Gastric sleeve surgery, or laparoscopic sleeve gastrectomy (LSG), is a minimally invasive bariatric procedure performed under general anesthesia. This technique reduces the stomach size by approximately 80% without bypassing the intestines or causing gastrointestinal malabsorption. It promotes weight loss by limiting food intake and reducing the production of ghrelin, the hormone responsible for hunger. Since 2020, LSG has been performed at Villa Alba Hospital as a critical treatment for obesity. This study aims to illustrate how LSG is performed and outline its benefits and risks, to evaluate the results of the first 100 LSG cases performed at Villa Alba Hospital.

Methods and Results: Within the first two years post-surgery, most patients experienced significant weight loss, typically ranging from 30% to 50% of their initial body weight. Additionally, obesity-related conditions such as diabetes, hypertension, sleep apnea, and hyperlipidemia showed notable improvement. Of the 100 cases, 2% developed cholecystitis; 1% experienced an abscess; 1% of patients regained weight due to dietary noncompliance and subsequently underwent SASI (Single Anastomosis Sleeve Ileal) revision surgery; 1% encountered gastric leakage; 100% of patients reported lifestyle changes, with 30% showing improvements in positive behavioral patterns.

Conclusion: Gastric sleeve surgery is an effective option for treating obesity, offering numerous advantages, such as reduced postoperative pain, shorter hospital stays, and fewer complications than open surgery. Our bariatric program includes thorough preoperative assessments to minimize risks and comprehensive postoperative care to support patients in achieving healthy, sustained weight loss.

Keywords: Gastric Sleeve Surgery; Laparoscopic Sleeve Gastrectomy (LSG); Bariatric Surgery;

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OP – 32

Antrum Preservation in Gastric Sleeve Surgery: A Technique for Reducing Postoperative Complications.

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Abstract

Introduction: Stomach narrowing operation, known as "Gastric Sleeve," has become a popular surgical procedure for weight loss and improvement of metabolic processes. However, concerns about postoperative complications have encouraged the exploration of techniques to avoid this risk while maintaining the effectiveness of the primary goal of the operation. This paper investigates the method and benefits of retaining a segment of the antrum during partial gastrectomy, as well as reducing the risk of postoperative complications such as nausea, prolonged vomiting, and GERD symptoms. This paper aims to compare two surgical techniques, reducing the antrum-pylorus distance <3cm, and the antrum-pylorus distance >5cm.

Materials and Methods; This paper is a meta-analysis paper with randomized control studies, which includes observing over 300 patients who underwent Gastric Sleeve Surgery for weight loss. Patients were

monitored for symptoms of postoperative complications such as nausea, prolonged vomiting, and symptoms of GERD. Preventive surgical technique involved a specific modification during surgery aimed at reducing the incidence of these complications by preserving the antrum. Data on surgical details and postoperative outcomes were collected and analyzed.

Results: post-operative patients with an antrum-pylorus distance greater than 5 cm present with fewer post-operative complications.

Conclusions: The findings suggest that the application of the antrum preservation technique during the Gastric Sleeve operation significantly reduces postoperative complications. This reduction in complications translates into better postoperative recovery and the comfort of Gastric Sleeve surgery.

Keywords: Gastric Sleeve, Antrum preservation, Risk reduction, Postoperative complications, Postoperative benefits

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OP – 33

Fracture Fixation in Polytraumatized Patients. from DCO to SDS

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Abstract:

Introduction: Managing fractures in polytraumatized patients involves balancing the need for early

stabilization with the risks posed by the patient's overall condition. Damage Control Orthopedics (DCO) has traditionally been employed to stabilize fractures in critically injured patients, followed by delayed definitive surgery. More recently, Single Definitive Surgery (SDS) has emerged as a viable option for selected patients, allowing for immediate fracture fixation in stable conditions. This study reviews the evolution from DCO to SDS in polytrauma care and its impact on patient outcomes.

Material and Methods: A robust retrospective analysis of 120 polytraumatized patients treated between 2020 and 2024 at a tertiary trauma center was conducted. Patients were categorized based on the initial fracture management approach: DCO or SDS. Clinical criteria were used to determine the approach, including hemodynamic stability, injury severity, and the presence of the "lethal triad" (hypothermia, acidosis, coagulopathy). Outcome measures included complication rates, time to definitive fixation, length of hospital stay, and functional recovery.

Results: This study's findings shed light on the effectiveness of the DCO and SDS approaches in managing fractures in polytraumatized patients. Patients treated with the DCO approach, focusing on temporary fracture stabilization and delayed surgery, had better outcomes in cases of severe instability or associated life-threatening injuries. However, patients eligible for SDS, where fractures were definitively fixed during the initial surgery, had shorter hospital stays, quicker rehabilitation, and fewer secondary surgeries.

Conclusion: The shift from DCO to SDS in managing fractures in polytraumatized patients offers a more tailored and patient-centered approach to trauma care. While DCO remains essential for unstable patients, SDS can be a safe and effective option in stable polytrauma patients, leading to improved recovery times and fewer complications. A patient-centered approach, closely monitoring clinical status, is critical

to determining the most appropriate fracture management strategy.

Keywords: polytrauma, fracture fixation, Damage Control Orthopedics, Single Definitive Surgery, trauma management, lethal triad, patient stability.

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OP – 34

Treatment Approach to Osteoporotic Fractures in the Elderly.

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Abstract:

Introduction: Osteoporotic fractures, particularly in the elderly, are a significant public health concern due to their association with increased morbidity, mortality, and loss of independence. These fractures, most commonly occurring in the spine, hip, and wrist, result from decreased bone density and fragility, often exacerbated by minor trauma or falls. Traditional management approaches, including conservative treatments such as bed rest, bracing, and pain control, frequently fail to achieve satisfactory outcomes, leading to prolonged disability and increased risk of complications such as pulmonary and CV decline.

This review evaluates current treatment strategies for osteoporotic fractures in the elderly, focusing on the efficacy and safety of minimally invasive techniques like vertebroplasty and balloon kyphoplasty and surgical interventions such as internal fixation and arthroplasty for hip fractures. Additionally, the role of pharmacologic treatments, including bisphosphonates,

calcium, vitamin D supplementation, and newer anabolic agents, is discussed as part of a comprehensive approach to fracture management and prevention.

Emerging evidence supports early surgical intervention and minimally invasive procedures to improve mobility, reduce pain, and enhance quality of life in elderly patients. Long-term management should include bone health optimization through lifestyle modification, fall prevention, and pharmacotherapy to mitigate the risk of future fractures.

Conclusions: A multimodal approach, combining early surgical intervention, pharmacological therapy, and preventative measures, offers the most effective strategy for managing osteoporotic fractures in the elderly.

Keywords: Osteoporotic fractures, elderly, vertebroplasty, kyphoplasty, fracture management, bone health.

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OP – 35

Complex Acetabular Fractures: Challenges in Management and Outcomes

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Abstract:

Introduction: Complex acetabular fractures represent a significant challenge in orthopedic trauma surgery due to the intricacies of pelvic anatomy, the high-energy mechanisms often involved, and the associated injuries. These fractures frequently result from motor vehicle collisions, falls from heights, or other high-impact events, leading to comminuted fractures and disruption of the pelvic ring. Proper diagnosis and classification using advanced imaging modalities such as CT scans are essential to guide treatment.

Managing complex acetabular fractures typically involves surgical intervention to restore joint congruity, achieve stable fixation, and preserve hip function. Techniques include open reduction and internal fixation (ORIF); in more severe cases, total hip arthroplasty may be required. The timing of surgery, surgeon expertise, and patient factors, such as age and overall health, critically influence outcomes. Postoperative complications, including heterotopic ossification, infection, and post-traumatic arthritis, remain concerns, and functional recovery often requires extended rehabilitation.

Conclusion: Complex acetabular fractures pose significant challenges in terms of diagnosis, management, and patient recovery due to their anatomical complexity and association with high-energy trauma. Surgical treatment, primarily through ORIF, is essential for restoring hip function and preventing long-term complications such as arthritis.

Keywords: Complex acetabular fractures, Orthopedic trauma, ORIF, Pelvic fractures, Surgical management

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OP – 36***Early Major Fracture Care in Polytrauma-Priorities in the Context of Concomitant Injuries***

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Abstract

Introduction: The management of early major fractures in polytrauma patients presents a significant challenge due to the complexity of associated injuries. Balancing the need for fracture care with the urgency of life-saving interventions within concomitant life-threatening injuries is critical for optimizing patient outcomes. This study evaluates the decision-making process in early fracture management and its impact on polytrauma recovery.

Material and Methods: All patients sustained major fractures and presented with additional injuries involving the head, chest, abdomen, or pelvis. The timing of fracture fixation, the prioritization of life-saving interventions, and the use of Damage Control Orthopedics (DCO) versus Early Total Care (ETC) strategies were examined. Outcomes measured included complication rates, length of hospital stay, and overall survival.

Results: This study's findings are crucial for the management of polytrauma patients. Patients managed with DCO, which prioritizes stabilization of life-threatening conditions before definitive fracture fixation, showed a lower incidence of complications such as fat embolism and organ failure. ETC, used in stable patients with minimal concomitant injuries, led to shorter hospital stays and quicker rehabilitation. The timing of fracture fixation was critical in preventing secondary complications while balancing the need to stabilize concomitant injuries.

Conclusion: Early management of significant fractures in polytrauma requires a tailored approach that is based on the severity of concomitant injuries. This individualized care is crucial for optimizing patient outcomes. Damage Control Orthopedics is often necessary for patients with significant associated trauma, while Early Total Care is beneficial for hemodynamically stable patients. Optimal timing and strategy selection are key to improving survival and reducing complications.

Keywords: polytrauma; major fractures; concomitant injuries; Damage Control Orthopedics; Early Total Care, fracture management, trauma care.

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OP – 37***Case Presentation on Pelvic or Spine Trauma***

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Abstract:

Introduction: Pelvic and spinal traumas are significant contributors to morbidity and mortality, often resulting from high-energy incidents such as motor vehicle accidents or falls. These injuries can lead to complex clinical challenges, necessitating timely diagnosis and management to optimize patient outcomes.

Case Presentation: We present a case of a 32-year-old male involved in a motorcycle accident who sustained both pelvic and spinal injuries. Initial assessment revealed a high-impact trauma mechanism with complaints of severe lower back pain, inability to bear weight, and neurological deficits in the lower extremities. Imaging studies, including X-rays and CT scans, confirmed a type B pelvic ring injury and a T12-L1 spinal fracture with associated spinal canal compromise.

Management: The patient was stabilized and underwent an urgent surgical intervention involving posterior spinal fusion and pelvic fixation. Post-operatively, he was monitored in the intensive care unit and received multidisciplinary rehabilitation, including physiotherapy and occupational therapy, to enhance recovery.

Results: At six months post-injury, the patient exhibited significant improvement in mobility and strength, achieving ambulation with minimal assistance. Follow-up imaging showed satisfactory alignment and healing of both pelvic and spinal injuries.

Conclusions: This case highlights the importance of a systematic approach to managing pelvic and spinal traumas, emphasizing early intervention and multidisciplinary care. Timely surgical intervention and comprehensive rehabilitation are crucial for improving functional outcomes in patients with complex trauma. Further research is needed to develop standardized protocols for assessing and treating such injuries to enhance recovery and minimize complications.

Keywords: Pelvic trauma, spine trauma, case presentation, surgical management, rehabilitation.

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OP – 38

Emergency Thoracotomy Resuscitative. Experience in Public Hub Hospital in Rome

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Abstract:

Introduction: Emergency resuscitative thoracotomy (ERT) is a life-saving procedure performed in extreme trauma cases, particularly for patients experiencing cardiac arrest or severe thoracic injury. This abstract outlines the experience of performing ERT at a public hub hospital in Rome, focusing on indications, outcomes, and lessons learned from real-world cases. The majority of cases involved patients presenting with cardiac arrest upon arrival or rapidly deteriorating hemodynamic status. ERT was indicated primarily in cases of penetrating trauma (68%) and blunt trauma (32%), with the primary goal of relieving cardiac tamponade, controlling major bleeding, and providing direct cardiac massage.

Patients who underwent ERT were carefully selected based on the injury mechanism, signs of life upon arrival, and response to initial resuscitation efforts. Successful outcomes were largely dependent on the rapid execution of the procedure, with survival rates higher in penetrating trauma cases compared to blunt trauma. Overall, 15% of patients survived to discharge, with most survivors recovering with acceptable neurological function. Critical determinants of success included the timing of the procedure, the presence of experienced trauma teams, and the immediate availability of surgical resources.

The experience from this public hub hospital in Rome highlights the importance of early identification of

candidates for ERT, adherence to resuscitation protocols, and the need for ongoing training in trauma centers. Although the survival rates for ERT remain low, timely intervention can make a significant difference in otherwise fatal cases. This study reinforces the role of ERT as a critical component in the management of severe thoracic trauma, particularly in urban trauma centers.

Keywords: emergency thoracotomy; resuscitative thoracotomy; thoracic trauma; cardiac arrest; trauma surgery; public hospital, Rome; penetrating trauma, blunt trauma.

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OP – 39

Retained Broken Beer Bottle Following Penetrating Thoracic Trauma: Challenges in Diagnosis and Treatment Dilemma

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Abstract

Introduction: Retained foreign bodies within the thoracic cavity following penetrating trauma are rare but present significant diagnostic and treatment challenges. The clinical presentation can be ambiguous, delaying diagnosis, while management strategies must be debated. Video-assisted thoracic surgery (VATS) offers a minimally invasive approach for removing retained foreign bodies, allowing thorough inspection of the pleural cavity, repair of damaged tissues, and prevention of infectious complications.

Material and Methods: We present the case of a patient with a thoracic stab wound inflicted by a broken beer bottle, resulting in a retained glass fragment within the pleural space. The glass shard was successfully removed using VATS. The patient recovered well and was discharged on the third post-operative day.

Results: At a 2-week follow-up, the patient demonstrated complete wound healing with normal chest X-ray findings. This case highlights the efficacy of VATS in managing retained foreign bodies from penetrating thoracic trauma, with a swift recovery and minimal complications.

Conclusions: This case emphasizes the need for a comprehensive approach to managing thoracic trauma with retained foreign bodies. A thorough understanding of the mechanism of injury, coupled with timely surgical intervention using VATS, contributes to optimal outcomes. The lessons learned from this case provide critical insights for clinicians handling similar trauma cases, underscoring the importance of individualized and meticulous care.

Keywords: Penetrating thoracic trauma, retained foreign body, VATS, Glass fragment, Thoracoscopy

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OP – 40***Principles of Diagnosis and Management of Traumatic Pneumothorax***

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Abstract

Introduction: The presence of air and fluid within the chest, or pneumothorax, has been recognized for centuries, with documentation dating back to the Fifth Century B.C. in ancient Greece, where physicians practiced techniques like the Hippocratic succussion of the chest. Traumatic pneumothorax results from a breach in the communication between the intrapulmonary air space and the pleural space or through the chest wall between the atmosphere and the pleural cavity. Air enters the pleural space until the pressure gradient equalizes or the breach is sealed.

With the rising incidence of road traffic accidents and the increasing utilization of advanced diagnostic procedures, traumatic pneumothorax (both non-iatrogenic and iatrogenic) has become a more frequently encountered clinical condition. The clinical presentation of pneumothorax can range from asymptomatic to life-threatening situations. Although diagnosis can often be established through clinical examination, a simple erect chest radiograph is generally sufficient for confirmation. However, more complex investigations may guide future management.

In critical, life-threatening cases, delaying treatment for imaging studies can be hazardous. Immediate clinical assessment and prompt intervention are crucial in managing traumatic pneumothorax, especially in acute cases where time-sensitive action is required to prevent fatal outcomes.

Conclusion: Traumatic pneumothorax remains a significant clinical challenge, especially with the

increasing incidence of trauma cases from road accidents and advanced medical procedures. Early recognition and timely intervention are critical to prevent life-threatening complications. While clinical examination and simple radiography are often sufficient for diagnosis, treatment should never be delayed in emergencies where the patient's condition is rapidly deteriorating. The role of rapid imaging in non-critical cases should be emphasized, but health-care providers must remain vigilant to intervene immediately when needed. The evolution of trauma management, particularly in intensive care settings, calls for an integrated approach to improve patient outcomes, reduce morbidity, and prevent unnecessary delays in life-saving interventions.

Keywords; Traumatic pneumothorax; Pleural space; Chest trauma; Clinical diagnosis

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OP – 41***Management of Laryngotracheal Trauma.***

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Abstract

Introduction: Laryngotracheal trauma continues to be a rare entity and accounts for only 1 in every 30,000 emergency room visits in the United States. It is the second most common cause of death in patients with head and neck trauma after intracranial injury. Only 0.5% of multiple trauma patients were reported to have injuries to the airway at any level.

Laryngotracheal trauma is a rare but potentially life-threatening injury. It is usually seen in multiple-trauma patients and can go unrecognized and undertreated due to its scarcity. The presenting symptoms often do not correlate with the severity of the injury, and injuries may range from an endolaryngeal hematoma to a complete tracheal transection. Accurate diagnosis of the injury's extent can be achieved with a combination of high-resolution computed tomography, flexible fiber optic laryngoscopy, and flexible bronchoscopy. Treatment may include observation with symptomatic management, reduction, and repair of laryngeal skeletal fractures, or complete tracheal or laryngeal reconstruction. The most crucial goal in management is to secure and reconstruct the airways. Once this has been achieved, the long-term goal of treatment is to restore the voice and swallowing mechanism.

Keywords: Airway trauma, tracheostomy, airway treatment, subcutaneous emphysema,

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OP – 42

Imaging in Polytrauma - Current Standards for and Clinical Impact of Emergency Radiology in Major Trauma.

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Abstract

Introduction: Despite significant medical advancements, polytrauma remains associated with a high mortality rate, ranging from 10% to 20%. This rate increases dramatically to 63% when brain injuries are involved and up to 35% in cases of pelvic fractures. Early survival and functional recovery hinge on prompt recognition and management of anatomical and physiological alterations, where radiology plays a pivotal role.

Material and Methods: Accurate, time-sensitive imaging is essential to guide clinical decision-making and prioritize treatment for life-threatening injuries. Advances in radiological technology and protocols have greatly enhanced clinicians' ability to address polytrauma effectively. Trauma centers must establish locally tailored protocols for the optimal use of imaging modalities, ensuring consistent and accurate reporting practices.

Role of Interventional Radiology: Interventional radiologists (IR) are critical in managing polytrauma by rapidly identifying and treating life-threatening vascular and organ injuries. Key criteria for effective utilization of IR in trauma settings include:

1. The presence of skilled IR professionals available on short notice.
2. Access high-quality digital subtraction angiographic equipment with advanced capabilities such as digital road mapping and fluoroscopy.
3. Availability of specialized nursing staff and monitoring equipment for critically ill patients.
4. Rapid mobilization of these resources within 30–60 minutes.

Delays in IR, particularly in hemodynamically unstable patients, significantly increase mortality, with a 47% rise in risk for every hour of delay, especially in splenic and pelvic injuries.

Current Trends: Most traumatic injuries are now managed non-operatively, significantly reducing morbidity and mortality. Interventional radiology has revolutionized the treatment of vascular injuries from blunt trauma, offering effective non-operative solutions. Robust CT protocols and radiologists' expertise are essential for detecting vascular injuries and guiding IR interventions.

Conclusion: Emergency and interventional radiologists are indispensable members of the trauma team. Their expertise ensures a tailored, timely approach to managing traumatic injuries, improving patient outcomes, and reducing complications.

Keywords: Polytrauma, emergency radiology, interventional radiology, vascular injuries, trauma imaging, CT protocols, non-operative management.

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OP – 43

Duodeno-Pancreatic Injuries: Wait and See It Always Possible?

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Abstract

Introduction: Duodeno-pancreatic injuries are, by definition, transitional lesions that may involve one or more anatomical structures. Their management is multidisciplinary. Moreover, endoscopy, interventional radiology, and gastroenterology may improve non-operative management (NOM) success and manage early and late sequelae of injury and complications. Transition of treatment strategies should occur as quickly and seamlessly as possible as morbidity and mortality both increase with delays in treatment. Duodenal trauma has an incidence of 0.2-0.6% of all trauma patients and 1-4.7% of all cases of abdominal trauma. Associated injuries are present in 68-86.5% of patients, with significant vascular injury occurring in 23-40% of cases. The presence and type of associated injuries significantly impact the treatment of duodenal trauma. Penetrating trauma is the most common cause of duodenal injury, accounting for 53.6-90% of cases. Pancreatic injury is rare, occurring in less than 1% of all traumas and 3.7-11% of abdominal trauma. Blunt trauma is the most common cause, accounting for 61.1-89% of cases in most series. Associated injuries are frequent, occurring in 55-100% of cases, and are more common in patients requiring surgery and following penetrating mechanisms of injury.

Classification: The WSES classification divides duodenum and pancreas injuries into four classes considering the AAST-OIS classification and the hemodynamic status.

- Minor (WSES class I) includes AAST-OIS grade I duodenal lesions, AAST-OIS grade I-II pancreatic lesions;

- Moderate (WSES class II) includes AAST-OIS grade II duodenal lesions, AAST-OIS grade III pancreatic lesions;

- Severe includes AAST-OIS grade III-IV-V duodenal lesions, AAST-OIS grade IV-V pancreatic lesions (WSES class III), or hemodynamically unstable AAST-OIS grade I-V duodenal-pancreatic lesions (WSES class IV).

WSES and AAST suggest a diagnostic and management algorithm based on the present classification.

Conclusions: Optimal management of duodenal-pancreatic injuries is dictated primarily by hemodynamic stability, clinical presentation, and grade of injury.

NOM of duodenal-pancreatic injuries without ductal involvement with or without endoscopic adjuncts is recommended for hemodynamically stable patients.

For severe duodenal-pancreatic injuries, immediate operative intervention is preferred as associated injuries are frequent and commonly present with hemodynamic instability or peritonitis.

Despite advances in care, morbidity and mortality following severe duodenal-pancreatic trauma remain high. The management of duodenal and pancreatic must be multidisciplinary. The trauma or emergency surgeon best accomplishes the management in the initial phase, and in the reconstructive phase, hepatobiliary surgeons may be helpful and should be consulted.

Keywords: Duodeno-pancreatic injuries, Pancreatic trauma, Duodenal trauma, Penetrating trauma, NOM,

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OP – 44

The Role of Ultrasound in Trauma Management

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Abstract:

Introduction: Ultrasound (US) has emerged as a pivotal tool in managing trauma patients, providing rapid, non-invasive, and accurate diagnostic information at the point of care. Its utility spans the entire spectrum of trauma care, from initial assessment in the emergency department to guiding therapeutic interventions in the operating room. This abstract explores the expanding role of ultrasound in trauma, emphasizing its applications, advantages, and limitations.

The Focused Assessment with Sonography for Trauma (FAST) exam is one of the primary uses of ultrasound in trauma settings. The FAST exam enables clinicians to quickly assess for hemoperitoneum, hemopericardium, and hemothorax, aiding in the early identification of life-threatening conditions in patients with blunt and penetrating trauma. The Extended FAST (eFAST) further incorporates evaluation of the thoracic cavity to identify pneumothorax, expanding its diagnostic capacity.

Ultrasound's portability allows it to be used in various settings, including pre-hospital care, trauma bays, and rural or resource-limited environments. It can also guide procedures such as central venous catheterization, thoracentesis, and pericardiocentesis, improving safety and efficiency.

Despite its many advantages, ultrasound's role in trauma management is not without limitations. The accuracy of the FAST and eFAST exams can be operator-dependent, and ultrasound may be less effective in detecting retroperitoneal injuries or smaller amounts of free fluid. Additionally, ultrasound is not a replacement for more comprehensive imaging modalities, such as computed tomography (CT), but rather a complementary tool in the trauma surgeon's diagnostic arsenal.

In conclusion, ultrasound is critical in modern trauma management, offering real-time bedside evaluation that enhances decision-making and patient care. As the

technology continues to evolve, so will its applications in trauma, making it an indispensable component of trauma systems worldwide.

Keywords: ultrasound; trauma management; eFAST; point-of-care ultrasound; pneumothorax; FAST exam; trauma diagnosis; hemodynamic assessment.

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OP – 45

Nonoperative Management of Major Blunt Hepatic Trauma in a 3-Year-Old Child: A Case Report

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Abstract

Introduction: Nonoperative management is the preferred treatment for low- and high-grade liver injuries, particularly in hemodynamically stable patients. However, many smaller clinics still favor a primary operative approach over conservative management.

Case Presentation: We report the case of a 3-year-old male who sustained a grade IV blunt liver trauma (later contusive injury to segments V, VI, and VII) with a massive hemoperitoneum. The patient was managed conservatively with antibiotics, intravenous fluids, and ½ unit of blood. Computed tomography (CT) scans revealed significant perihepatic and periileal fluid collections, which persisted for five days. Laboratory values for Serum Glutamic Pyruvic

Transaminase, Serum Glutamic-Oxaloacetic Transaminase, and Total Bilirubin peaked on the third day and gradually declined, normalizing by the tenth day. The total hospital stay was 11 days, sufficient for the complete conservative treatment and recovery from trauma.

Discussion: Nonoperative intervention effectively manages over 80% to 90% of liver injuries. When necessary, interventional radiology techniques can often address both early and late complications. The success rate for conservative treatment approaches exceeds 80%.

Conclusion: In the absence of other abdominal injuries and with the patient in a hemodynamically stable condition, nonoperative management of major blunt hepatic trauma in children is the optimal treatment strategy.

Keywords: Nonoperative management, hepatic trauma, pediatric surgery, hospital stay.

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OP – 46

Management of a Traumatic Anorectal Laceration in the Context of Polytrauma: A Case Report

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Abstract

Introduction: Rectal injuries are relatively rare in trauma, with an incidence of approximately 1% to 3%. Gunshot wounds account for 85% to 90% of these

cases, while blunt trauma contributes 5% to 10%, and stab wounds make up around 5%. This case report discusses a 27-year-old male who sustained severe injuries in a workplace accident involving a tractor collision. The patient presented with blunt trauma, resulting in the amputation of the entire right lower extremity, including the right hemipelvis, right pubic ramus, and iliac crest extending to the sacrum. Upon arrival at the emergency room, the patient was in traumatic hemorrhagic shock. Ten days of intensive rehabilitation were required to stabilize him hemodynamically before proceeding with the reconstruction of the abdominal-lumbar wall.

Case Presentation: The rectal trauma involved a laceration of the inferior one-third of the rectum and the anal sphincter complex. Surgical management included primary suturing of the rectal laceration, sphincteroplasty, and the creation of a Hartmann's colostomy. On the 11th day post-trauma, the patient underwent surgical repair of the extensive abdominal and lumbar wall defect using a double layer of 30x30 cm Vicryl mesh. Despite the delayed surgical intervention, the hospital stay extended to 50 days, allowing for complete wound healing.

Discussion: Life-threatening injuries, such as those sustained by this patient, demand immediate exploratory surgery and a carefully coordinated, multi-disciplinary approach. In cases of severe polytrauma involving anorectal injuries, a Hartmann's procedure, combined with primary repair of rectal damage, remains a valid and life-saving option.

Keywords: emergency surgery, polytrauma, rectal trauma, amputation, case report

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OP – 47

Management of Trauma in Pregnant Patients: A Case Report

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Abstract

Introduction: Trauma remains a significant cause of maternal morbidity and mortality, accounting for approximately 8% of pregnancies. Motor vehicle accidents are the leading cause of trauma during pregnancy in developed countries, contributing to up to 80% of cases. Other common causes include falls, assaults, and domestic violence. Placental abruption is a severe complication of trauma, occurring in about 1% of pregnancies. When more than 50% of the placenta is involved, fetal demise is almost inevitable. Notably, placental abruption may not always manifest with typical symptoms such as bleeding or contractions, complicating timely diagnosis. Additionally, trauma can lead to coagulopathy and maternal hemorrhage, further elevating the risks.

Materials and Methods: Trauma management in pregnant patients requires a specialized approach due to the physiological and anatomical changes that occur during pregnancy. This case report focuses on the management of a 37-year-old pregnant patient (G2P1) at 36-37 weeks of gestation who presented after a fall. Initial symptoms were mild, including lower abdominal pain and minimal vaginal bleeding. A physical examination revealed mild abdominal tenderness but no significant distress or active bleeding. However, after three hours, the patient became semiconscious, experienced severe abdominal pain, and exhibited fetal bradycardia, indicating placental abruption. This case highlights the critical aspects of managing trauma in pregnant patients, including fetal and maternal monitoring.

Conclusion: The principle of trauma management in pregnancy is to prioritize the mother's survival, as maternal stability directly influences fetal outcomes. Focused Abdominal Sonography for Trauma (FAST) is the gold standard for initial assessment. While radiographic studies are generally delayed due to radiation concerns, maternal and fetal assessments, including electronic fetal monitoring, are essential. Pregnant trauma patients beyond 23 weeks of gestation with symptoms such as uterine tenderness, significant abdominal pain, vaginal bleeding, or abnormal fetal heart rate patterns should be admitted for at least 24 hours of observation. Early detection and intervention are critical for improving maternal and fetal outcomes in trauma cases.

Keywords: pregnancy, trauma, injury, placental abruption, fetal assessment, maternal hemorrhage, obstetric emergencies.

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OP – 48

Spontaneous Retroperitoneal Hemorrhage in a Patient with Tuberous Sclerosis: A Case of Wunderlich Syndrome Presenting with Hypovolemic Shock and Anemia, CT Findings.

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Abstract

Introduction: Wunderlich Syndrome refers to spontaneous retroperitoneal hemorrhage, often linked to renal pathologies, including angiomyo-lipomas (AML) in the context of tuberous sclerosis (TS). It is a rare, life-threatening condition that can present with acute hypovolemic shock.

Case Description: A 42-year-old female with a known history of TS presented to the Emergency Department with acute onset of left-sided flank pain, profound weakness, and hemodynamic instability. Clinical examination revealed hypotension and pallor suggestive of hypovolemic shock. Laboratory investigations confirmed severe anemia (Hb 6.5 g/dL). Emergent contrast-enhanced CT of the abdomen revealed a large retroperitoneal hematoma on the left side, with evidence of an actively bleeding renal angiomyolipoma.

The patient was stabilized with aggressive fluid resuscitation and transfusion of packed red blood cells. Following hemodynamic stabilization, she underwent angiographic embolization to control the bleeding. Post-procedure recovery was uneventful, and the patient was discharged with recommendations for ongoing management of her TS and renal angiomyolipomas.

Discussion: Spontaneous retroperitoneal hemorrhage is a critical complication of renal AML in TS. CT imaging is pivotal in rapid diagnosis, identifying the source of bleeding, and guiding intervention. Angiographic embolization is a practical, minimally invasive treatment for hemostasis and organ preservation.

Conclusion: This case highlights the importance of early recognition and prompt management of Wunderlich Syndrome to prevent morbidity and mortality. Comprehensive care for patients with TS requires multidisciplinary collaboration to monitor and manage associated renal and vascular complications.

Keywords: Wunderlich Syndrome, tuberous sclerosis, spontaneous retroperitoneal hemorrhage,

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OP – 49

Enhanced Predictive Value of Prognostic Models and Inflammatory Biomarkers for In-Hospital Mortality in Decompensated Cirrhosis: A Comprehensive Analysis

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Abstract

Introduction: Hepatic cirrhosis is a significant cause of in-hospital mortality, particularly in its decompensated form. Accurate prediction of mortality risk is essential for timely interventions. Traditional predictive models such as Child-Turcotte-Pugh (CTP) and the Model for End-Stage Liver Disease (MELD) have been widely used but may lack dynamic assessment capabilities. This study evaluates the predictive power of these models and inflammatory biomarkers such as the Neutrophil-to-Lymphocyte Ratio (NLR) and

Material and Methods: A retrospective analysis was conducted on 212 patients with decompensated cirrhosis admitted to UHC, Mother Teresa in Tirana, Albania, between January and December 2022.

Predictive models (CTP, MELD, MELD-Na, iMELD, and MELD 3.0) and inflammatory biomarkers (NLR, SIRI, and others) were assessed at two-time points: admission and 48-72 hours later. The predictive value was determined using multivariate logistic regression and Cox proportional hazards regression analyses.

Results: Significant predictors of in-hospital mortality included elevated total bilirubin (OR 1.35, $p < 0.01$), creatinine (OR 1.58, $p < 0.01$), hepatic encephalopathy (OR 2.45, $p < 0.01$), and the presence of ascites (OR 1.75, $p = 0.01$). AUROC values for predictive models and biomarkers significantly improved when reassessed after 48-72 hours (e.g., MELD AUROC from 0.809 at 24 hours to 0.877 at 48-72 hours).

Conclusions: Dynamic monitoring of predictive models and inflammatory biomarkers enhances the prediction of in-hospital mortality in patients with decompensated cirrhosis.

Keywords: Cirrhosis, predictive models, NLR, SIRI,

References

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OP – 50

Mammalian Derived non-meat Products Anaphylaxis in Alpha-Gal Syndrome (AGS), a non-classical Food Allergy Leading to Multiple Life-Threatening Anaphylaxis

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Abstract

Introduction: Food allergy can lead to life-threatening anaphylaxis. Sensitization to main allergens in food can produce type I IgE-mediated systemic reaction even in traces of food ingestion. AGS is a unique allergy to non-primate mammalian meat (and derived products) associated with tick bites and is due to a specific IgE antibody to the oligosaccharide galactose- α -1,3-galactose (alpha-gal). [1] AGS is known as a delayed reaction 2-8 h after exposure to red meat and other mammalian-derived products that have been previously tolerated.

Material and Methods: Literature review and case report

Results: We report the case of a male 63 years old, with 9 years of clinical history of AGS, with multiple generalized reactions, from mild urticaria and angioedema to three episodes of severe anaphylaxis, two leading to cardiocirculatory arrest. Before diagnosis, the patient had a related response to red meat consumption and avoided it for a few years; he tolerated dairy products well all the time and reintroduced red meat. After two years of a “normal diet,” several moderate reactions appeared after red meat consumption till sudden life-threatening anaphylaxis 3 years ago. The patient underwent a first-time allergology investigation and was diagnosed with red meat allergy (AGS, sIgE alfa-gal class 6). In extract-based sIgE resulted in multiple positivity to food allergens and high anti-CCD IgE, but in molecular-based sIgE, favorable only to (myt e, pen m2, equ c_meat, sol t), clinically urticaria from potato ingestion and never introduced to seafood. Total IgE >2500kU/L. Avoiding alfa-gal-containing products (food of mammalian origin and medications) was advised, and an adrenaline autoinjector was prescribed. A few months ago, the patient reported an anaphylaxis episode after cow

yogurt consumption, which he had continued to consume; adrenaline autoinjector was first time administered and then treated by emergency service. No new sensitization is present in molecular sIgE testing for cow milk.

Conclusions: ASG is challenging mainly adulthood food allergy with broad clinical presentation, many paradigm changes related to allergen tolerance and quantities inducing severe reactions, time of reaction start, factors and period of “disease remission” after tick bites, or increased severity of reaction in probable newly tick bites or other unknown reasons leading to tolerance loss to alfa-gal containing products, previously tolerated in IgE positive to alfa-gal subjects.

Keywords: alfa-gal syndrome, anaphylaxis, red meat allergy, life-threatening

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OP – 51

Contribution to the Recognition of Burn-Related Infections in Albania. Review of our Literature.

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Abstract

Introduction: Burns are damage to the skin caused by thermal, electric, and chemical forces. They are often complicated with infections and sepsis, which lead to higher morbidity and mortality. The burned wound is the starting point in the sepsis cascade. Patients suffering from burns are complicated with wound infections, pneumonia, UTI from the catheter, thrombophlebitis, necrotizing fasciitis, etc. Pathogenic microorganisms are bacteria, viruses, and fungi. Treatment of these complications starts with managing the wound, general body involvement, and altered life parameters and then moves up to the psychological rehabilitation of the patient.

Material and Methods: Our objective is to analyze the infections that develop as complications in major burn patients. To do this, we reviewed the literature and other studies conducted in our country.

Results: Our country has around 1600 – 1700 burn cases treated in facilities with surgical capabilities, counting for an incidence of 270 – 300 per million. The incidence of hospitalization in the Burning Unit was 5.2 patients/100000 people/year. The most common causes of burns were hot fluids 49.6%; fire 39.5%; electricity 5.1%; chemicals 5%; and unknown cause 0.7%. The prevalence of infection was 12 for every 100 patients, where the most common microorganisms were *Pseudomonas aeruginosa*, 67%, and *Staphylococcus aureus*, 24%. A significant factor in the etiology of the infection was the presence of a urinary catheter. Mortality from sepsis was calculated 42.8% in 1992 and 31.8% in 2015.

Conclusion: Burns is considered a major physical trauma with a high mental impact on the patient and high costs for society. The main challenge of the burn team is to avoid infection and, when not possible, adequately treat these patients, reducing morbidity and mortality. We must update the treatment and follow-up protocols to 'win' our fight against sepsis.

Keywords: burn, bacteremia, infection, sepsis, nosocomial infection, intensive care unit, invasive device-associated infection.

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OP – 52***Ascitic Glucose: A Simple Marker of the Viral Etiology of Hepatic Cirrhosis***

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Abstract

Introduction: Ascites is a common clinical manifestation of decompensated hepatic cirrhosis. Laboratory analysis of ascitic fluid provides essential diagnostic information, aiding not only in the differential diagnosis of ascites but also in identifying complications such as spontaneous bacterial peritonitis. Furthermore, it allows for rapid differentiation of underlying etiologies of liver cirrhosis.

Materials and Methods: This prospective study was conducted over four years at the "Mother Teresa" University Hospital Center (QSUT) in Tirana from 2017 to 2024. A total of 45 adult patients with liver cirrhosis were evaluated, focusing on critical

biochemical parameters of ascitic fluid, including Serum Albumin-Ascites Gradient (SAAG), albumin, total protein, cholesterol, triglycerides, LDH, amylase, and glucose. Patients were categorized into two groups based on the etiology of cirrhosis—viral (hepatitis B or C) and alcoholic.

Results: Statistical analysis revealed no significant differences between the two groups concerning SAAG, total protein, albumin, cholesterol, triglycerides, LDH, and amylase levels ($p > 0.05$). However, glucose levels showed a statistically significant difference; patients with ascitic fluid from viral cirrhosis had higher glucose levels (206.5 ± 11.7 mg/dL) compared to those with alcoholic cirrhosis (138.4 ± 40 mg/dL) ($p < 0.002$).

Conclusion: While no significant differences were observed in most biochemical parameters between patients with alcoholic and viral cirrhosis, glucose levels in ascitic fluid were significantly higher in those with viral etiology. This distinction may be attributed to the higher prevalence of diabetes mellitus among patients with alcoholic cirrhosis. Therefore, ascitic glucose levels could be a simple yet effective marker for distinguishing viral cirrhosis from alcoholic cirrhosis.

Keywords: ascites, cirrhosis, etiology, alcoholic, viral, glucose.

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OP – 53

Increasing Parents' Understanding about Antibiotic Use and Antibiotic Resistance

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Abstract

Introduction: Despite numerous antibiotic awareness campaigns, misconceptions about antibiotic use remain prevalent among the public, particularly in a top-down messaging approach that lacks direct public engagement. Effective campaigns must resonate with communities to promote better health-seeking behavior and responsible antibiotic use. This study aimed to create evidence-based infographics (EBIs) on antibiotic use for common pediatric infections and to assess their impact on parental understanding of antibiotic use and resistance.

Materials and Methods: This research was conducted in three phases. In Phase 1, we summarized scientific evidence on antibiotic use for children with sore throat, acute cough, and otitis media. Phase 2 involved co-designing EBIs through focus groups with parents and graphic designers to test validity. Phase 3 used an online survey to evaluate the EBIs' effectiveness in improving parents' understanding of antibiotic use and perceptions of antibiotic resistance.

Results: Parents found the EBIs informative, though some noted overly technical language or elements that were not immediately relevant. The presentation format influenced comprehension, with parents favoring single message visuals and consistent terminology for clarity.

Conclusions: Co-designed EBIs have the potential to be tools for enhancing parental understanding of antibiotic use and resistance. Phase 3 results will

determine if this approach could be scaled for community-wide antibiotic stewardship efforts.

Keywords: health communication, antibiotic use, evidence-based infographics, parental understanding,

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OP – 56

Acute Purulent Otitis due to Streptococcus Pneumonia in Children.

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Abstract

Introduction: Acute otitis media (AOM) is a common childhood disease, often developing as a complication of respiratory infections. It predominantly affects children aged 3 months to 3 years, with various pathogens causing middle ear inflammation. Antibiotic sensitivity of AOM pathogens, including *Streptococcus pneumoniae*, varies across regions, impacting treatment strategies.

Material and Methods: This study assessed the antimicrobial sensitivity of *S. pneumoniae* in 31 children aged 1 to 15 years with AOM who were hospitalized in the otorhinolaryngology department. Ear discharge samples were analyzed to determine pathogen prevalence and resistance profiles.

Results: *S. pneumoniae* was the leading pathogen in AOM, responsible for 45% of cases. Over 30% of *S.*

pneumoniae strains demonstrated resistance to macrolides, reducing the efficacy of these antibiotics for pneumococcal infections.

Conclusions: Findings indicate that amoxicillin remains an effective first-line treatment for pediatric AOM of pneumococcal origin, given its high sensitivity. However, the increased macrolide resistance discourages their routine use for confirmed pneumococcal infections. Continuous monitoring of *S. pneumoniae* resistance patterns is essential to guide appropriate antimicrobial therapy in pediatric AOM.

Keywords: acute otitis media, *Streptococcus pneumoniae*, antibiotic resistance, pediatric infections,

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OP – 57

Exploring the Occupational Factors That Contribute to Professional Burnout Among Tertiary Care Physicians and Identifying Resources to Mitigate Their Impact

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Abstract

Introduction: Professional burnout among healthcare providers is a pressing issue that affects the quality of care and the well-being of physicians. This study

investigates the occupational factors contributing to burnout among doctors in tertiary healthcare settings in Albania and identifies strategies to mitigate these factors.

This research aims to explore the specific occupational factors that lead to burnout in tertiary care physicians and to highlight effective protective measures.

Material and Methods: Utilizing qualitative research methods, semi-structured interviews were conducted with physicians at the Mother Teresa University Hospital Center in Tirana. The analysis focuses on identifying and understanding the occupational factors associated with burnout.

Results: The findings reveal that several profession-related factors significantly contribute to physician burnout. Key factors identified include work intensity (84%), emotional demands (82%), workplace relationships (69%), job safety (64%), and value conflicts (37%).

Conclusion: Occupational factors substantially influence professional burnout in doctors; however, the adverse effects can be alleviated by implementing comprehensive institutional policies to enhance the well-being of healthcare professionals. Essential resources to address burnout include psychosocial support, improved physical safety, involvement in decision-making processes, and increased access to technical resources—crucial elements in combating burnout among medical staff.

Keywords: professional burnout, clinical burnout, work stress, occupational factors, medical staff,

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OP – 58

Burnout Among Radiographers in Trauma Hospitals: Prevalence, Contributing Factors, and Coping Mechanisms

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Abstract:

Introduction: Burnout is critical among healthcare professionals, particularly those working in high-pressure environments such as trauma hospitals. Radiographers, who are essential in the diagnosis and management of trauma patients, face high levels of emotional and physical strain. This study aims to evaluate the prevalence of burnout among radiographers in trauma hospitals, identify contributing factors, and assess coping mechanisms that could mitigate burnout's impact.

Material and Methods: A cross-sectional study was conducted between January and June 2024, involving radiographers from five major hospitals in Albania and a Trauma center in Tirana. A total of 50 radiographers participated in the study. Data were collected through an online survey, incorporating the Maslach Burnout Inventory (MBI) to measure levels of emotional exhaustion, depersonalization, and personal accomplishment. The survey also gathered demographic information, workload data, and details about coping strategies. Statistical analysis was conducted to identify burnout-related factors, including chi-square tests and logistic regression.

Results: The study found that 68% of radiographers reported moderate to high levels of burnout, with 45% experiencing significant emotional exhaustion. Radiographers working in trauma hospitals with higher patient volumes (≥ 30 patients/day) were 1.7 times more likely to experience burnout compared to those with lower volumes ($p < 0.05$). Key contributing factors included excessive workload (62%), lack of institutional support (55%), and exposure to traumatic patient conditions (48%).

Conclusion: Burnout is prevalent among radiographers in trauma hospitals, with workload, insufficient support, and emotional stress being the primary drivers. Effective coping mechanisms, particularly peer support and access to professional mental health resources, can mitigate burnout. There is an urgent need for institutional interventions aimed at reducing workload pressures and promoting mental health support systems to enhance radiographers' well-being and ensure the delivery of quality patient care in trauma settings.

Keywords: Coping Mechanisms, Trauma Hospitals, Burnout, Radiographers, Emotional Exhaustion, Workload, Mental Health Support

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OP – 59

Psychological Aspects of Radiographers in the Management of Pediatric Trauma Patients

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Abstract:

Introduction: Managing pediatric trauma patients presents unique psychological challenges for radiographers, who must balance their technical responsibilities with the emotional needs of both the child and their caregivers. This study aims to explore the psychological aspects faced by radiographers in pediatric trauma settings, assess how these factors impact their work, and evaluate coping mechanisms that support their mental well-being.

Material and Methods: A cross-sectional study was conducted from January to July 2024, involving 70 radiographers working in pediatric trauma units across five significant hospitals in Albania and the Trauma Center in Tirana. Data were collected through a self-administered survey that included quantitative and qualitative components.

Results: The results indicated that 72% of radiographers experienced moderate to high levels of psychological stress in pediatric trauma cases. Emotional challenges were reported by 60% of respondents, with fear of causing pain or distress to the child being a key stressor. Anxiety levels were significantly higher in radiographers working with children under five years old ($p < 0.05$).

Conclusion: Psychological stress is a prevalent issue among radiographers working in pediatric trauma settings, driven by emotional strain and patient interactions.

Keywords: Pediatric Trauma, Radiographers, Emotional Strain, Coping Mechanisms, Communication, Mental Health Support

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OP – 60

How Can We Prevent Urinary Infections in Long-Term Hospitalized Patients

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Abstract:

Introduction: Urinary tract infections (UTIs) are among the most common healthcare-associated infections (HAIs), particularly in long-term hospitalized patients. Prolonged hospital stays, the use of indwelling urinary catheters, and patient comorbidities significantly increase the risk of developing UTIs, which can lead to complications, prolonged recovery, and increased healthcare costs. Preventing UTIs in long-term hospitalized patients is critical to improving patient outcomes and reducing hospital-associated complications.

This study aims to identify the most effective strategies for preventing urinary infections in patients with extended hospital stays, focusing on catheter-associated urinary tract infections (CAUTIs) and non-catheter-associated UTIs.

Material and Methods: A systematic review of literature and clinical guidelines was conducted, focusing on studies published between 2010 and 2023. Evidence-based practices for preventing urinary infections were analyzed, particularly in long-term hospitalized patients. The critical areas of prevention evaluated included catheter management, aseptic techniques, antibiotic stewardship, patient hydration, and routine monitoring protocols.

Results: The primary risk factor for UTIs in long-term hospitalized patients was the prolonged use of urinary

catheters. Catheter-associated UTIs (CAUTIs) accounted for over 70% of hospital-acquired infections. Effective prevention strategies included minimizing catheter use, utilizing alternatives such as intermittent catheterization, ensuring strict adherence to aseptic insertion and maintenance protocols, and implementing early catheter removal protocols. Hydration and regular monitoring of urine output and symptoms were also critical in preventing non-catheter-associated UTIs. Additionally, antibiotic stewardship programs aimed at preventing *the overuse of antibiotics helped mitigate the risk of resistant infections.*

Conclusion: Preventing urinary infections in long-term hospitalized patients requires a multifaceted approach, mainly focusing on reducing catheter use and maintaining proper catheter care. Strict adherence to aseptic techniques, early catheter removal, proper patient hydration, and antibiotic stewardship are essential strategies in minimizing the incidence of UTIs in this vulnerable population. Continuous education for healthcare staff and implementing hospital-wide protocols are crucial to sustaining these preventive measures and improving patient outcomes. This abstract outline critical strategies for preventing urinary infections in long-term hospitalized patients, focusing on avoiding catheter-associated UTIs.

Keywords: Urinary tract infections (UTIs), Catheter-associated urinary tract infections (CAUTIs), Long-term hospitalization, Indwelling catheter

References:

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OP – 61

Assessing the Impact of the PSSE-Schroth Method versus General Exercises on Trunk Rotation in Adolescent Idiopathic Scoliosis

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Abstract

Introduction: Adolescent idiopathic scoliosis (AIS) is a prevalent spinal deformity that often necessitates intervention to prevent further curvature progression. The PSSE-Schroth method has emerged as a promising conservative treatment, yet its efficacy compared to general exercise regimens requires further exploration.

This study aims to evaluate the effectiveness of the PSSE-Schroth method in reducing trunk rotation compared to general exercises in adolescents with idiopathic scoliosis.

Study Design: Randomized Controlled Trial

Material and Methods: A total of 30 participants with adolescent idiopathic scoliosis were randomly assigned to two groups: 15 in the PSSE-Schroth group (13 females, 2 males; mean age 12.1 years) and 15 in the control group (12 females, three males; mean age 11.9 years). No statistically significant difference was found between groups regarding age (p-value = 0.609). Participants in the PSSE-Schroth group underwent treatment five times a week, both at home and at the Trauma University Hospital, while

the control group engaged in general exercises. Inclusion criteria included a Cobb angle of 10-25 degrees, a Risser sign of 0-3, and an angle of trunk rotation (ATR) greater than 5 degrees. ATR was assessed using a scoliometer before and after the intervention, with changes of more or less than 4 degrees indicating progression or improvement. The follow-up period lasted 6 months.

Results: In this randomized clinical trial, the PSSE-Schroth group showed that 60% of patients remained stable, 26.67% improved, and 13.33% worsened. In contrast, the control group had 26.67% stable, 6.67% improved, and 73.3% worsened. A chi-squared test indicated a statistically significant difference between the two groups (P = 0.024), demonstrating that the PSSE-Schroth method is more effective than general exercises in reducing trunk rotation in adolescents with AIS.

Conclusion: This study suggests that the PSSE-Schroth method effectively reduces trunk rotation in adolescents with idiopathic scoliosis. These findings align with existing literature, highlighting the superior efficacy of the PSSE-Schroth method compared to general exercise interventions.

Keywords: Adolescent idiopathic scoliosis, PSSE-Schroth method, general exercises, physiotherapeutic interventions, scoliosis-specific exercises.

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OP – 62

Incidental Diagnosis and Treatment of DDH as a Result of Femur Fracture. Case Report

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Abstract

Introduction: DDH is known as congenital dislocation of the femoral head, including acetabular dysplasia, subluxation, and cox-femoral location. However, the femur fracture, one of the fractures most frequently treated with casts at cast service, can occur at different levels due to accidents, falls, etc.

Case Report: A 5-month-old child brought by her parents to the SUT- Tirana emergency service in September 2023 was incidentally diagnosed with bilateral congenital coxa-femoral luxation during an X-ray as a result of a femur fracture. This child was transferred to the cast service to be immobilized for both diagnoses simultaneously.

The patient was immobilized with a functional cast in abduction, effectively centering the femoral heads in the acetabulum and treating the femur fractures. After immobilization, an X-ray was taken to confirm the correct positioning of the femoral heads. The physician recommended periodic follow-ups every two months with X-rays and follow-ups by a cast technician. The child's treatment lasted nine months, and the success rate was a reassuring 100%.

Conclusions: The medical community plays a vital role in screening children at a young age through the Ortolan test and cox-femoral ultrasound to diagnose

and treat DDH at an early age. This proactive approach significantly contributes to positive results and prognosis for the child and his family, making the medical community an integral part of the child's health journey. Health education of family should be seen as a solid point to make them aware of diagnosis at the right time. **Correctly** implementing health protocols improves the child's and his family's quality of life.

Keywords: DDH, femur fracture, cast immobilization, health education.

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OP – 63

The Most Frequent Causes of Operative Wound Infection after Elective Surgeries

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Abstract:

Introduction: Operative wound infections, or surgical site infections (SSIs), are a significant cause of morbidity following elective surgeries, often leading to prolonged hospital stays, increased healthcare costs, and delayed recovery. Identifying the most common causes of SSIs can aid in improving prevention strategies and postoperative outcomes.

This study aims to analyze the most frequent causes of operative wound infections after elective surgeries, identifying key risk factors and common pathogens involved.

Material and Methods: A retrospective cohort study was conducted on patients who underwent elective surgeries at a clinical hospital between 2018 and 2023. The incidence of SSIs was recorded, and clinical data, including patient demographics, type of surgery, comorbidities, and perioperative factors, were analyzed. Microbiological cultures from infected wounds were examined to identify the most prevalent pathogens.

Results: Of the 1,500 elective surgeries reviewed, 125 patients (8.3%) developed SSIs. The most frequent causes were poor perioperative infection control, contamination during surgery, and patient-related factors such as obesity, diabetes, and smoking. *Staphylococcus aureus* (including methicillin-resistant *S. aureus* (MRSA)) was the most common pathogen isolated, followed by *Escherichia coli* and *Pseudomonas aeruginosa*. Inadequate sterilization of surgical instruments and improper antibiotic prophylaxis also contributed to the incidence of infections. Certain types of surgery, including colorectal and vascular procedures, were more prone to SSIs due to higher exposure to bacterial flora.

Conclusion: SSIs following elective surgeries are commonly caused by inadequate infection control measures, patient comorbidities, and contamination during surgery.

Keywords: Surgical site infection (SSI), Elective surgeries, Operative wound infection

References:

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OP – 64

The Importance of Early Initiation of Locomotor Rehabilitation After Femoral Diaphyseal Fractures

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Abstract:

Introduction: Femoral diaphyseal fractures present significant challenges in terms of both surgical intervention and post-operative recovery. Beyond the complexity of the surgical technique, effective rehabilitation is crucial for ensuring functional recovery. Early initiation of locomotor rehabilitation plays a pivotal role in improving patient outcomes. This study aims to highlight the benefits of early physical rehabilitation in patients with femoral diaphyseal fractures and emphasize its critical impact on recovery.

Material and Methods: Between February 2020 and February 2024, 24 patients with femoral diaphyseal fractures were treated at Elbasan Hospital. Fractures were categorized by location: lower 1/3 (11 patients), middle 1/3 (9 patients), and upper 1/3 (4 patients). The surgical intervention included osteosynthesis with plates, screws, and retrograde pins, followed by a structured physiotherapy regimen. Three patients are still undergoing treatment.

Results: Early rehabilitation significantly improved patient outcomes, with faster recovery and better functional results. Intramedullary nailing demons-

trated advantages over plate and screw fixation, reducing surgical trauma and facilitating quicker rehabilitation. Early physiotherapeutic intervention and proper nursing care were essential in addressing post-surgical complications.

Conclusions: Rapid initiation of rehabilitation following femoral diaphyseal fractures is crucial, particularly in cases of trauma from road accidents or gunshot wounds. Early physiotherapy and a multi-disciplinary approach involving nurses and physiotherapists are vital to optimizing recovery.

Keywords: fracture, femoral diaphysis, physiotherapeutic rehabilitation, surgical pin

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OP – 65

The Role of S100B in Brain Trauma and Patient Recovery

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Abstract

Introduction: Central nervous system (CNS) disorders can be assessed with the help of biochemical markers. Especially in recent years, there has been a growing interest in the clinical use of brain markers such as S100 proteins. S100B is a calcium-binding peptide produced primarily by astrocytes that exerts

paracrine and autocrine effects on neurons and glia. An increased level of S100B is associated with pathological damage or clinical severity in various disorders affecting the CNS. This protein can be a great helper in recovering patients who have suffered cerebral damage due to accidents and other physical causes.

This review's objective is to better understand the importance of S100 proteins and their role in the recovery of patients with cerebral damage caused by various traumas.

The study is a review. Studies from recent years have been used as a basis for it.

Results: Current data suggest that S100B is a strong candidate for becoming a diagnostic and prognostic parameter for various neurological disorders. Furthermore, the potential therapeutic role of S100B in CNS disorders needs to be elucidated. Further research should focus on obtaining evidence for using S100B in known clinical problems and as-yet-unknown neuroscience areas.

Keywords: Neurological disorders, Trauma, S100B protein, cerebral markers.

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OP – 66

Mode of Management of Primary Bacterial Infections of the Skin and Soft Tissues

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Abstract

Introduction: Primary bacterial infections of the skin and soft tissues (SSTIs) are standard and range from mild superficial infections to severe, life-threatening conditions. These infections, caused by pathogens such as *Staphylococcus aureus* and *Streptococcus pyogenes*, often present as cellulitis, abscesses, or impetigo. The management of SSTIs is crucial for preventing complications like sepsis, necrotizing fasciitis, and long-term morbidity.

Objectives: To evaluate the most effective methods for managing primary bacterial SSTIs, including pharmacological and surgical approaches, while highlighting the importance of early diagnosis and the role of microbial resistance.

Materials and Methods: This comprehensive review of clinical guidelines and recent studies on the management of SSTIs focused on antibiotic therapy, surgical interventions, and supportive care. Factors such as patient comorbidities, pathogen resistance, and infection severity were considered when reviewing treatment options.

Results: Mild to moderate infections are typically managed with empirical antibiotic therapy, with beta-lactam antibiotics or clindamycin as first-line options, adjusted based on local antibiotic resistance patterns. Severe cases, particularly those with abscess formation, often require incision and drainage alongside antibiotic therapy. Early aggressive surgical debridement combined with broad-spectrum antibiotics is essential for complicated infections like necrotizing fasciitis. The increasing prevalence of methicillin-resistant *Staphylococcus aureus* (MRSA) necessitates careful antibiotic selection, with vancomycin and linezolid being preferred agents for MRSA infections.

Conclusion: Effective management of primary bacterial infections of the skin and soft tissues relies on promptly initiating appropriate antibiotics and

surgical intervention when indicated. The growing threat of antibiotic resistance underscores the need for accurate microbial identification and tailored therapy. Early diagnosis, appropriate antibiotic selection, and, when necessary, surgical management are critical to reducing the morbidity and mortality associated with SSTIs.

Keywords: Skin and soft tissue infections (SSTIs), antibiotics, MRSA, incision and drainage, necrotizing fasciitis, bacterial resistance.

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OP – 67

The Nurse's Role in One-Day Surgery

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Abstract:

Introduction: One-day surgery, also known as ambulatory or outpatient surgery, has gained widespread popularity due to its cost-effectiveness, reduced hospital stays, and enhanced patient satisfaction. Nurses' roles in this setting are critical, as they are responsible for preoperative, intraoperative, and postoperative care. This study aims to highlight the multifaceted role of nurses in one-day surgery and the importance of their involvement in ensuring positive patient outcomes.

Purpose: To examine the essential responsibilities of nurses in one-day surgery, focusing on patient safety, care coordination, and postoperative recovery.

Material and Methods: To evaluate the role of nurses in one-day surgical settings, a qualitative review of existing literature and case studies was conducted. Data was gathered from peer-reviewed journals, hospital reports, and healthcare guidelines concerning nursing interventions and patient management in outpatient surgical units.

Results: The findings indicate that nurses play a pivotal role in preoperatively patient preparation, education, and emotional support. Intraoperatively, they assist surgeons, monitor patient vitals, and ensure sterility and safety. Postoperatively, nurses manage pain, monitor for complications, provide discharge instructions, and coordinate follow-up care. Effective communication, patient education, and pain management are crucial components of nursing care that directly impact patient satisfaction and recovery.

Conclusion: Nurses in one-day surgery settings are integral to successful surgical outcomes. Their role in patient preparation, intraoperative assistance, and postoperative care ensures patients experience safe, efficient, and high-quality care. Continuous training and adaptation to new surgical techniques and technologies are essential for nurses to maintain their effectiveness in this fast-paced environment.

Keywords: One-day surgery, outpatient surgery, nursing care, patient safety, postoperative recovery,

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OP – 68

Managing and Treating Trauma After a Car Accident

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Abstract

Introduction: A Car accident is an unexpected event, typically sudden and associated with injury, loss, or harm. Accidents are a common feature of the human experience and result in injury or permanent disability to large numbers of people worldwide every year. Many accidents also involve damage to or loss of property. Every year, the lives of approximately 1.19 million people are cut short due to road traffic crashes. Between 20 and 50 million more people suffer non-fatal injuries, with many incurring a disability. Road traffic injuries can be prevented. Governments must take action to address road safety holistically. This requires involvement from multiple sectors such as transport, police, health, and education, as well as the private sector and civil society organizations. It requires actions that address the safety of roads, vehicles, and all road users. Socioeconomic status. More than 90% of road traffic deaths occur in low- and middle-income countries. The first thing you must do after any accident is to see an auto accident doctor as soon as possible. Immediate DRSABCDE treatment

Conclusion. Treatments immediate BLS, PHTLA, BTLS, and ATLS, such as psychotherapy, medication,

and peer support, are crucial in the recovery process. Understanding and addressing PTSD can help people reclaim their lives and regain a sense of normalcy after a car accident.

Keywords: Road traffic, polytrauma, multiple injured, severely injured, EMS, treatment.

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OP – 69

The Impact of the Pandemic on the Profile of Frequent Emergency Attendees

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Abstract

Introduction: The COVID-19 pandemic significantly altered healthcare utilization patterns worldwide, including emergency services. Frequent emergency department (ED) attendees represent a distinct subgroup of patients who often have complex medical and social needs. This study examines how the pandemic influenced frequent ED attendees' demographic, clinical, and behavioral profiles.

Objective: To analyze changes in the characteristics and care-seeking patterns of frequent ED attendees during the COVID-19 pandemic compared to pre-pandemic periods.

Material and Methods: This retrospective observational study reviewed medical records of patients who visited the ED more than four times annually between January 2019 and December 2021. Data on demographics, presenting complaints, comorbidities, and outcomes were collected. Pre-pandemic (2019) and pandemic periods (2020-2021) were compared to identify shifts in attendance rates, diagnoses, and hospital admission rates.

Results: During the pandemic, a significant increase in attendance was noted among older adults (62% vs. 48%; $p < 0.05$) and patients with chronic conditions, particularly respiratory (23% vs. 15%) and mental health disorders (19% vs. 9%). Non-urgent visits decreased by 25%, while presentations for severe conditions, such as chest pain (27% vs. 18%), increased. Admission rates were higher during the pandemic (45% vs. 32%), indicating a rise in the severity of presentations. Behavioral patterns also shifted, with more attendees citing fear of delayed outpatient care as a reason for their visits.

Conclusion: The pandemic reshaped the profile of frequent ED attendees, with an increased burden of chronic and severe illnesses. These findings underscore the need for tailored strategies to manage this vulnerable patient population, emphasizing preventive care and improved access to outpatient services during healthcare crises.

Keywords: Emergency department, COVID-19 pandemic, frequent attendees

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OP – 70***The role of ED in dealing with Disaster Situations: how Prepared are we?***

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Abstract

Introduction: Emergency Departments (EDs) are at the forefront of managing disaster situations, ranging from natural calamities to mass casualty incidents. Their preparedness is vital to ensure rapid and effective responses, mitigate loss of life, and maintain community resilience. This study examines the current state of disaster preparedness in EDs, focusing on training, resources, and systems readiness, using the Emergency Service of the University Hospital Center "Mother Teresa" as a case study.

Objective: To evaluate the preparedness level of EDs for handling disaster scenarios and identify gaps in protocols, resource availability, and personnel training.

Material and Methods A mixed-method approach was employed, combining a retrospective review of disaster response records with surveys and structured interviews of ED staff. Key performance indicators included disaster simulation frequency, availability of critical resources, communication protocols, and alignment with national and international disaster response standards.

Results: The findings reveal a moderate level of preparedness. While the ED possesses established disaster response protocols and a dedicated response team, limitations exist in resource availability, particularly in critical care equipment and surge capacity. Staff surveys highlighted a lack of regular simulation exercises, with only 45% of respondents having participated in disaster drills in the past two years.

Conclusion: This study underscores the need for enhanced disaster preparedness in EDs. Priority areas include increased frequency of simulation exercises, investment in resource augmentation, and improved inter-agency coordination.

Keywords: Disaster preparedness, Emergency Department, disaster response, hospital readiness,

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OP – 71***Factors Affecting Resuscitation of Patients with Cardiac Arrest in Pre-Hospital Conditions***

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Abstract

Introduction: Cardiac arrest is the abrupt loss of heart function, often occurring without prior diagnosis of heart disease, either suddenly or following warning symptoms. Immediate medical intervention is critical as cardiac arrest is usually fatal without prompt action. Modern Emergency Medical Services (EMS), with their advanced technology and therapeutic options, have significantly improved the chances of survival following out-of-hospital cardiopulmonary resuscitation (CPR). This study explores key factors

that influence the survival of patients experiencing cardiac arrest in pre-hospital settings. The objective is to investigate and identify the most critical factors influencing the survival of cardiac arrest patients through a review of global and local research data.

Material and Methods: An extensive review of global and local literature focused on studies involving patients of various age groups who underwent pre-hospital resuscitation. Key factors affecting survival outcomes in pre-hospital cardiac arrest were tracked and analyzed.

Results: Data from 37 EMS across Europe indicate a one-year survival rate following CPR of approximately 20.7%, according to large meta-analyses. In the Emergency Medicine Center (EMC) in Pristina, from 2016 to 2023, resuscitation efforts were carried out for 576 patients, with an average one-year survival rate of 8.8%. Timely defibrillation of ventricular fibrillation increases survival rates up to 90%; however, for every minute defibrillation is delayed, survival rates decrease by roughly 10%. Optimal defibrillation occurs 3-5 minutes post-cardiac arrest. Healthcare professionals must be equipped to perform both basic and advanced CPR techniques to improve outcomes.

Conclusion: The success of resuscitation depends on the time elapsed between cardiac arrest and the initiation of resuscitation measures. Early intervention with basic life support techniques significantly increases the chances of survival. Automated External Defibrillators (AEDs) is a safe and effective method, mainly when applied promptly in cases of cardiac arrest.

Keywords: Resuscitation, cardiac arrest, pre-hospital, defibrillation, AED, survival rate, CPR

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OP – 72

Transportation of Patients in the Emergency Department of United Hospital: Case Presentations.

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Abstract

Introduction: Critically ill and seriously injured patients require immediate treatment and prompt diagnosis, often coupled with optimal transport to specialized centers. In emergency medicine, time is of the essence, and effective interventions can only be carried out by ambulance teams equipped with the necessary knowledge, skills, and equipment. Rapid and comprehensive action is vital to prevent further deterioration of patients, as medical emergencies can arise anytime, anywhere.

Purpose: This study presents the methods and strategies used to treat patients on-site, during transport, and upon transfer to emergency centers for advanced treatment or hospitalization. The study highlights the coordination between emergency services and specialized clinics (e.g., Coronary Unit, Surgery, Neurology, Gynecology, Infectious Diseases, Ophthalmology, ENT) to stabilize and treat critical cases. Furthermore, it emphasizes the importance of preventive measures under the "*Primum nonnocere, secundum nonplus nocere*" (first, not harm; second, cause no more damage). This study also analyzes the best practices for preventing adverse outcomes during patient transport.

Material and Methods: This retrospective study utilizes data from United Hospital Emergency Department records. The analysis includes monitoring data, laboratory results, imaging studies, and video and photographic documentation of the transport

process. Over several years, professional teams treated and transported patients, and the outcomes were carefully analyzed and documented through medical reports.

Results: From June 2022 to May 2024, 3,262 patients were treated in the United Hospital Emergency Department. Out of these, 160 patients (4.9%) required transport for further treatment. The patient population included 84 males and 76 females, with the majority presenting with cardiovascular conditions such as cardiac arrest, ischemic heart disease, aortic aneurysms, acute abdomen, pneumonia, pulmonary edema, and cerebrovascular events, along with extremity fractures. The number of patients transferred to other facilities was lower than those received. This analysis underscores the importance of timely and efficient patient transport to improve clinical outcomes in critical situations.

Conclusion: Effective transport of critically ill patients is pivotal in emergency care. The study highlights the essential role of well-equipped and skilled ambulance teams inpatient stabilization and treatment during transport. Continued improvements in transport protocols and interdisciplinary coordination are necessary to ensure the best possible patient outcomes.

Keywords: Patient transport, emergency care, critical illness, serious injury, cardiovascular emergencies, interdisciplinary care

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OP – 73

The Usefulness of Point-of-care (POC) Cardiac Troponin in Diagnosing Acute Coronary Syndrome

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Abstract

Introduction: Rapid and accurate acute coronary syndrome (ACS) diagnosis is critical for optimizing patient outcomes. Cardiac troponin (cTn) is a well-established biomarker for myocardial injury. Point-of-care (POC) testing for cardiac troponin can streamline the diagnostic process by delivering rapid results at the bedside, particularly in emergency and resource-limited settings.

This study evaluates the diagnostic accuracy, clinical utility, and impact of POC cardiac troponin testing on decision-making in patients with suspected ACS.

Material and Methods: A prospective analysis involved 200 patients presenting with chest pain or symptoms suggestive of ACS. Patients underwent POC cardiac troponin testing at admission, with results compared to laboratory-based high-sensitivity cardiac troponin assays. Sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) of POC testing were calculated. The study also assessed the time to diagnosis, initiation of treatment, and discharge decisions.

Results: POC cardiac troponin testing demonstrated a sensitivity of 94% and a specificity of 90% in identifying ACS, with a PPV of 88% and an NPV of 95%. POC testing significantly reduced the time to diagnosis and treatment initiation by 45 minutes compared to standard laboratory testing ($p < 0.01$). Clinical decisions, such as initiating anticoagulation therapy or ruling out ACS for discharge, were expedited in 80% of cases. No significant adverse

outcomes were observed in patients discharged based on negative POC troponin results.

Conclusion: POC cardiac troponin testing is a reliable and effective tool for diagnosing ACS. It offers rapid results that can improve clinical decision-making and patient outcomes. Its utility is precious in emergency settings and facilities with limited access to centralized laboratory testing. Further research is warranted to assess its long-term impact on healthcare systems and patient care.

Keywords: Point-of-care testing, cardiac troponin, acute coronary syndrome, emergency medicine.

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OP – 74

Hyper and Hypopigmentation. As a Stressful Burden, Skin Disease

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Abstract

Introduction: Vitiligo is an acquired dermatological pigmentation disorder that leads to the loss of pigment in affected areas of the skin or mucosa, characterized by distinct, milk-white, non-scaly lesions. Though non-life-threatening, vitiligo can significantly impact a patient's psychological and social well-being. This research aims to assess the impact of vitiligo on the quality of life in patients and explore the psychosocial burden associated with this skin disorder.

Material and Methods: 1,758 individuals visiting the Dermatology Service from October 2014 to March 2015 were screened for vitiligo. Of these, 39 cases were diagnosed through standard physical examination. These 39 patients (22 females, 17 males) were administered the Dermatology Life Quality Index (DLQI) questionnaire to evaluate the psychosocial effects of the disease.

Results: Analysis revealed that gender significantly influenced the degree of concern caused by vitiligo ($p=0.01$), with females reporting more significant anxiety and embarrassment due to the skin condition. Age also played a role in how vitiligo affected social activities ($p=0.007$), clothing choices ($p=0.007$), and relationships with relatives ($p=0.007$). Younger age groups, specifically those aged 15-24 and 25-34, were the most affected. Additionally, living in urban or rural areas influenced the level of concern ($p=0.01$), social activity limitations ($p=0.026$), and sexual difficulties ($p=0.0047$).

Conclusion: Though primarily a dermatological condition, Vitiligo imposes a significant psychosocial burden on patients. Women and younger individuals are particularly vulnerable to the emotional and social impacts of the disease. Despite ongoing research, the etiology and pathogenesis of vitiligo remain unclear, as does its natural course.

Keywords: Vitiligo, pigmentation disorders, quality of life, DLQI, psychosocial burden, dermatology, psychological impact

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OP – 75

Trauma Epidemiology and Etiology at the University Hospital of Trauma and Military Medical Unit, Tirana, Albania

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Abstract

Introduction: Despite advancements in technology, hospital infrastructure, and healthcare personnel, trauma remains a significant public health challenge globally. The University Hospital of Trauma (UHT) is Albania's only tertiary trauma facility, receiving approximately 4,150 polytrauma cases monthly in its emergency department.

Material and Methods: This retrospective epidemiological study analyzed data from 2022 to 2023. Descriptive statistics were employed to characterize trauma cases presented to the UHT based on age, sex, etiology, type of injury, and mortality rates.

Results: Annually, about 0.3% of the Albanian population seeks specialized trauma care at the tertiary level. The majority of injuries were observed in individuals aged 15 to 65. Notably, car accidents saw an 83% increase from February to August, while incidents involving blunt trauma from heavy objects rose by 75% during the same period. Falls were identified as a leading cause of trauma, with the highest incidence recorded in October (2,437 cases). The average length of hospital stay was 7.23 ± 0.55 days, and the overall hospital mortality rate stood at 2.3%.

Conclusions: The UHT in Tirana is pivotal in providing trauma care in Albania. These findings highlight the need for a deeper understanding of

trauma patterns and etiologies to inform effective preventive strategies and public health initiatives aimed at reducing trauma incidence and improving patient outcomes.

Keywords: Trauma, Epidemiology, Albania, Poly-trauma, Public Health

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OP – 76

Hairy Cell Leukemia After Splenectomy with Ascites at the University Hospital of Trauma

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Abstract

This case report highlights the diagnostic challenges and management of Hairy Cell Leukemia (HCL), a rare B-cell malignancy constituting approximately 2% of all leukemias.

Case Report: A 45-year-old male presented with a three-month history of abdominal swelling, dyspnea, weakness, and anorexia. Physical examination revealed cutaneous and conjunctival pallor, ecchymosis in the right hypochondrium, and hepatomegaly, with no collateral circulation noted. The patient had undergone splenectomy in 2011 and had been treated with prednisone due to pancytopenia and massive splenomegaly at that time.

Laboratory investigations showed bi-cytopenia (anemia and thrombocytopenia) with serum parameters including total bilirubin at 0.7 mg/dl, normal AST and ALT levels, total proteins at 4.5 g/dl, and an INR of 1.32. Additional tests (serum B12, folate, A.D.A, γ -interferon, ceruloplasmin, serum copper, ASMA, ANA, AMA, CEA, AFP, CA 19-9, LDH) returned within normal ranges.

A bone marrow biopsy revealed hypercellularity with reduced myeloid and megakaryocytic series. Immunohistochemistry (IHC) findings showed: CD20+++, CD3---, CD5+--, CD8+--, CD15+--, CD38+--, CD138+--, Bcl-2+++, CD34---, CD117---, MPO---. Peripheral blood leukocyte immune-phenotyping showed CD19+ (83%), CD20+ (90%), CD11c+ (90%), CD25+ (90%), FMC7+ (60%); the patient was treated with Cladribine at a dosage of 0.14 mg/kg/day intravenously for five days. One-year post-admission, the patient remains in remission.

Conclusion: The diagnosis of Hairy Cell Leukemia was confirmed, and the patient achieved remission following treatment.

Keywords: Hairy Cell Leukemia, splenectomy, diagnosis, Cladribine, remission.

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OP – 77

Arteriovenous Fistulas are the Smart Choice for Hemodialysis

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Abstract

Introduction: Vascular access is crucial for effectively managing patients undergoing hemodialysis, serving as the lifeline for renal replacement therapy. This abstract examines the critical challenges associated with vascular access, focusing on arteriovenous fistulas (AVFs), arteriovenous grafts (AVGs), and central venous catheters (CVCs). While AVFs are preferred due to their lower complication rates, they are prone to stenosis and thrombosis due to neointimal hyperplasia. AVGs offer quicker access but are similarly affected, with an increased risk of infection. Often utilized in acute settings, CVCs pose significant risks of thrombosis and infection, rendering them less suitable for long-term use. The primary causes of vascular access failure, including altered blood flow dynamics and endothelial injury, highlight the need for vigilant monitoring and timely intervention. Surveillance techniques, such as physical examinations and duplex ultrasound, are essential for the early detection of access dysfunction. Interventional strategies—including angioplasty, thrombectomy, and surgical revision—are critical for restoring patency.

A multidisciplinary approach involving regular monitoring, early intervention, and patient education is imperative for optimizing vascular access management. By addressing these vascular challenges, healthcare providers can improve patient outcomes, reduce hospitalization rates, and enhance the overall effectiveness of hemodialysis treatment, ultimately ensuring patients maintain access to life-sustaining therapy.

Conclusion: Effective vascular access management is fundamental to hemodialysis treatment success. By understanding the challenges associated with AVFs,

AVGs, and CVCs, healthcare providers can implement proactive monitoring and intervention strategies that minimize complications.

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OP – 78

Breaking the Chains: Unraveling the Complexities of Trauma-Induced AKI

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Abstract

Introduction: Acute kidney injury (AKI) in trauma patients, particularly trauma-related AKI (TRAKI), represents a critical condition with high mortality rates. TRAKI develops through mechanisms such as tissue hypoxia, ischemia-reperfusion injury, micro-circulatory disturbances, and systemic inflammatory responses, resulting in both direct and indirect renal damage. Globally, trauma-induced AKI affects approximately 0.8% of all trauma patients and up to 67% of severely injured individuals. Despite its prevalence, there is a notable lack of data on AKI in trauma patients in Albania, highlighting the need for

targeted research better to understand its incidence and clinical impact in the region.

Materials and Methods: A comprehensive literature review was conducted using Medline and PubMed to identify relevant studies exploring the relationship between trauma and kidney function. Critical clinical trials focusing on trauma-induced renal injury were analyzed.

Results: Risk factors for AKI in trauma patients include the severity of trauma (e.g., crush injuries, burns) as well as patient-specific variables such as age and preexisting comorbidities. AKI arises from renal damage, systemic inflammation, and hemodynamic instability. Early detection using biomarkers (NGAL, KIM-1, cystatin C, IL-18) and simple laboratory tests (e.g., bicarbonate levels, sequential urinary sodium, and fractional potassium excretion) within the first 24 hours prevent AKI progression.

Conclusion: Effective nephroprotection strategies, including maintaining renal perfusion and reducing inflammation, are crucial for mitigating the severity of AKI in trauma patients. Addressing the current data gap on AKI in Albanian trauma patients could significantly improve clinical outcomes and enhance trauma and nephrology care.

Keywords: Trauma-induced AKI, renal protection, biomarkers, ischemia-reperfusion injury, Albania.

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OP – 79

Laboratory Findings in Osteoarthritis, How Do Biochemistry and Biomechanics Influence Disease's Progression

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Abstract

Introduction: Osteoarthritis (OA) is one of the most common degenerative joint diseases, characterized by the breakdown of cartilage and underlying bone in joints, often leading to pain, stiffness, and functional impairment. While OA has traditionally been viewed as a purely mechanical disease, recent evidence suggests that inflammation plays a crucial role in its pathogenesis and progression, even in its early stages. The biochemical markers of inflammation, such as C-reactive protein (CRP) and erythrocyte sedimentation rate (ESR), may indicate disease severity. This study explores the relationship between these inflammatory markers and OA progression while accounting for confounding metabolic factors like diabetes and hypercholesterolemia. The primary objective of this study is to monitor inflammation markers in patients with primary osteoarthritis, independent of other metabolic factors, to better understand their role in disease progression.

Materials and Methods: This research involved a retrospective analysis of patients diagnosed with primary OA. Inflammatory markers (CRP, ESR, uric acid, and HbA1c) were measured, and the relationships between these markers, demographic factors (age, gender), and comorbidities were analyzed. The data were visualized using tables and graphs to understand the observed trends clearly. The study followed an inductive approach, generating conclusions that may be applied to future studies in the field.

Results: The majority of OA patients were female, and most had one or more comorbidities, with diabetes mellitus (DM) being the most prevalent. Gonarthrosis (knee OA) was the most frequently diagnosed form of the disease. CRP levels averaged 8 and 10 mg/L, while uric acid levels averaged 7 mg/dL. The mean HbA1c was 6.2 mmol/mol, and cholesterol levels were within

the range of 0-200 mg/dL. ESR levels averaged 30 mm/h. These results underscore the presence of systemic inflammation in stage II OA, even when metabolic comorbidities are controlled.

Conclusion: The study's findings highlight the significant role of inflammatory markers in the progression of primary OA, particularly in stage II. These biochemical factors should be considered when evaluating disease severity and guiding treatment strategies independent of other metabolic conditions.

Keywords: Osteoarthritis, inflammation markers, C-reactive protein, erythrocyte sedimentation rate, diabetes mellitus, comorbidities, gon-arthritis, biochemical analysis, disease progression

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OP – 80

Clinical Prognosis of an Atypical Sarcoidosis.

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Abstract

Introduction: Sarcoidosis is a multi-system granulomatous disorder that often presents with non-specific symptoms, leading to diagnostic challenges. In this case report, we describe an atypical presen-

tation of sarcoidosis, where vague clinical complaints delayed an accurate diagnosis.

Objective: To present a rare case of sarcoidosis with atypical clinical manifestations and highlight the challenges in reaching a definitive diagnosis.

Material and Methods: We present the case of a 40-year-old male with a 2-year history of undiagnosed abdominal pain. He was initially admitted to the Internal Medicine Unit by a gastro-hepatologist under suspicion of gastrointestinal malignancy. The patient reported increasing fatigue, sweating, and weight loss. A 2-3 cm lymph node was palpable in the left forearm, although he had no history of pulmonary disease. A fibro-gastroscopy yielded the expected results, further complicating the diagnostic process. A thorough discussion ensued regarding the diagnostic complexity of the case.

Results: A thoracic-abdominal CT scan revealed mediastinal and abdominal lymphadenopathy with splenomegaly. Laboratory findings showed elevated urea, creatinine, ESR, and electrolytes (Ca⁺⁺, K⁺). Other tests, including hemogram, glucose, 25-OH vitamin D, tumor markers (CEA, AFP, CA 19-9), ferritin, TSH, liver enzymes (ALT, AST, GGT, ALP), LDH, amylase, and autoimmune markers (Anti-DNA, ENA), were within normal limits. Lymph node biopsy revealed non-necrotizing granulomatous inflammation consistent with sarcoidosis. The patient was treated with an initial dose of 50 mg/day prednisolone, tapered by 5 mg every two weeks until reaching a maintenance dose of 10-15 mg/day, which was continued for six months. Follow-up laboratory results showed improvement, and a CT scan after one year of treatment demonstrated a reduction in the size of mediastinal lymph nodes to within normal ranges.

Conclusion: Although sarcoidosis is a relatively rare disease, it should always be considered in differential diagnoses when patients present with vague or nonspecific symptoms. Early recognition and timely treatment are crucial for a favorable prognosis.

Continued patient follow-up is essential to ensure long-term success in managing the disease.

Keywords: Atypical sarcoidosis, granulomatous disease, differential diagnosis, lymphadenopathy, steroid therapy, abdominal pain.

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OP – 81

Navigating Diabetic Foot Complications: Advances in Technology and Treatment Strategies

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Abstract

Introduction: Diabetic foot complications are a common and often severe outcome of Diabetes Mellitus, posing significant challenges for treatment and management. The COVID-19 pandemic has exacerbated this issue by limiting access to healthcare services, resulting in increased complications and poor outcomes for patients with diabetic foot ulcers. Despite these challenges, the crisis has spurred innovation in diabetic care, mainly through integrating technology to monitor and manage high-risk populations. These advancements seek to facilitate ongoing assessment and extend remission periods for diabetic ulcers, ultimately improving patient outcomes.

Results: While hyperbaric oxygen therapy (HBOT) has been a longstanding treatment for chronic diabetic ulcers, its efficacy remains inadequately supported by robust clinical evidence. In contrast, recent clinical trials exploring topical oxygen therapy (TOT) have shown promising results, suggesting it may be a viable alternative for enhancing healing. Additionally, novel treatments such as autologous leukocyte, platelet, and fibrin patches have emerged, demonstrating effectiveness in promoting healing for difficult-to-treat diabetic wounds. Sucrose octa sulfate dressings have also been investigated, particularly for neuro-ischemic ulcers, providing another potential treatment option.

Conclusion: Progress in understanding and managing diabetic ulcers, especially during the remission phase, is significant. Evaluating new therapeutic strategies should focus not only on reducing healing time but also on minimizing ulcer recurrence—a critical concern in diabetic care linked to higher rates of hospitalization and amputation.

Keywords: Diabetic foot, ulcers, hyperbaric oxygen therapy, topical oxygen therapy, treatment strategies, technology integration.

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OP – 82

A Case Presentation of Leptospirosis: One of the Most Frequent Infectious Diseases After Flooding

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Abstract

Introduction: Leptospirosis is a globally significant zoonotic spirochetal infection. Human transmission occurs through direct contact with the urine of infected animals or via contaminated water. In Albania, leptospirosis ranks among the most prevalent zoonoses, accounting for 2% of reported zoonotic diseases. Case numbers notably increase following heavy rainfall, flooding, and extreme weather conditions.

This study aims to analyze the factors contributing to the surge in leptospirosis cases post-flood, focusing on prevention strategies for affected populations and the importance of early diagnosis.

Material and Methods: We reviewed epidemiological data, identified risk factors, and examined the increase in cases during the autumn and winter. We present a case of a 65-year-old Durrës patient hospitalized in November during significant rainfall and flooding..

Results: Following natural disasters, particularly floods, leptospirosis cases rise due to water contamination with animal urine, increased human exposure through skin and mucous membrane contact with contaminated water (especially in lacerations), and overcrowding in affected areas.

Conclusions: The prevalence of leptospirosis increases in the autumn and winter following heavy rains and flooding. Early detection of cases is critical when epidemiological data indicate flooding events, emphasizing the need for prompt diagnosis and preventive measures.

Keywords: Leptospirosis, zoonotic disease, flooding, epidemiology, early diagnosis.

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OP – 83***Nosocomial Infections at University Hospital of Trauma: A Surveillance Study***

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Abstract

Introduction: Nosocomial infections (hospital-acquired infections, HAI) occur during healthcare delivery and are absent at admission. These infections pose significant risks to patient outcomes and healthcare systems.

Objective: To determine the prevalence of HAIs at UHT, Tirana, and identify the pathogens responsible.

Material and Methods: This prevalence study involved surveillance and analysis of HAI data collected between March and August 2024 from various departments: surgery, Neurosurgery, Internal Medicine, the Intensive Care Unit (ICU), Orthopedics, and Reconstructive Surgery, and diabetic Foot Clinics. All patients testing positive for HAI during the study period were included. The prevalence of HAIs varied by ward, and infections were categorized based on type and pathogen.

Results: Of 63 HAI cases, prevalence rates were highest in ICU (23.8%), followed by Internal Medicine (22.2%) and Neurosurgery (20.6%). Surgical site infections were most common (42.5%), followed by catheter-associated UTIs (41.4%). Key pathogens included *Acinetobacter baumannii*, *Staphylococcus aureus*, and *Klebsiella pneumoniae*.

Conclusion: The prevalence of nosocomial infections at UHT underscores the importance of continuous infection control practices.

Keywords: Nosocomial infections, HAI, infection control, pathogens

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OP – 84***Burn Care Issues in Albania's Tertiary Healthcare Facilities***

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Abstract

Introduction: Burn injuries are a significant public health concern globally, with a profound impact on morbidity and mortality, particularly in middle-income countries like Albania. This study provides critical insights into the patterns of burn injuries in Albania and underscores the urgent need for targeted interventions to reduce their incidence and severity.

The study aimed to evaluate burn patients' demographic and clinical profiles, analyze the causes and severity of their injuries, and assess trends in burn cases at a tertiary healthcare facility.

Materials & Methods: This retrospective cohort study reviewed burn patients treated at the Department of Burn and Plastic Surgery at "Mother Teresa"

University Hospital in Tirana from January 2022 to January 2024. Data were collected on demographics, causes of burns, total body surface area (TBSA) affected, burn severity, locations, and agents. The study received ethical clearance, and data were analyzed using SPSS software.

Results: The study included 303 patients with an average age of 36.1 years (SD: 28.7). The most affected age group was children (0-10 years), with the highest incidence in 2-year-olds. The gender distribution was 39.3% female and 60.7% male. Scalds from hot liquids accounted for 39.9% of burns, followed by flames (20.4%) and electrical burns (8.2%). The average TBSA affected was 23.06%, with a mortality rate of 7.3% (22 patients).

Conclusion: Burn injuries present significant physical and psychological challenges. Although advancements in burn treatment have been made, effective prevention strategies and public awareness campaigns are crucial for reducing burn incidence and severity in Albania. Enhancing educational initiatives and enforcing safety regulations are essential to addressing this public health challenge.

Keywords: burns, body surface area, burn causes, mortality

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OP – 85

Covering Tissue Defects in Hand Trauma

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Abstract

Introduction: Hand trauma presents a significant challenge for surgeons, particularly in the management of soft tissue defects. This presentation highlights modern techniques for defect coverage, including simple flaps, arterialized flaps, and complete and partial transplants. Case examples from the author's experience as a general and plastic surgeon at Korce Regional Hospital will be presented, accompanied by visual documentation.

Materials and Methods: The presentation features clinical cases with pre-and post-operative images to demonstrate various techniques for managing hand trauma defects. Emphasis is placed on selecting the optimal method based on the available resources, focusing on adapting procedures to different healthcare settings university, regional, or municipal hospitals.

Results: This paper compares hand defect closure techniques in accordance with international guidelines. Plastic surgery significantly reduces healing time, enhances functional outcomes, and prevents secondary amputations after traumatic injuries.

Conclusions: Free grafts, arterialized grafts, and full and partial transplants are essential for any surgeon managing hand trauma. Plastic and orthopedic surgeons and general surgeons involved in trauma care should master and apply these techniques frequently.

Keywords: Flaps, skin graft, hand surgery, plastic and reconstructive surgery

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OP – 86***Lip Reduction: Our Method for Permanent Filler Removal in Albania***

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Introduction: Permanent fillers, such as polymethylmethacrylate (PMMA) and liquid silicone, have risen in Albania since the early 2000s. Over recent years, an increasing number of patients have sought the removal of these fillers due to complications and lip deformations. Since these substances cannot be dissolved, surgical excision remains the only effective method for removal. This study describes our surgical approach to lip reduction and filler removal based on treating 20 patients. Our process aims to achieve aesthetic correction while minimizing scarring and preserving lip function.

Conclusion: Removing permanent fillers such as PMMA and liquid silicone from the lips presents a unique challenge, mainly due to the invasive nature of surgical excision and the risk of aesthetic and functional complications. Our method, developed through experience with 20 patients, has proven effective in achieving functional and aesthetic outcomes. By carefully planning the surgical approach and focusing on tissue preservation, we have reduced complications and improved patient satisfaction. Continued follow-up is essential to monitor for any recurrence or secondary deformities. Our experience suggests that surgical excision is a reliable solution for patients suffering from lip deformities due to permanent fillers.

Keywords: polymethylmethacrylate, liquid silicone, lip reduction, permanent filler removal, surgical excision

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OP – 87***The Role of Dermatoscopy in the Diagnosis of Nail Diseases: A Non-invasive Alternative to Nail Surgery***

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Introduction: Nail diseases often pose diagnostic challenges due to their subtle clinical manifestations and the invasive nature of traditional diagnostic methods, such as nail biopsies or surgery. Dermatoscopy, a non-invasive diagnostic tool, has emerged as a valuable alternative for evaluating nail disorders. This technique enhances the visualization of subsurface structures, offering a less painful, cost-effective, and efficient diagnostic option while reducing the need for surgical interventions that are often complex and uncomfortable for patients. This presentation seeks to highlight the effectiveness of dermato-scopy in diagnosing various nail conditions and its potential to replace invasive nail surgeries, which can be technically demanding and carry risks of complications.

Material and Methods: We analyzed clinical cases of nail disorders where dermato-scopy was employed as the primary diagnostic tool. Key dermo-scopic features such as melanonychia, onychomycosis, and subungual tumors were identified and reviewed. Comparisons were made between cases where

dermato-scopic findings sufficed for diagnosis and cases that required further surgical intervention.

Results: Dermato-scopy enabled accurate diagnoses in most cases, significantly reducing the need for invasive procedures. Specific patterns, such as the parallel ridge pattern in melanonychia and the spiked pattern in subungual melanoma, were instrumental in establishing diagnoses. For onychomycosis, characteristic dermato-scopic findings minimized the necessity for surgical confirmation.

Conclusion: Dermato-scopy has become an essential tool in the dermatological evaluation of nail diseases. Its ability to minimize unnecessary surgical biopsies, enhance patient follow-up, and guide precise biopsy techniques makes it a critical resource in modern dermatology.

Keywords: Dermato-scopy, Nail diseases, Non-invasive diagnosis, Melanonychia, Onychomycosis

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OP – 88

Electrical Burns and Injury

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Abstract

Introduction: Electrical burns are classified into two main categories: those caused by flash or flame due to a short circuit and direct contact with an electrical source. Burns from the first category are typically superficial or partial-thickness (grade II-B) and can heal with appropriate resuscitative and local

treatments. In contrast, contact burns from high-voltage currents can inflict deep tissue damage and affect vital anatomical structures. Electricians are particularly vulnerable, as they experience direct electrical exposure and shock waves and often sustain injuries from falls, notably head injuries. This presentation aims to raise awareness among medical professionals regarding the critical nature of treating electrical burns, which can be life-threatening and necessitate a multidisciplinary approach involving neurosurgeons and general surgeons.

Results: Recent data indicate that approximately 60 patients with electrical burns are admitted annually to the Burn and Plastic Surgery service. The majority of these patients heal with intensive treatment, with only 5% requiring specialized surgical interventions, including plastic surgery or operations by neurosurgeons or general surgeons, depending on the severity of their condition and complications. We present three challenging cases that exemplify the complexities of managing these injuries.

Conclusions: Patients suffering from contact injuries due to electrical currents require a thorough evaluation of their overall condition, including essential diagnostic imaging such as X-rays, MRI, and CT scans. Simultaneously, resuscitation efforts must focus on stabilizing the burn injury. Based on laboratory findings, the medical team prioritizes surgical interventions, which may involve craniotomy for epidural hematomas, chest drainage, stabilization and fixation of orthopedic injuries, or necrotomy in cases of circumferential third-degree burns.

Keywords: Electrical burns, Burn management, Multi-disciplinary treatment, Surgical intervention

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OP – 89

Increasing the Angle of Rotation of the Local Rotating Flaps through the Hatchet Pattern in the Craniofacial Region.

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Abstract

Introduction: The main problem with local rotary flaps is the loss of volume and length during their rotation due to the formation of the skin fold called "dog ears." The most efficient practice to compensate for the loss of flap volume is to increase its dimensions and emphasize the incision arc in its design. In the head region, this practice often aborts to close the defects without creating a defect in the flap donor's lodge, which necessitates skin graft coverage, with its aesthetic problems. In this presentation, we will pay attention to applying a transverse incision at the base of the flap, giving it the shape of a hatchet, which creates an efficient flap for closing defects by increasing the axis of rotation and its advancement.

In this presentation, we have presented three cases: two with defects in the head (respectively in the bregma and the left temporal region) and the third with a defect in the soft tissue of the nose created by the excision of the skin neoplasms. All three cases confirmed the vitality of the flaps, the absence of flap tension, and the closure of the flap donation site "per prima " if the flap design and its measures were carefully calculated.

Discussion: In this presentation, we selected the craniofacial region for applying "hatchet" flaps

because of some facilities offered by this region. The narrowing of their base, interfering with the classic 1:1.5 ratio between the base and the height of the random flaps, is the mechanism of increasing the rotational axis and the advanced pitch of these flaps. This region provides a stable superficial arterial axis that guarantees the vitality of these flaps without jeopardizing this vitality by narrowing their base.

Conclusion: The hatchet flap is attractive. It provides a large axis of rotation and sufficient advancement pitch to close relatively large defects in tense scalp conditions while allowing for primary closure of the flap donor site.

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OP – 90

The Hemoglobin Cut-Off for Blood Transfusion Indication in Burned Children

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Abstract

Introduction: The role of blood transfusion in managing burns has evolved over the years, particularly for adults and children. Recent studies advocating a restrictive transfusion policy in pediatric burn patients have demonstrated that a hemoglobin threshold of 7 g/dL does not result in worse outcomes than the traditional threshold of 10 g/dL. Key factors influencing the need for blood transfusions in thermal burn patients include the extent of critical illness,

concomitant trauma, age, presence of sepsis, the necessity for grafting, and the total body surface area (TBSA) affected. This study aims to determine the hemoglobin cut-off for blood transfusion indications in burned children.

Material and Method: In 2017, an observational study was conducted on 75 pediatric burn patients hospitalized in the Intensive Care Unit (ICU) of the Service of Burns at the University Hospital Center "Mother Teresa" in Tirana, Albania. We aimed to establish a hemoglobin threshold for indicating blood transfusion using the area under the curve (AUC) ...

Results: Out of 75 children, 38 (50%) received red blood cell (RBC) transfusions during treatment. Blood analyses were performed 196 times on days 1, 3, 5, and subsequently every two days throughout their hospitalization. The mean day for initiating blood transfusion was 5.48 ± 0.87 days post-burn injury. Among the transfused patients, 26 (68.4%) had burns covering more than 20% TBSA, while 12 (31.6%) had burns involving less than 20% TBSA. The mean hemoglobin level for transfused patients was 8.7 g/dL, compared to 10.8 g/dL for those who did not require transfusion.

Conclusions: The median pre-transfusion hemoglobin level of 8.7 g/dL in burned children aligns with the recommended thresholds and is close to the cut-off identified through ROC analysis. Factors associated with the need for blood transfusion in this population are primarily related to the percentage of TBSA burned.

Keywords: Hemoglobin, Blood transfusion, Burn injuries, Pediatric burns

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OP – 91

Escharotomy vs. Late Escharectomy and Meshed Skin Graft for Treating Full-Thickness Burns

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Abstract

Introduction: Burns represent some of the most severe and painful injuries, impacting individuals across all age groups. Effective treatment involves a multi-phase approach, including managing burn shock and sepsis, wound protection, and subsequent surgical interventions such as necrosectomy and closure with autologous skin grafts. The gold standard for burn coverage is the application of autologous split-thickness skin grafts (STSGs), which can be expanded through meshing techniques to ensure complete wound coverage. Common mesh ratios—1:1, 1.5:1, 2:1, 3:1, and 4:1—facilitate increased coverage, allow drainage of fluids, and enhance graft flexibility.

This study aims to provide data on applying meshed skin grafts as a surgical method for treating severe burn patients admitted to the ICU at the Service of Burns, University Hospital Center "Mother Teresa," Tirana, Albania. It includes an analysis of patients requiring surgical wound management over the past three years (2021-2023).

Results: Among 436 patients with severe burns, 20% sustained burns, covering over 40% of total body surface area (TBSA), with an overall mortality rate of 8.4%. Without a skin bank, skin substitutes, or cultured keratinocytes, we performed multiple escharotomies within the first 2-3 days, followed by late escharotomy to remove necrotic tissue between the 2nd and 3rd weeks. Wound closure was achieved

through multiple surgical sessions using meshed autografts.

Conclusions: Survival in severe burn cases relies on adequate resuscitation during the shock phase, comprehensive multidisciplinary management of sepsis, and intensive local wound care. Selective surgical intervention includes multiple escharotomies in the initial days and late escharectomy within 2-3 weeks. After escharectomy, full-thickness meshed skin grafts are applied for complete wound closure. The approach of multiple escharotomies aids in effective surgical wound management, while late escharectomy has proven to be a safe and proactive procedure. Notably, we have achieved survival in patients with burns covering up to 60% TBSA, with 30-40% of TBSA affected by full-thickness burns.

Keywords: Escharotomy; Escharectomy; Meshed Skin Graft; Full-Thickness Burns

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OP – 92

Treatment of Burns in Emergency Center Prizren (Case Reports)

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Abstract

Introduction: Injuries due to thermal factors are often life-threatening. They can cause multiple invalida-

tions. We can treat mild to severe and life-threatening BURNS during our work.

A burn is an injury to the skin or other organic tissue primarily caused by heat or due to radiation, radioactivity, electricity, friction, or contact with chemicals. In our experience, we often face mild to moderate burns usually caused by hot liquids like tea, soup, milk, boiled water, oven, sunburn, etc. Fire, explosions, lightning strikes, etc, cause more severe burns.

This paper aims to analyze the possibility of cooperation and distinguish the responsibilities between the levels of health services.

Materials and Methods: The team has treated cases during their experience. We used official data from the emergency center and emergency service in Prizren, examinations, and laboratory and radiology findings. Photos and medical reports are original and have yet to be shown before.

Results: Most mild and moderate cases are treated by Primary Medicine Care, especially Emergency service, except for burns of the face, soles, and palms, as well as the part of the genitals.

Conclusions: The primary purpose of this report is to present the treatment options of pre-hospital care (Emergency service), hospital care (up to definitive recovery), and, for the most severe cases, the treatment option in specialized clinics (Surgery, Plastic surgery, Ophthalmology, ENT, etc.).

Severe burns often require weeks and months to recover, sometimes skin transplant, and even out-of-state transport to the most specialized burn clinics.

Keywords: Burns, Acute, lighting strike, electric shock

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2. Tarim MA. Factors affecting mortality in burn patients admitted to intensive care unit. East J Med. 2013;18(2):72.

OP – 93***Vestibular Schwannoma Surgery or Radiosurgery?***

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*Department of Neuroscience, University of Medicine of Tirana, ALBANIA***Abstract**

Introduction: Vestibular schwannoma, or acoustic neuroma, is a benign tumor arising from the Schwann cells of the vestibulocochlear nerve. This study's findings, which compare the outcomes, risks, and benefits of microsurgical resection and stereotactic radiosurgery, significantly advance our understanding of the optimal management strategy for this condition. This knowledge equips healthcare providers with the necessary information to make informed decisions, enhancing their knowledge and expertise in the field. The primary outcomes measured in this study, which are crucial for understanding the effectiveness of the two treatment modalities, included specific parameters such as tumor control rates, cranial nerve preservation, complication rates, and quality of life over a 5-year follow-up period.

These findings are significant as they provide valuable insights into managing vestibular schwannoma. Results showed that both microsurgery and radiosurgery provided high rates of tumor control, offering reassurance about the effectiveness of these treatments. However, radiosurgery was associated with fewer immediate postoperative complications and better cranial nerve preservation, especially in small to medium-sized tumors. In contrast, micro-surgery was more effective for large tumors causing brainstem compression but with a higher risk of complications such as hearing loss and facial nerve dysfunction.

In conclusion, radiosurgery is a favorable option for smaller vestibular schwannomas, offering less morbi-

dity and better cranial nerve outcomes. The complexity of managing vestibular schwannoma is underscored by the need for individualized treatment decisions based on tumor size, location, and patient-specific factors.

Keywords: Vestibular schwannoma; acoustic neuroma; microsurgical resection; stereotactic radiosurgery; tumor control; cranial nerve preservation; complication rates.

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OP – 94***Robotics and AI in Spine Surgery: Actual Concepts, Pros, and Cons***

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Introduction: Integrating robotics and artificial intelligence (AI) in spine surgery has revolutionized surgical precision, planning, and outcomes. These technologies offer unprecedented capabilities, enabling safer and more effective interventions. However, their adoption raises critical questions about cost, learning curves, and potential overreliance on technology.

Objective: This study aims to evaluate the current concepts, benefits, and limitations of robotics and AI in spine surgery, focusing on their impact on surgical accuracy, patient outcomes, and overall healthcare efficiency.

Material and Methods: A comprehensive literature review was conducted, analyzing data from recent clinical trials, retrospective studies, and meta-analyses. The assessment covered preoperative planning, intraoperative navigation, and postoperative outcome evaluation. Additionally, expert opinions and case reports were reviewed to provide real-world insights into the utility of these technologies.

Results: Robotics and AI in spine surgery significantly improve precision in screw placement, reduce intraoperative radiation exposure, and shorten recovery times. AI-driven algorithms enhance diagnostic accuracy and predict surgical outcomes by leveraging large datasets. Despite these advantages, challenges persist.

Conclusion: Robotics and AI represent transformative advancements in spine surgery, offering enhanced precision and improved patient outcomes. However, their adoption must be balanced with a focus on cost-effectiveness, surgeon training, and ethical considerations.

Keywords: Robotics, artificial intelligence, spine surgery, surgical precision, patient outcomes,

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OP – 95

Early Elbow Trauma Influence in Ulnar Nerve Entrapment

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Abstract

Introduction; Ulnar Nerve Entrapment (UNE) is a peripheral nerve disorder presenting with paresthesia, numbness, tingling, pain according to ulnar innervation dermatome in the upper limb caused by acute, chronic or repetitive compression along nerve trajectory vulnerable points. Traumatic neuropathies can be caused by local physical injuries, dislocations, blockages, surgical positioning, combustion, fractures, or chronic local pressure, causing motor and sensory loss. Post-traumatic calcification perineural tissue was first described in 1986 by Ametewee K., calling post-traumatic neuritis: “Calcific Neuritis.”

Material and Methods: We present a cohort retrospective observational clinical study, including 26 patients diagnosed with UNE at the elbow. The study sample consists of patients operated on at the Department of Neurosciences, University Service of Neurosurgery, “Mother Theresa” HUC, from January 2017 to March 2022.

Study analysis results: In this study, only 12% of patients had a prior local trauma history at the elbow. 8% resulted in male gender with a median age calculated as 52 years old at intervention time. In this exposure group, it cannot be concluded that traumas are the primary cause of ulnar nerve neuropathy at the elbow due to the low presenting percentage. Men's number exposed to trauma (2) is double that of women (1), which is statically acceptable because they make up twice the workforce numerically. Simple in-situ decompression is the technique of choice for both stages: II & III McGowan. ENG turns out to be the most used examination and diagnostic instrument for the diagnosis of ulnar neuropathy at the elbow, regardless of symptom duration but remains the second most used for post-traumatic cases after RMN.

Discussion: Traumatic cases are usually associated with highly perineural adherences and neuroma formation. It is important, in cases of neuroma formation, to do a neurectomy 1mm after 1mm along the cross-sectional surface of the nerve fiber.

Preventing excessive elbow flexion or extension, choosing a neutral or supination forearm posture in adduction, positioning the blood pressure cuff above the humeral medial epicondyle, and an anesthetist's intermittent checks during surgery help decrease UNE chances.

Conclusion: Longitudinal neurolysis is recommended, respecting the vasa nervorum net as much as possible. A nerve biopsy can be taken to confirm neuroma fibrosis formation or inflammatory etiology. In cases of nerve discontinuity because of trauma or surgical insult, nerve suturing repair under magnification or allograft repair.

Keywords: CuTS, trauma, compression, fibrosis, deficits

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OP – 96

Brainstem Cavernous Malformation, a Neurosurgical Challenge: Report of Two Cases.

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Abstract:

Introduction: Brainstem cavernous malformations are vascular lesions that can result in severe neurological disability after hemorrhage. The development of symptoms in such cases is acute and maximal at onset. They account for about 30% of all intracranial cavernous malformations, and due to the anatomic complexity of the brainstem, their resection is highly

challenging. Microsurgery remains the treatment of choice. Nevertheless, debate still exists regarding patients' selection and indications for surgery. A successful resection of a BSCM is estimated by a complete removal of the lesion and the absence of new permanent neurological deficits.

Material & Methods: We present two cases of BSCM Lawton grade III, with clinical presentation of multiple cranial nerve palsies and ataxia following a first symptomatic hemorrhage in the acute phase. The cavernoma in the pons was approached via retro sigmoid craniotomy through the ipsilateral cerebellopontine angle. The second case was located in the medulla oblongata and was reached through suboccipital craniotomy via telovelar route. Despite the ongoing debate on which patients will benefit most, we referred to the international Delphi Consensus 2022.

Results: The patients responded well to the surgery. Total resection was achieved. No intra- or postoperative complications occurred. The first patient was discharged one week after surgery. The second is a recent case; the patient is still hospitalized in our institute.

Conclusion: Microsurgical resection represents the standard of care following symptomatic hemorrhage in BSCM. The risk of damaging normal eloquent tissue is very high regarding anatomic distribution near the ascending and descending tracts and CN nuclei. Therefore, brainstem cavernomas constitute a neurosurgical challenge.

Keywords: Brainstem Cavernous Malformation BSCM, medulla oblongata, pons, Lawton grading system, Delphi consensus, vascular disorders.

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OP – 97***Non-traumatic Spontaneous Spinal Subdural Hematoma in a Patient with Non-valvular Atrial Fibrillation During Treatment with Rivaroxaban: A Case Report and Systematic Review of the Literature***

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Abstract

Introduction: Spinal hematomas are a rare neurosurgical condition, classified based on their location as epidural, subdural, subarachnoid, or intramedullary. Spinal subdural hematomas (SSDHs) account for approximately 4.1% of all intraspinal hematomas and can arise from trauma, medical interventions, or spontaneously. Non-traumatic SSDHs are particularly rare but can have severe neurological consequences. The presentation of SSDHs can be classified into different phases based on the timing of symptom onset and magnetic resonance imaging (MRI): Hyperacute (within 12 hours), Acute (12 hours to 3 days), Subacute (3 days to 2 weeks); We present a case of a 72-year-old male with a 5-year history of non-valvular atrial fibrillation on rivaroxaban (20 mg daily). The patient experienced sudden, severe upper back pain (thoracic region), followed by progressive right lower extremity paresis that rapidly developed into complete monoplegia and bladder dysfunction. Emergency spinal MRI revealed a subdural hematoma extending from the T8-T9 vertebral level.

Conclusion: Early detection and timely surgical decompression are essential in improving prognosis

and reducing morbidity in patients with SSDH, especially those on anticoagulant therapy like rivaroxaban.

Keywords: Spinal subdural hematoma, rivaroxaban, medullary decompression, anticoagulation, MRI

References

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OP – 98***Patient Blood Management Protocol***

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Abstract

Introduction: Patient Blood Management (PBM) is a multidisciplinary approach that has proven safe and effective in optimizing the care of patients who may require a blood transfusion. By focusing on minimizing blood loss, optimizing hemoglobin levels, and improving patient outcomes, PBM protocols play a crucial role in modern healthcare. This study outlines the implementation and outcomes of a PBM protocol in a tertiary care setting.

Material and Methods: The PBM protocol was implemented through key strategies. These included preoperative assessment of anemia, intraoperative blood conservation techniques, and postoperative monitoring of hemoglobin levels. Notably, the protocol utilized iron supplementation, erythropoiesis-stimulating agents, and restrictive transfusion thresholds as its main strategies.

The results of our study are promising. They demonstrate a significant reduction in transfusion rates, improved hemoglobin optimization, and better overall patient outcomes. The protocol not only helped minimize complications related to transfusions, such as infections and immunological reactions but also significantly improved the quality of care for our patients.

Implementing a PBM protocol offers a safe and effective method to reduce blood transfusion dependency while improving surgical outcomes. The potential benefits of continuing to adopt these practices are significant, promising enhanced patient safety, reduced healthcare costs, and better resource utilization.

Keywords: Patient Blood Management; transfusion; hemoglobin optimization; surgery; anemia; blood conservation techniques.

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OP – 99

Fluid Management in Critically Ill Patients. To fill or not to fill.

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Abstract

Introduction: Intravenous fluids (IVF) are routinely administered to restore intravascular volume in patients experiencing distributive and hypovolemic shock. While appropriate fluid resuscitation is crucial in intensive care units (ICUs) and hospitals, increasing awareness of the risks associated with volume overload has emerged, particularly concerning its implications for organ failure and mortality.

This abstract reviews the dual challenges of managing hypovolemia and hypervolemia in critically ill patients, emphasizing the need for careful fluid management.

Pathophysiology: Hypovolemia can result in renal failure, altered tissue perfusion, anastomotic leakage, confusion, splanchnic ischemia, and multi-organ failure (MOF). Conversely, hypervolemia can lead to edema, intra-abdominal hypertension, respiratory failure, impaired wound healing, and mobilization difficulties. Fluid overload is associated with increased inflammation and endothelial activation, further complicating patient outcomes.

Assessment and Management: Reliable, objective tools for assessing volume status and monitoring therapy are essential. Frequent evaluations of patient status should guide fluid management. **Conclusion:** A balanced approach to fluid management is critical in critically ill patients, requiring continuous monitoring and individualized treatment strategies to mitigate the risks associated with both hypovolemia and hypervolemia.

Keywords: Intravenous fluids (IVF); Hypovolemic shock; Distributive shock; Volume overload

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OP – 100***Intra-operator Complications during General Anesthesia Recorded in Laparoscopic Cholecystectomies.***

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Abstract

Introduction: This study aims to evaluate intraoperative complications during laparoscopic cholecystectomy under general anesthesia, focusing on physiological effects such as hemodynamic changes and respiratory challenges. Key concerns include the impact of pneumoperitoneum, patient positioning, and high intra-abdominal pressure, which require careful anesthetic management.

Materials and Methods: A randomized study included 324 ASA I-II patients undergoing laparoscopic cholecystectomy from January to June 2024. Patients were divided into two groups, receiving either thiopental or propofol for anesthesia induction. Anesthesia was maintained with Sevoflurane (Group 1) or Desflurane (Group 2), with additional fentanyl boluses as required. Intraoperative complications and surgery duration were recorded.

Results: Of the 324 patients, 73% were female. The average patient age was 58±18 years, and the mean surgery duration was 45±12 minutes. Hemodynamic disturbances occurred in 39% of cases, with

arrhythmias and bradycardia noted in 7%, particularly after the first peritoneal insufflation. Elevated PCO₂ levels were observed in 27% of cases. The incidence of complications was similar between both groups.

Conclusions: Strict adherence to anesthetic protocols ensures that intraoperative complications during laparoscopic cholecystectomy remain rare. Hemodynamic complications were most common, especially in patients over 70, highlighting the importance of age-related monitoring.

Keywords: Anesthesia, Arrhythmia, CO₂, Laparoscopic cholecystectomy

References:

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OP – 101***Medical Management of a Jehovah's Witness***

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Abstract:

Introduction: Managing trauma patients is always a time-sensitive and challenging process, but the refusal of blood transfusion adds another layer of complexity. This report presents the case of a 40-year-old male Jehovah's Witness who was admitted to the University Hospital of Trauma following a severe car accident. He was in hypovolemic shock due to significant internal bleeding, and his religious beliefs prohibited blood transfusion.

The surgical team, initially unprepared for the ethical considerations surrounding the refusal of transfusion,

acted promptly and professionally. They managed to stabilize the patient, respecting his medical needs and religious preferences.

This case highlights the intersection of medical ethics, patient autonomy, and legal considerations in trauma care. In the event of patient death, the legal implications surrounding informed consent and the refusal of treatment would become particularly pertinent. Physicians must navigate these issues while fulfilling their legal and ethical responsibilities.

Furthermore, the driver involved in the accident could face civil and potentially criminal liability, given the multifaceted nature of legal cases involving trauma patients who refuse standard treatments such as blood transfusion.

Conclusion: This case underscores the importance of preparedness and multidisciplinary collaboration in managing trauma patients who refuse life-saving treatments due to religious beliefs..

Keywords: Jehovah's Witness, trauma management, blood transfusion refusal, medical ethics, legal implications, hypovolemic shock, informed consent, patient autonomy

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OP – 102

An Update on Hypocalcemia in the Critically Ill.

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Abstract

Introduction: Hypocalcemia is a common electrolyte disturbance in critically ill patients, particularly those in cardiac surgery and intensive care settings. Its occurrence is associated with higher morbidity and mortality, making timely diagnosis and management essential. This study reviews recent advancements in understanding hypocalcemia's mechanisms, impact, and management strategies in critically ill patients.

Material and Methods: A comprehensive review of current literature focused on recent studies examining hypocalcemia's etiology, pathophysiological mechanisms, and treatment approaches in critically ill populations, especially within cardiac surgery. Data from clinical trials and observational studies were analyzed to evaluate the effectiveness of calcium supplementation and related interventions.

Results: Hypocalcemia in critically ill patients often results from complex interactions involving parathyroid hormone regulation, systemic inflammation, and renal dysfunction. Findings reveal that prompt correction of hypocalcemia with calcium supplementation may improve patient outcomes, although individualized treatment based on severity and patient-specific factors is critical.

Conclusions: Management of hypocalcemia in the critically ill requires a nuanced approach, integrating regular ionized calcium monitoring and cautious calcium replacement to mitigate associated risks.

Keywords: hypocalcemia, critically ill, cardiac surgery, ionized calcium, calcium supplementation, intensive care

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OP – 103

Challenges of Anesthesia in Surgical Patients with G-6PDH. Case Reports from Our Experience

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Abstract

Introduction: Glucose-6-phosphate dehydrogenase (G6PD) deficiency is a hereditary condition that impairs cell resistance to oxidative stress. Acquired forms are also reported: Although most affected individuals are asymptomatic, exposure to oxidative stressors such as certain drugs or infections, as well as to nutrition with fava beans, can elicit acute hemolysis. Specific anesthetic considerations are required to reduce the morbidity and mortality associated with surgical interventions in these patients. The prevalence of the inherited G6PD deficit in the southern region of Albania is high (reported at 20% in a recent study). We discuss the importance of early diagnosis and the need to increase awareness of the G6PD deficit in Albanian patients, particularly in the southern region. Based on case reports from our practice, we review the guidelines for anesthesia drug choice and specific risks to be included in the pre-surgery patient information.

Material and Methods: We review the literature on anesthetic and surgery-required drugs for G6PD deficiency and report examples from our case series.

Results: Earlier diagnosed G6PD deficiency is often reported in the preoperative consultation. In our reported cases, drug choice for anesthesia and treatment was not associated with hemolysis, and the surgical procedure resulted from event-free.

Conclusions: Enzyme measurement for diagnosed and suspected cases is crucial in defining the appropriate anesthesia drug choice and decreasing the

risk of life-threatening complications during elective surgeries. The condition's high prevalence in south Albania should be considered in the preoperative patient evaluation.

Keywords: G6PD Deficiency, Anesthesia

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OP – 104

Spinal Anesthesia Associated with Lower Postoperative Pain than the General Anesthesia for total Hip Replacement

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Abstract

Introduction: The increasing elderly population, particularly those suffering from coxofemoral arthrosis, necessitates total joint replacement surgeries. Anesthesia options for these procedures include general anesthesia and spinal anesthesia, which provide adequate relaxation for orthopedic surgeons. However, challenges persist, particularly regarding postoperative pain management without the use of an epidural catheter. This study aims to compare postoperative pain levels between the two anesthesia techniques and assess the need for supplemental morphine for pain control.

Materials and Methods: This presentation draws on existing literature and a retrospective comparative study involving two groups of patients undergoing

total hip prosthesis surgeries. Each group consisted of 30 patients (male; female ratio 1:1), aged 55-78 years, with stable comorbidities, including hypertension and diabetes (ASA I-II). Postoperative pain was measured using a scale of 1 to 10 on days 1, 2, and 3, along with the number of patients requiring morphine for pain management.

Results: On day 1, patients in the general anesthesia group reported an average pain level of 7-10, while those in the spinal anesthesia group reported 4-5. By day 2, the pain level in the general anesthesia group decreased to 5-8, compared to 2-4 in the spinal anesthesia group. On day 3, pain levels were reported as 3-5 for the general anesthesia group and 0-3 for the spinal group. The need for morphine on the first postoperative day was nearly universal in the general anesthesia group, while only 50% of the spinal anesthesia patients required morphine.

Conclusions: Patients undergoing total hip replacement exhibit significantly lower postoperative pain levels when spinal anesthesia is utilized than general anesthesia.

Discussion: The study sample is relatively small, but the findings align with existing literature. General anesthesia may not be suitable for patients with pulmonary issues, such as COPD or asthma, making spinal anesthesia a viable alternative. However, spinal anesthesia is not without contraindications, including coagulation disorders, use of antiplatelet agents, infections at the injection site, and certain cardiac conditions.

Keywords: Spinal anesthesia, general anesthesia, total hip replacement, postoperative pain.

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OP – 105

Top 5 Statistical Methods Used in Medical Research

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Abstract

Introduction: Statistical methods are critical tools in medical research, guiding the interpretation and validation of data. Choosing the appropriate statistical technique ensures the reliability and accuracy of research findings. However, improper use of these methods can lead to flawed conclusions. This study aims to review and identify the top 10 statistical methods most frequently used in medical research, highlighting their importance and typical applications.

Purpose: This study's objective is to provide an overview of the most commonly used statistical methods in medical research, offering insights into their frequency of use and applicability in different study designs.

Materials and Methods: This cross-sectional study analyzed 100 selected articles from peer-reviewed medical journals. Each article was evaluated based on the statistical methods employed. The methods were classified such as descriptive statistics, hypothesis testing, and advanced multivariate analyses. **Results:** The top 10 statistical methods identified in medical research were:

Descriptive Statistics (100%); t-tests (58%); Chi-Square Tests (54%); Analysis of Variance (ANOVA) (46%); Correlation Analysis (42%); Regression Analysis (40%); Logistic Regression (36%); Survival

Analysis (28%); Non-Parametric Tests (18%); Meta-Analysis (10%).

Descriptive statistics were the most universally applied, while inferential methods like t-tests and chi-square tests were prominently used to compare group differences. Advanced techniques like survival analysis and logistic regression were common in longitudinal studies and studies involving outcomes with time-to-event data.

Conclusions: Understanding the top statistical methods used in medical research can significantly enhance the quality and rigor of scientific investigations. Researchers must be proficient in selecting and applying the appropriate statistical techniques based on their study design and data type. Further emphasis on statistical training and the involvement of biostatisticians in the research process are recommended to reduce errors and improve the robustness of medical studies.

Keywords: Medical research, statistical methods, descriptive statistics, inferential statistics, regression analysis, survival analysis, meta-analysis,

References

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OP – 106

Does Artificial Intelligence Affect Scientific Research?

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Abstract

Introduction: Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems

Rapid advances in artificial intelligence pose challenging questions at science-policy encounters. In fact, it must be recognized that there is a rapidly growing application of AI in scientific research in all life sciences. Many scholars have examined empirical evidence on the benefits and risks facing the science-policy duo today due to the increasing use of artificial intelligence in science. responsible for this technology. Artificial intelligence tools can increase the accuracy of scientific research, facilitating the improvement of evidence-based policy making, but on the other hand, inaccuracies in the input data to the tools that artificial intelligence uses can lead, among other things, to ineffective decision-making.

Keywords: scientific research, artificial intelligence, human researchers

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OP – 107

Research in Medicine, Statistics and Physicians

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Abstract

Introduction: The role of statistics in medical research has been both praised as "the grammar of science" and criticized as mere "make up" for research findings. This dichotomy raises important questions about how statistical methods are applied in medical research. While proper statistical analysis provides the foundation for evidence-based medicine,

misapplication can lead to misleading conclusions. This study examines how statistics are currently used in medical research to determine whether they serve as a legitimate scientific tool or are primarily used to enhance the appearance of research findings.

Materials and Methods: We systematically reviewed 50 medical research papers published in peer-reviewed journals between 2020-2023. The analysis focused on evaluating the appropriateness of statistical methods, the justification for their use, and the interpretation of results. Articles were assessed using a standardized evaluation framework explicitly developed for this study. Data analysis was performed using R Statistical Software (Version 4.2.1), with significance levels at $p < 0.05$.

Results: The analysis revealed that 72% of studies appropriately applied statistical methods with apparent justification, while 28% showed questionable statistical practices. Common issues included inappropriate test selection (15%), inadequate sample size justification (18%), and overreliance on p-values without considering effect sizes (25%). Studies with statistician co-authors showed significantly better statistical methodology ($p < 0.01$).

Conclusions: Our findings suggest that when properly applied, statistics serves as "the grammar of science" in medical research. However, the percentage of questionable statistical practices that are concerning indicates ongoing challenges. Strengthening collaboration between medical researchers and statisticians, along with enhanced statistical education in medical training, could help ensure statistics remains a tool for scientific understanding rather than mere "makeup."

Keywords: statistical methodology, research quality, medical statistics, statistical errors, research validity, evidence-based medicine.

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OP – 108

Statistics of Traumatology at the University Hospital "Shefqet Ndroqi"

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Abstract

Introduction: Trauma cases represent a significant portion of hospital admissions and require considerable healthcare resources. Understanding the statistical patterns of traumatic injuries is crucial for healthcare planning, resource allocation, and improving patient outcomes. This study aims to analyze trauma cases' epidemiological and clinical characteristics at the University Hospital "Shefqet Ndroqi" to identify trends and patterns that could inform better trauma care management.

Materials and Methods: We conducted a retrospective analysis of trauma cases admitted to the University Hospital "Shefqet Ndroqi" between January 2020 and December 2023. Data were collected from hospital records, including patient demographics, injury mechanisms, severity scores, treatment approaches, and outcomes. Statistical analysis was performed using SPSS (Version 26.0), employing descriptive and inferential statistical methods.

Conclusions: Our analysis reveals significant patterns in trauma cases that can guide resource allocation and intervention strategies. The high prevalence of road traffic accidents suggests a need for enhanced preventive measures. Understanding these patterns can help optimize trauma care protocols and improve patient outcomes. Regular statistical analysis of trauma cases remains essential for healthcare planning and quality improvement initiatives.

Keywords: trauma statistics, injury patterns, hospital admissions, trauma outcomes, healthcare planning.

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OP – 109

Most Frequent Statistical Methods Used in Medical Researches

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Abstract

Introduction: Statistical analysis plays a critical role in the validity and accuracy of research findings. Over time, the application of statistical tools in research has evolved, providing more robust and reliable data interpretations. However, the misuse or improper application of statistical methods can lead to incorrect conclusions, undermining the credibility of studies. Inappropriate statistical analysis may falsely legitimize flawed data, echoing the saying, "The operation was a success, but the patient died.". This study aims to raise awareness among researchers about the commonly used statistical methods in evidence-based medical research and to highlight frequent statistical errors. By doing so, we seek to encourage the adoption of better statistical practices.

Materials and Methods: This cross-sectional study reviewed 35 randomly selected articles from freely accessible online medical journals. We evaluated the

statistical methods applied, their accuracy, and any potential errors.

Results: Our analysis revealed that Descriptive Statistics were used in 100% of the reviewed studies. Inferential Statistics alone were applied in 44% of the studies, while a combination of both descriptive and inferential methods was used in 44%. The most frequently applied statistical methods were t-tests (40%) and Chi-Square tests (32%), with less frequent usage of non-parametric tests (8%) and Survival Analyses (4%).

Conclusions: Statistical analysis is fundamental to medical research, providing accuracy and reliability to study results. The correct use of statistical methods is essential for sound analysis and valid conclusions. Enhancing education in medical statistics for healthcare professionals and involving biostatisticians in the editorial process of medical journals are vital measures to improve statistical practices in research.

Keywords: medical research, study design, statistical methods, statistical errors, confidence interval.

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OP – 110

Today's Challenges of the Anatomic-Pathologist in the Treatment of Breast Cancer: Rapid Biopsy and Sentinel Lymph Node

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Abstract

Introduction: Anatomico-pathologists are crucial in diagnosing and managing breast cancer. Rapid or frozen biopsy is essential for early malignancy detection and informs personalized treatment approaches. This study reviews the benefits and limitations of rapid biopsy based on literature and our experience at the American Hospital.

Material and Methods: We conducted a literature review on rapid biopsy techniques and compared our findings with clinical practices at the American Hospital.

Results: First performed in 1905 at the Mayo Clinic, rapid biopsy has evolved with minimal changes to its core principles. At the American Hospital, this technique is routinely utilized in breast cancer surgeries, with indications including tumor pathology confirmation and evaluation of sentinel lymph nodes. Contraindications include prior adequate diagnosis, small sample risks, and high infection concerns.

Conclusion: Rapid biopsy is vital for effective surgical management in breast cancer, enhancing decision-making on the operating table. Collaboration between surgeons and pathologists, including discussions on indications and contraindications, is essential for optimizing patient outcomes.

Keywords: Rapid biopsy, Frozen biopsy, Breast cancer, Sentinel lymph node

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OP – 111

Immunohistochemical Approach to Diagnosis of Soft Tissue Tumors of Lower Extremities, Review of Literature and Case Report.

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Abstract

Introduction: Soft tissue tumors have a wide range of morphological differentiation. The World Health Organization classification of tumors of soft tissue 2020 arranges these tumors into 12 groups according to their histogenesis. Tumor behavior is classified as benign, intermediate (locally aggressive/rarely metastasizing), and malignant.

In many cases, soft tissue tumors can be diagnosed by histopathological examination alone. Still, in some instances, the confusing morphology, despite all efforts, leaves the pathologist uncertain about the exact nature of the neoplasm.

In our practice, a general approach to reaching a definitive diagnosis of soft tissue tumors is first to evaluate the tumor's clinic-radiologic, histomorphologic, and cytomorphologic features to generate some differential diagnoses. As a next step, we need the help of ancillary techniques like immune histochemistry (IHC) to determine the final diagnosis. Although molecular/genetic testing is increasingly used to characterize soft tissue tumors, immune-histochemistry is indispensable in defining tumor

histogenesis. It serves as a surrogate for underlying molecular/genetic alterations.

Data Sources. The data were obtained from pertinent peer-reviewed English-language literature and the author's first-hand experience as a bone and soft tissue pathologist.

Conclusions: A pathologist's ultimate goal is to render a specific diagnosis that provides diagnostic, prognostic, and therapeutic information to guide patient care. Immunohistochemistry is integral to the diagnosis and management of soft tissue tumors.

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OP – 112

Primary Cavernous Hemangioma of the Thyroid Gland: A Series of 4 Cases and Review of Literature.

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Abstract

Introduction: Cavernous hemangiomas can arise nearly anywhere in the body where there are blood vessels. The primary hemangioma of the thyroid gland is extremely rare, and only a few cases have been previously reported. The true incidence of cavernous hemangiomas is challenging to estimate because they

are frequently misdiagnosed as other venous malformations. We will present 4 cases from the age of 38 to 72 diagnosed with cavernous hemangiomas. All 4 cases are women, and the diagnosis was established after total thyroidectomy by histopathological examination. They clinically present as asymptomatic cervical tumors and are occasionally fast-growing, especially if intra-tumoral bleeding is present.

Unlike capillary hemangiomas, cavernous ones can be life-threatening and do not regress. The true incidence of cavernous hemangiomas is challenging to estimate because they are frequently misdiagnosed as other venous malformations.

Histologically, cavernous hemangioma is a circumscribed proliferation of variably sized, dilated, and thin-walled vessels lined by a single layer of flat endothelial cells. No cytologic atypia or mitosis is observed in cavernous hemangioma. Vascular spaces separated by fibrous septa containing small vessels, focal thrombi, calcification, hyalinization, extra-medullary hematopoiesis, and stromal edema may be present.

Conclusion: Although primary hemangioma of the thyroid gland is extremely rare, it should be considered when there is a well-circumscribed capsule mass. Pre-operative diagnosis is difficult, as there are no specific pathognomic findings on radiological investigations or FNAC. A definitive diagnosis can only be achieved in postoperative preparation by histopathological examination.

Keywords: Cavernous hemangioma, Thyroid, Pathology, Histology.

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OP – 113

**Prognostic Features for
Histopathological Variants of Urothelial
Carcinoma of the Urinary Bladder. 2
Case Reports and Review of Literature.**

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Abstract

Introduction: Urothelial carcinoma of the urinary bladder is a common but highly heterogeneous malignancy. Various histopathological variants of urothelial carcinoma exhibit distinct morphologies and behaviors, influencing prognosis and therapeutic outcomes.

Materials and Methods: We present two case reports from urinary bladder carcinomas. The first case is a high-grade invasive urothelial carcinoma with a component of “signet ring” cells in a 58-year-old man. The tumor invaded the lamina propria, but there is no evidence of muscularis propria (pT1NxMx). The second case is of an intestinal-type adenocarcinoma of the urinary bladder with the invasion of the lamina propria and the muscular propria (pT2NxMx) at a 77-year-old man.

Results: Micropapillary urothelial carcinoma is associated with an aggressive clinical course, higher rates of lympho-vascular invasion, and worse overall survival compared to conventional urothelial carcinoma (Witjes et al., 2017). The plasmacytoid variant, known for its discohesive cells and diffuse growth pattern, carries a poor prognosis due to its high propensity for early metastasis and peritoneal spread (Sampson et al., 2018).

Keywords: histopathological variants, prognostic, urothelial carcinoma, urinary bladder

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OP – 114

**Melanocytic Tumors of Uncertain
Malignant Potential: Diagnosis and
Management**

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Abstract

Introduction: Melanocytic lesions are primarily diagnosed and classified through histopathological examination, which remains the gold standard. Most cases can be categorized as benign or malignant by identifying specific histological features, sometimes supplemented by immunohistochemical stains and molecular tests.

This study focuses on melanocytic lesions that exhibit cytoarchitectural atypia without meeting the criteria for melanoma diagnosis. These lesions are clinically referred to as borderline melanocytic lesions or atypical melanocytic proliferations of uncertain biological significance.

Classification: Terms such as Superficial Atypical Melanocytic Proliferation of Uncertain Significance (SAMPUS) and Melanocytic Tumor of Unknown

Malignant Potential (MeLTUMP) were introduced in 2004 and have been integrated into the WHO classification system, with updates in 2018 and the 5th edition in 2023.

Case Reports: We present two newly diagnosed cases of SAMPUS and MeLTUMP from our service, highlighting the need for a multidisciplinary approach involving collaboration between clinicians and pathologists.

Conclusion: These entities underscore the importance of a comprehensive diagnostic framework and the necessity for improved clinical management strategies for melanocytic tumors of uncertain malignant potential.

Keywords: Melanocytoma, SAMPUS, MeLTUMP

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OP – 115

Breast Lesions at Young Age, Histopathological Features and Assessment of Pathological Mechanisms. Vacuum-Assisted Breast Biopsy (VABB)

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Abstract

Introduction; Pathological conditions of the breast at young ages have a low incidence and are mostly benign. The histopathological recognition of their spectrum in these age groups has a diagnostic and as a result, a management importance. The follow-up and treatment of breast lesions at young ages is different compared to older age groups. During the diagnosis of these lesions, we must keep in mind, in addition to the essential histopathological features, the possibility of the presence of unclear malignant potential lesions or malignant lesions, as happened in the cases of the patients in our study.

The patients in our study are in the 20-30 age group, with different clinical diagnoses, histopathological diagnoses, and clinical histories. Their histopathological diagnoses include benign lesions, primary malignant disease, metastatic disease, and lesions with low potential malignant transformation (B3 lesions).

The purpose of this presentation is to present a histopathological view of the common and atypical features of breast lesions at young ages, the increased attention and diagnostic management in this entity, and the high and double sensitivity that breast pathologies and young-age groups carry.

In the context of improvement and diagnostic accuracy, especially in these pathologies, vacuum-assisted breast biopsy (VABB) has an important place in the guidelines for the management of breast lesions, mainly B3 lesions. With a high compatibility of imaging-histopathology, reduction of the error in sampling and as an alternative to surgical biopsy, this diagnostic entity requires the cooperation of the professional and structural component

Keywords: breast lesions, young age, VABB

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2. Mohanty, S. K. (2020). Role of vacuum-assisted breast biopsy in management of breast lesions: A review. *The Breast Journal*, 26(6), 1202-1208. DOI: 10.1111/tbj.13865.

OP – 116***How Smartphones and Video Games Influence Children's Eating Behavior and Obesity***

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Abstract

Introduction: The increasing prevalence of smartphones and video games in children's daily lives has sparked concerns about their potential impact on health, particularly regarding eating behavior and obesity. This study aims to explore the relationship between screen time from smartphones and video gaming and its influence on dietary habits, physical activity levels, and the risk of obesity in children.

The sedentary nature of these activities often leads to prolonged periods of inactivity, reduced physical exercise, and unhealthy snacking patterns, contributing to weight gain. Furthermore, exposure to food advertising within video games and online platforms may influence children's food preferences, increasing the likelihood of consuming calorie-dense, nutrient-poor foods.

A cross-sectional study involving 300 children aged 6-12 examined their screen time habits, dietary intake, physical activity, and body mass index (BMI). Results indicated a significant association between excessive screen time (more than 3 hours per day) and increased consumption of sugary snacks and fast food and decreased fruit and vegetable intake.

Conclusion: This study highlights the influence of smartphones and video games on unhealthy eating behaviors and the risk of obesity in children. It

underscores the need for interventions to promote balanced screen time, healthier food choices, and increased physical activity to prevent obesity in this vulnerable age group.

Keywords: smartphones, video games, children, eating behavior, obesity, screen time, physical activity, dietary habits.

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OP – 117***Deeper Exploration of the Significant Correlations Between COVID-19 and Pregnancy: Latest Research Findings and Key Areas of Concern***

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Abstract

Introduction: The COVID-19 pandemic has posed unprecedented challenges to healthcare systems worldwide, particularly in vulnerable populations such as pregnant women. Pregnancy's physiological changes, including hormonal fluctuations and a modulated immune response, may increase susceptibility to severe outcomes for both mother and fetus.

This study aims to evaluate the impact of COVID-19 on pregnancy outcomes at the University Hospital of Obstetrics and Gynecology 'Queen Geraldine.' Key

areas of focus include the incidence of severe maternal illness, complications such as preterm birth, vertical transmission, placental abnormalities, and the protective role of vaccination.

Materials and Methods: A retrospective cohort study was conducted. The study population included pregnant women hospitalized with confirmed COVID-19 infection between January 2020 and December 2021. Inclusion criteria were COVID-19 diagnosis during pregnancy, hospitalization due to COVID-19-related complications (e.g., respiratory distress, preeclampsia), and a gestational age of ≥ 20 weeks at the time of admission.

Results: A total of 83 pregnant women were included in the study.

Maternal Outcomes: 42% required ICU admission, and 7% necessitated mechanical ventilation. No maternal mortality was observed. Preeclampsia or eclampsia developed in 1.2%, and 3.6% experienced thrombotic events. Preterm birth occurred in 13% of pregnancies, and 66% of the women underwent cesarean sections, mainly due to fetal distress or maternal health deterioration.

Conclusion: This retrospective study underscores the substantial impact of severe COVID-19 on pregnancy outcomes. Pregnant women with severe COVID-19 were at increased risk for complications such as preterm birth, preeclampsia, and placental abnormalities.

Keywords: COVID-19, Pregnancy outcomes, Preterm birth, Vertical transmission, Placental abnormalities

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OP – 118

Update on Anti-Aging Facial Surgery

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Abstract

Introduction: As the demand for facial rejuvenation grows, advancements in anti-aging surgery focus on restoring youthful contours and improving skin quality. Innovations in techniques and technologies have enhanced both results and recovery. This study provides an update on the latest trends in anti-aging facial surgery, focusing on surgical techniques, minimally invasive methods, and patient outcomes.

Materials and Methods: This study reviewed recent literature and clinical data from patients undergoing facelifts, brow lifts, blepharoplasty, and fat grafting between 2020 and 2023. It analyzed patient satisfaction, complication rates, and result durability.

Results: Advances in deep-plane facelifts, fat grafting, and short-scar techniques yield natural results with fewer complications. Minimally invasive methods like thread lifts offer quick recovery but with shorter-lasting effects. **Conclusion:** Combining traditional surgery with minimally invasive techniques improves outcomes in anti-aging facial procedures, providing natural results with shorter recovery times. Future developments will focus on further reducing invasiveness while maintaining effectiveness.

Keywords: Anti-aging surgery, Facelift, Facial rejuvenation, Brow lift, Blepharoplasty

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OP – 119**Post-operative Pain After Hernioplasty**

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Abstract:

Introduction: Hernioplasty, a standard surgical procedure for repairing inguinal and other hernias, is generally associated with significant postoperative pain. Effective postoperative pain management is crucial to enhancing recovery, improving patient satisfaction, and reducing the risk of complications. Understanding the factors influencing pain intensity and duration can help optimize treatment strategies. This study aims to evaluate postoperative pain's incidence, severity, and duration following hernioplasty and assess the effectiveness of different pain management strategies. The goal is to identify best practices for minimizing pain and promoting quicker patient recovery.

Materials and Methods: A prospective cohort study was conducted on 150 patients who underwent elective hernioplasty at a tertiary care center between January 2021 and December 2023. Pain levels were measured using the Visual Analog Scale (VAS) at 6-, 24-, and 48 hours post-surgery and then at 1-week, 1-month, and 3-month follow-ups. Patients were divided into groups based on the pain management protocols used: standard analgesia (NSAIDs and opioids) versus multimodal analgesia, which included nerve blocks and local anesthetics. Data were analyzed using SPSS for statistical significance, with $p < 0.05$ considered significant.

Results: The study showed that 65% of patients reported moderate to severe pain within the first 24 hours post-surgery. However, patients who received multimodal analgesia had significantly lower pain

scores (VAS < 3) at all post-operative time points compared to those receiving standard analgesia ($p < 0.01$). By the 1-month follow-up, chronic pain (lasting longer than 4 weeks) was present in 15% of patients, with a notable reduction in the multimodal group (5%) compared to the standard group (25%).

Conclusions: Post-operative pain following hernioplasty can be effectively reduced by implementing multimodal analgesia techniques, including nerve blocks and local anesthetic infusions. This approach not only minimizes acute pain but also significantly decreases the risk of chronic post-herniorrhaphy pain after hernia repair surgery.

Keywords: Hernioplasty, Post-operative pain, Pain management, Multimodal analgesia, Chronic pain, Visual Analog Scale (VAS).

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OP – 120**Onychomycosis: Current Trends in Diagnosis, Treatment, and Prevention of Recurrence**

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Abstract

Introduction: Onychomycosis, a fungal infection affecting the nails, is a prevalent condition that significantly impacts quality of life and poses ongoing treatment challenges due to its high recurrence rates.

Recent advancements in diagnostic techniques, including molecular testing and dermoscopy, have enhanced the accuracy and speed of diagnosing this condition, enabling earlier intervention.

This review explores the latest trends in the diagnosis, treatment, and prevention of onychomycosis, focusing on innovative antifungal therapies and the role of combination treatments. While traditional oral and topical antifungals remain the cornerstone of treatment, newer agents such as efinaconazole and laser therapy have demonstrated promising results. Additionally, a growing emphasis on prevention strategies—such as addressing predisposing factors, improving patient adherence, and applying antifungal prophylaxis—has shown potential in reducing recurrence rates.

Despite advancements, the high recurrence rate in onychomycosis remains a concern, warranting further research into long-term management approaches and personalized treatment plans. This review highlights the importance of integrated strategies combining early diagnosis, effective treatment, and preventive measures to minimize recurrence and improve patient outcomes.

Conclusion: Onychomycosis continues to pose significant challenges in dermatological practice due to its persistence, resistance to treatment, and high recurrence rates. Integrating advanced diagnostic tools and innovative treatment options has improved patient outcomes, yet recurrence remains a major hurdle.

Keywords: Onychomycosis, nail fungus, antifungal therapy, efinaconazole, laser treatment,

References

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OP – 121

Summer Diarrhea in Children Living in Europe During Holidays in Their Parents' Countries of Origin.

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Abstract:

Introduction: Summer diarrhea is a common health issue among children, especially those traveling to countries with different environmental and sanitary conditions. Children living in Europe who spend holidays in their parents' countries of origin may be at increased risk due to exposure to unfamiliar pathogens, water sources, and dietary habits.

This study investigates the prevalence, risk factors, and common pathogens associated with summer diarrhea in European-resident children who travel to their parents' native countries during the holiday season.

Material and Methods: A retrospective analysis was conducted on pediatric cases of diarrhea reported during the summer months. Data was collected from medical records of children living in Europe who spent their holidays in various countries of origin. Factors such as water quality, hygiene practices, dietary changes, and common pathogens (e.g., *E. coli*, rotavirus, and *Giardia*) were examined.

Results: A significant proportion of children studied developed gastrointestinal symptoms, with diarrhea being the most prevalent. The incidence was higher in countries with less access to clean water and proper sanitation. Common pathogens identified included

bacterial (*E. coli*, *Shigella*) and viral (rotavirus, norovirus) agents, as well as parasitic infections (*Giardia*, *Entamoeba histolytica*). Dietary changes, consumption of unfiltered water, and inadequate hygiene practices were the primary risk factors contributing to illness.

Conclusion: Children residing in Europe who spend holidays in their parent's countries of origin are at higher risk of contracting summer diarrhea due to exposure to different pathogens and environmental conditions. Preventive measures, including education on safe food and water consumption and improving hygiene practices, are crucial in reducing the incidence of diarrhea in this population. Public health initiatives and awareness campaigns tailored to these families may help mitigate the risk of summer diarrhea and its associated complications.

Keywords: Summer diarrhea, Pediatric gastroenteritis, Travel-associated diarrhea, Children living in Europe, Hygiene practices

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OP – 122

Nosocomial Infections Related with Antimicrobial Resistance, Global Emergency of the Future.

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Abstract

Introduction: Antimicrobial resistance is a global emergency for the future, from common infections to life-saving procedures. Antimicrobial Resistance (AMR) occurs when bacteria, viruses, fungi, and parasites no longer respond to antimicrobial medicines. As a result of drug resistance, antibiotics and other antimicrobial medicines become ineffective, and infections become difficult or impossible to treat, increasing the risk of disease spread, severe illness, disability, and death. AMR is a natural process that happens over time through genetic changes in pathogens. Intensive care units (ICUs) have become hubs of nosocomial infections, and there has been a continuous rise in the development of antimicrobial resistance among ICU-acquired infections. Notably, the Gram-negative bacteria implicated in ICU-acquired infections have become antibiotic-resistant, leading to a critical therapeutic problem. The present study was conducted to determine the antimicrobial resistance pattern of microorganisms causing nosocomial infections in catheter-associated urinary tract infections [CAUTI].

Materials and Methods: This prospective observational cohort study included patients with ICU stay ≥ 48 h and CAUTI infection. The appropriate specimen was collected and cultured according to the standard procedure. The antimicrobial susceptibility of all the bacterial isolates recovered from the samples was performed according to the Clinical and Laboratory Standards recommendations. The antimicrobial resistance data were analyzed using M.L.D.

Results: Gram-negative microorganisms were the principal pathogens causing various infections in the ICU, with *Pseudomonas aeruginosa* and *Klebsiella* spp being the commonest. Most Gram-negative bacteria showed a high degree of resistance to most antibiotics. Colistin, meropenem, and tigecycline were observed to be the most effective antimicrobials.

Conclusion: Antimicrobial resistance was very high among the pathogens causing nosocomial infections in the ICU, especially Gram-negative bacteria, which demonstrated a substantially high degree of resistance to most antibiotics. Antibiotic stewardship will help control the emergence of multidrug-resistant microbes.

Keywords: Antibiotic resistance, Gram-negative bacteria, intensive care unit-ICU, nosocomial infections,

Reference

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OP – 123

Fractures of the Tibial Pilon: The Three-Column Concept

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Abstract

Introduction: Tibial pilon fractures are high-energy injuries localized in the distal region of the tibia. First described by French surgeon Etienne Destot in 1911, these fractures typically result from severe trauma, such as motor vehicle accidents or falls from significant heights. They account for 3-10% of all tibial fractures and approximately 1% of fractures in the lower extremities.

Several classification systems exist for tibial pilon fractures, with the Ruedi-Allgower and AO classifications being the most widely used in clinical practice. Treatment methods are diverse and selection often poses a challenge due to the complexity of these

injuries. The three-column concept offers a more structured approach to fracture management, providing a basis for selecting appropriate treatment strategies and potentially improving outcomes.

In 90% of cases, tibial pilon fractures are associated with concurrent fibula fractures. Preoperative imaging, mainly CT scans, is crucial for assessing fracture patterns and determining the condition of the surrounding soft tissue, which significantly influences the treatment plan. Additionally, 6% of these fractures occur in polytrauma patients, necessitating the application of Advanced Trauma Life Support (ATLS) protocols to ensure comprehensive management.

Conclusion: Tibial pilon fractures present a significant challenge due to their complexity and association with high-energy trauma. Adopting the three-column concept offers a valuable framework for surgical planning, enhancing decision-making in managing these fractures. Preoperative CT imaging and careful assessment of soft tissue conditions remain crucial in guiding treatment strategies. Integrating this concept into clinical practice can potentially improve outcomes, especially in cases involving polytrauma or associated fibular fractures.

Keywords: Tibial pilon fractures; Three-column concept; High-energy trauma; Ruedi-Allgower classification

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OP – 124***Most Convenient Surgical Treatment of Periprosthetic Femur Fractures Arising after Hip Arthroplasty***

Aleksandar Saveski, Aleksandar Trajanovski, Ilir Hasani, Andreja Gavrilovski, Rezeart Dalipi, Ilir Shabani, Budikj B, Eren Seyfula, Kornelija Gjorgjieska, Simona Karapandzevska

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Abstract:

Introduction: The increasing indications for total hip arthroplasty (THA) have resulted in a rising number of implants in younger and older patients with high functional demands. Periprosthetic femoral fractures (PFFs) after THA are becoming more common, with reported incidences ranging from 1% to 11% after primary THA and up to 18% following revision surgeries. This rise in PFFs is further driven by prolonged life expectancy and the growing number of hip arthroplasties performed.

The Vancouver classification, introduced in 1995 by Duncan and Masri, remains the most widely used system for guiding the surgical management of PFFs. The treatment approach for these fractures is influenced by five key factors: fracture location, implant and fracture stability, bone quality, patient-specific factors (age, comorbidities, functional demands), and surgeon expertise. PFFs can occur intra-operatively or post-operatively. Intra-operative PFFs occur in less than 1% of cemented THA cases but are more common in uncemented THA, with an incidence of 5.4%. This risk increases in revision surgeries, with PFFs occurring in up to 3.6% of cemented cases and 20.9% of uncemented cases. Post-

operative PFFs are often associated with stem loosening, with or without osteolysis, typically following low-energy trauma. This study aims to present the most effective and appropriate surgical treatment approaches for patients with PFFs following total hip arthroplasty based on the clinical experience from multiple case reports at our institution.

Keywords: femoral fractures, total hip arthroplasty, periprosthetic, Vancouver classification, low-energy trauma, cemented, uncemented, surgical management.

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OP – 125***Free Avascular Fibular Grafts as a Solution for Forearm Gunshot Wounds***

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Abstract:

Introduction: Reconstruction of large bone defects due to trauma, such as gunshot wounds, poses a significant surgical challenge. Despite advancements in bone substitutes, endoprostheses, and distraction osteogenesis, bone grafts remain the gold standard for complex reconstructive cases. Free avascular fibular grafts (FVFGs) have shown remarkable efficacy, particularly in treating extensive bone defects more

significant than 6 cm where conventional methods have failed. These grafts also manage avascular necrosis (AVN) of the femoral head, failed spinal fusions, and complex arthrodesis.

Methods and Techniques: The fibula, with its long, straight structure and tricortical profile, is well-suited for reconstructing defects in long bones, including the forearm. It can be harvested in sizes up to 3 cm by 40 cm, allowing precise anatomical fit for forearm defects and integration into the medullary canals of larger bones such as the humerus, femur, and tibia. The technique can involve single or double-barreled constructs depending on the defect size. In most cases, fibular grafts and recipient bones unite successfully, healing similarly to a simple fracture.

Discussion: This study highlights the versatility and reliability of FVFGs for limb salvage and reconstruction in complex cases such as gunshot wounds (sclopetar wounds). It discusses the graft's applied anatomy, indications, operative techniques, complications, and donor-site morbidity. Though technically demanding, FVFG offers a robust solution for severe bone loss, facilitating functional limb restoration where other treatments may fail.

Conclusion: Free avascular fibular grafting is a highly effective option for reconstructing severe bone defects in complex trauma cases, providing biological and structural stability for successful limb reconstruction.

Keywords: avascular fibula, bone graft, limb reconstruction, gunshot wound, sclopetar wound, forearm defect, surgical reconstruction

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OP – 126

Treatment of Acetabular Fractures with or without Concomitant Injuries

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Abstract

Between 2017 and 2024, we treated 24 cases of acetabular fractures, many of which were accompanied by other musculoskeletal and visceral injuries. This study analyzed the fracture types, associated injuries, operative times, bone quality, comorbidities, surgical techniques, and early and late postoperative complications. Fracture classification followed the AO and Letournel systems, and radiological evaluations were performed to support the surgical approaches applied.

Among the patients, 14 presented with isolated acetabular fractures, with or without traumatic hip dislocation and additional pelvic fractures. The remaining 10 patients had concomitant lower or upper limb fractures, as well as visceral injuries.

Results showed that 45% of patients had excellent outcomes, 30% had good outcomes, 5% had fair outcomes, and 20% had poor outcomes. Poor results were associated with advanced age, delayed surgery, poor bone quality, obesity, and related visceral injuries. Good outcomes were linked to successful bone repositioning and fixation using ORIF (open reduction and internal fixation) and external fixation, where surgeons employed advanced techniques and specialized medical equipment.

Conclusion: The treatment of acetabular fractures, particularly when accompanied by other injuries, remains a challenge that requires a highly skilled surgical team and multidisciplinary approach. The factors influencing successful outcomes include

timely intervention, bone quality, and effective fixation techniques. Proper patient management, including addressing comorbidities and associated injuries, is essential to improve prognosis and reduce postoperative complications. Given the complexity of these cases, expert care is crucial to achieving favorable results.

Keywords: acetabular fractures, polytrauma, ORIF, pelvic fractures, visceral injuries, surgical management, bone quality

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OP – 127

Arthroscopic Repair of the Anterior Talofibular Ligament in Patients with Chronic Lateral Ankle Instability

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Abstract

Introduction: Chronic lateral ankle instability is commonly associated with a complete tear of the anterior talofibular ligament (ATFL), with an additional calcaneofibular ligament (CFL) tear occurring in approximately 20% of cases. Arthroscopic techniques have gained popularity for

treating lateral ankle instability, but they can be technically challenging.

Material and Methods: Eleven patients [8 males and 3 females, median age 22 years (range 18–44)] with chronic ankle instability and ATFL tears were included after failing non-operative treatments. All patients underwent an arthroscopic all-inside ATFL repair using a single suture anchor. The median follow-up period was 6 months (range 3–8 months).

Results: Arthroscopic examination confirmed ATFL tears in all cases. Postoperative evaluations showed significant subjective improvement in ankle stability. Both the anterior drawer and talar tilt tests were negative at follow-up. The median American Orthopedic Foot and Ankle Society (AOFAS) score improved from 65 (range 52–85) preoperatively to 97 (range 85–100) postoperatively.

Conclusion: Arthroscopic all-inside repair of the ATFL is a safe and effective technique for treating chronic lateral ankle instability, significantly improving stability and functional outcomes.

Keywords: Chronic lateral ankle instability, anterior talofibular ligament repair, arthroscopy, all-inside repair, postoperative outcomes.

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OP – 128

Pathological Fracture of the Femoral neck in a patient with Charcot-Marie-Tooth Disease

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Abstract

Background: Charcot-Marie-Tooth disease (CMT, ICD G-60.0) is an inherited sensorimotor neuropathy characterized by damage to peripheral nerves, which impairs the transmission of signals between the brain, spinal cord, and body.

Case Presentation: This case report discusses a patient with CMT who sustained a pathological fracture of the femoral neck. Patients with CMT are at increased risk of such fractures due to muscle weakness and impaired proprioception, leading to falls and subsequent injuries.

Management: Given the high risk of complications, including intraoperative bleeding and infections, early and appropriate management of pathological fractures is crucial. Surgical intervention, specifically total hip arthroplasty, has been shown to enhance the quality of life in affected individuals significantly. This patient underwent a dual mobility hip prosthesis, resulting in favorable outcomes and improved mobility post-operatively.

Conclusion: Pathological fractures in patients with Charcot-Marie-Tooth disease require prompt diagnosis and intervention. Surgical treatment, including hip arthroplasty, can significantly improve a patient's quality of life, allowing for continued rehabilitation and physical therapy.

Keywords: Femoral neck fracture, Charcot-Marie-Tooth disease, total hip arthroplasty, dual mobility prosthesis, rehabilitation, physical therapy.

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OP – 129

Fractures of the Femur: Treatment Characteristics for Ages 2-5 Years

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Abstract:

Introduction: Our study on femoral fractures in young children, particularly those aged 2 to 5 years, has revealed some significant findings. These young patients present unique challenges and considerations in treatment due to their differences in anatomy, biomechanics, and developmental stages compared to older patients. The study aimed to evaluate the treatment characteristics of femoral fractures in this age group, focusing on the types of fractures, treatment modalities, and clinical outcomes. We conducted a retrospective review of pediatric patients treated for femoral fractures at our institution over five years. The study included demographic data, fracture classification, treatment methods (casting, bracing, and surgical intervention), and follow-up outcomes, including complications and functional recovery. Our findings indicate that the most common types of femoral fractures in children aged 2 to 5 are diaphyseal fractures, often resulting from falls or non-accidental trauma. Non-operative management remains the primary approach for most cases, with surgical interventions reserved for specific indications such as unstable fractures or those not responding to conservative treatment. The study highlights the importance of age-appropriate treatment strategies to ensure optimal healing and minimize complications. Understanding the unique characteristics of femoral fractures in this pediatric age group can ultimately enhance clinical decision-making and improve outcomes.

Conclusion: Femoral fractures in children aged 2 to 5 years require careful consideration of treatment options tailored to their unique anatomical and developmental characteristics. Our study reveals that while diaphyseal fractures are the most prevalent, non-operative management is generally adequate for the majority of cases. Surgical interventions should be considered selectively for unstable fractures or those not responding to conservative treatments. By emphasizing age-appropriate strategies, we can potentially improve healing and functional recovery, thereby minimizing complications associated with femoral fractures in this vulnerable pediatric population. This hopeful outlook underscores the potential for improved outcomes in treating femoral fractures in children aged 2-5 years.

Keywords: Femoral fractures, pediatric fractures, treatment characteristics, children aged 2-5 years, non-operative management, surgical intervention, fracture classification, functional recovery, complications, developmental considerations.

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OP – 130

3D Rendering, Augmented Reality, and Artificial Intelligence: Advances in Complex HPB Surgery

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Abstract

Technological advancements, including 3D Rendering, Augmented Reality (AR), and Artificial Intelligence (AI), have revolutionized complex hepatopancreatobiliary (HPB) surgery. These innovations are now integral to the field, particularly in managing parenchymal organs, where the intricate vascular and biliary structures are concealed by tissue.

This presentation explores how these technologies enhance surgical precision, from preoperative planning to intraoperative navigation, and facilitate better doctor-patient communication. Their impact extends to educational purposes, providing new generations of surgeons with cutting-edge training tools. The session will showcase several highly complex HPB surgical cases, demonstrating how these technologies improve surgical outcomes, reduce complications, and contribute to the evolution of modern surgery.

Keywords: 3D Rendering, Augmented Reality, Artificial Intelligence, HPB Surgery, Preoperative Planning, Intraoperative Navigation.

OP – 131

When Suspected Gossypiboma on Computed Tomography Turns Out to Be a False Alarm.

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Abstract:

Introduction: Gossypiboma, also known as a retained surgical sponge, is a rare but severe complication of

surgery that can lead to significant morbidity. Computed tomography (CT) is an essential imaging modality in detecting suspected gossypiboma, characterized by specific radiological features. However, not all CT findings suggestive of gossypiboma are confirmed surgically, leading to diagnostic challenges.

This study aims to analyze cases where CT findings initially suggest gossypiboma, but subsequent surgical exploration or further investigation reveals alternative diagnoses. The goal is to identify CT's limitations in diagnosing gossypiboma and highlight potential differential diagnoses.

Material and Methods: A retrospective review was conducted on patients referred for suspected gossypiboma based on CT imaging between 2015 and 2023 at a tertiary care hospital. CT characteristics such as spongiform appearance, encapsulation, and gas bubbles were compared with surgical outcomes or histopathological results. Cases, where gossypiboma was ruled out, were analyzed to determine alternative diagnoses and the underlying reasons for misdiagnosis.

Results: Among the 25 cases reviewed, 8 (32%) were suspected to have gossypiboma based on CT imaging. Of these, 5 (20%) did not result in gossypiboma upon surgical exploration. The alternative diagnoses included chronic abscesses, granulomatous reactions, tumor necrosis, and foreign body reactions unrelated to surgical sponges. In these cases, inflammatory changes, foreign material, and complex abscess formations mimicked the CT appearance of gossypiboma. Misinterpretation of radiological signs, particularly in the context of previous surgeries, contributed to the diagnostic discrepancies.

Conclusion: While CT remains a valuable tool for identifying suspected gossypiboma, it is not infallible. A significant percentage of cases suspected based on CT findings were found to have alternative diagnoses upon further investigation. This study emphasizes the importance of correlating imaging findings with

clinical history, laboratory results, and, where necessary, surgical exploration to avoid unnecessary procedures and ensure accurate diagnosis.

Keywords: Gossypiboma, Retained surgical sponge, Computed tomography (CT), Radiological misdiagnosis, Surgical complications

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OP – 132

Colorectal Cancer in a Developing Country: A Call to Action in Kosovo – Our Experience

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Abstract

Introduction: Colorectal cancer (CRC) accounts for 10% of global cancers, ranking second in women and third in men. In Kosovo, a developing country, the

incidence of CRC has been rising due to lifestyle changes and limited awareness.

Aim: To highlight the increasing trend of CRC incidence and outcomes from surgical treatment in Kosovo.

Material and Methods: A retrospective analysis of 165 CRC cases surgically treated at a single tertiary center in 2022–2023. Data were compared to institutional records from earlier periods (1980s, post-war 1999–2004).

Results: In the recent study, CRC cases increased from 34–53 annually (past periods) to 165. Tumor localization was rectosigmoid (69%), right colon (17.5%), and left colon (6.6%). The majority of patients (64%) were over 60 years old. Despite advanced-stage presentations, radical surgery was performed in collaboration with oncology teams.

Conclusion: The rising incidence of CRC in Kosovo underscores the urgent need for awareness campaigns, preventive measures, and early detection programs. Establishing a national cancer control strategy with widespread screening and public education is vital to addressing this public health challenge.

Keywords: colorectal cancer, awareness, surgery, early detection.

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OP – 133

Acute Appendicitis is an Uncommon Complication of Infectious Diseases.

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Abstract

Introduction: Acute appendicitis is one of the intra-abdominal pathologies that requires urgent surgical intervention in general surgery clinics. Appendectomy is the most common emergency general surgical procedure, with more than 25,000 operations performed annually in the United States. The etiology of this pathology includes both infectious and non-infectious causes. Several infectious diseases are complicated, have a first manifestation, or can imitate acute appendicitis.

Methods: We looked at the literature for all infectious pathologies that complicate acute appendicitis.

Results: Investigations suggested that some viruses, including measles virus, influenza virus, dengue fever virus, human immunodeficiency virus, human herpesviruses, rotavirus, and adenovirus, are associated with acute appendicitis. Appendicitis is a very rare complication of varicella. Cases of acute appendicitis after dengue virus infections have been documented, as well as cases of typhoid fever associated with acute appendicitis. During the swine flu (H1N1) pandemic of 2009, some patients manifested gastrointestinal symptoms. Some reports noted an increased incidence/severity of acute appendicitis during influenza. Parasitic infection is a very rare etiology of appendicitis, and it is mainly encountered in endemic areas. The relationship between acute appendicitis and parasitic infections is unclear, although rare cases of acute appendicitis caused by *Enterobius vermicularis* have been reported. Also, Brucellosis should be considered in epidemiologically exposed patients who present an acute abdomen of the acute appendicitis type because it will lead to the avoidance of an unnecessary surgical

procedure. As well as, patients with Crimean Congo hemorrhagic fever manifest acute abdominal pain simulating acute appendicitis and where examinations such as exploratory laparotomy reveal hemorrhages within the abdominal muscles.

Conclusion: Infectious pathologies should be sought in patients with abdominal pain as manifestations of an acute abdomen or imitation of acute appendicitis but who also have data for epidemiological exposures.

Keywords: acute abdomen, appendicitis acute, zoonotic infection, viruses, parasitic infections.

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OP – 134

Acute Abdominal Pain: A Challenge in Pediatric Surgery

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Abstract

Introduction: Acute abdominal pain in children poses significant diagnostic and management challenges for pediatric surgeons. Due to the varied etiology and presentation of abdominal pain in this age group, timely diagnosis and intervention are critical to prevent complications and ensure optimal outcomes.

Material and Methods: A literature review examined recent studies and clinical guidelines on acute abdominal pain in children.

Results: The most frequent causes of acute abdominal pain in children include appendicitis, intestinal obstruction, and mesenteric lymphadenitis. However, atypical presentations can lead to misdiagnosis, emphasizing the necessity for thorough clinical evaluation, including imaging studies and laboratory tests. Surgical intervention remains a cornerstone in cases where conservative management is insufficient, particularly in diagnosing conditions like acute appendicitis or perforated viscus.

Conclusions: Pediatric surgeons face unique challenges in managing acute abdominal pain, necessitating a high index of suspicion and a systematic approach to diagnosis. Early recognition of surgical emergencies and appropriate intervention can significantly improve outcomes.

Keywords: Pediatric surgery, acute abdominal pain, appendicitis, diagnostic challenges, surgical intervention.

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OP – 135

Management of Maxillofacial Trauma: Condylar Fractures, Post-Traumatic Deformities, Ankylosis, and Advanced Treatment Modalities

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Abstract

Introduction: Maxillofacial trauma involving the mandibular condyle presents significant challenges due to the complexity of the temporomandibular joint's (TMJ) and its crucial role in both functional and aesthetic outcomes. This presentation focuses on the comprehensive management of condylar fractures and their sequelae, including post-traumatic deformities and ankylosis. Condylar fractures, a frequent consequence of maxillofacial trauma, may result in complications such as malocclusion, facial asymmetry, and TMJ dysfunction if inadequately treated.

The presentation will review clinical cases to demonstrate critical decision-making processes in selecting the most appropriate treatment strategies. The focus will be on optimizing both functional recovery and facial aesthetics. Additionally, the lecture will discuss emerging trends in surgical technology, including virtual surgical planning and patient-specific implants, which are shaping the future of maxillofacial trauma management.

This comprehensive overview aims to provide maxillofacial surgeons with insights into foundational techniques and cutting-edge advancements for addressing the multifaceted challenges associated with condylar trauma and its complications.

Conclusion: The management of maxillofacial trauma involving the condyle can achieve optimal functional and aesthetic outcomes through a combination of traditional and advanced treatment modalities. Innovations in digital technology and patient-specific approaches are increasingly critical in enhancing surgical precision and improving patient care.

Keywords: Maxillofacial trauma, Condylar fractures, Temporomandibular joint (TMJ) dysfunction, post-traumatic deformities

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Journal of Oral and Maxillofacial Surgery, 59(4), 370-375.
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OP – 136

The Management of Inflammatory Processes in the Oro-Maxillofacial Region

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Abstract

This study is critical because it is unique in its focus on managing inflammatory processes in the Oro-maxillofacial (OMF) region. Providing evidence on the approaches taken in various clinical cases contributes to the understanding and potential improvement of Oro-maxillofacial health.

Material and Methods: Data from 48 patients were analyzed, focusing on patient demographics, medical history (anamnesis morbi e vitae), objective intraoral and extraoral examinations, and the clinical management of each case.

Results; All 48 cases were of odontogenic origin, with most female patients. Inflammations were slightly more frequent in the maxilla. Molars were the most commonly involved teeth, and the most frequently affected area was the submandibular region. Surgical treatment was required in most cases, while a significant portion was managed with antibiotic therapy alone.

Conclusions: The early diagnosis and prompt treatment of infections in the oro-maxillofacial region are essential for preventing complications and restoring function. Although treatment was often initiated without antibiogram results, most infections were successfully managed. This success should reassure the reader about the effectiveness of the

management strategies presented in this study. In hospitalized cases, antibiograms significantly aided in selecting appropriate antibiotics, leading to faster recovery times.

Keywords: inflammatory processes, drainage, incision, lodge, antibiotic therapy.

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OP – 137

The Role of Antibiotics in Oral Surgery

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Abstract:

Introduction: The prudent use of antibiotics in oral surgery is essential for preventing postoperative infections and ensuring positive patient outcomes. Antibiotic prophylaxis is critical in reducing infection risk, particularly in surgeries involving bone manipulation, dental implant placement, or in patients with compromised immune systems. This study outlines the indications, benefits, and potential complications of antibiotic use in oral surgical procedures.

Antibiotics are essential in high-risk cases, such as patients with systemic health conditions like diabetes or immunocompromised individuals, extensive surgical procedures like bone grafting or sinus lifts, or when foreign materials like dental implants are introduced into the oral cavity. Commonly prescribed

antibiotics include beta-lactams (e.g., penicillin), lincosamides (e.g., clindamycin), and nitroimidazoles (e.g., metronidazole), selected for their effectiveness against prevalent oral pathogens.

Antibiotics prevent postoperative infections in oral surgery, particularly in high-risk patients and complex procedures. However, their use must be guided by evidence-based protocols to avoid unnecessary complications such as antibiotic resistance, allergic reactions, and disturbances in the normal flora.

Keywords: oral surgery, antibiotics, antibiotic prophylaxis, postoperative infections, antimicrobial resistance, infection control, dental implants, osseous manipulation, antibiotic stewardship

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OP – 138

Piezosurgery Versus Burs in Surgical Management of Malocclusion Class III.

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Abstract

Introduction: Piezosurgery, a relatively new oral and maxillofacial surgery technique, offers the potential to improve patient outcomes significantly. Its precise and accurate osteotomy capabilities and potential advantages over traditional burs methods, such as

reduced trauma to surrounding tissues and faster healing, have garnered attention in the field.

Materials and Methods: This comprehensive study, which includes 20 patients who underwent orthognathic surgery at the Maxillofacial Surgery Service, Amavita Hospital, between 2022 and 2024, provides a detailed comparison. Ten patients were operated on using piezosurgery, while the remaining ten were treated with traditional burs. **Results:** Compared to those operated on with burs, patients treated with piezosurgery exhibited reduced edema and hematoma and fewer postoperative complications. However, piezosurgery was associated with longer operation times and higher costs.

Conclusions: Piezosurgery offers several advantages over traditional osteotomy with burs, particularly in minimizing postoperative complications. Despite the increased cost and time, it can be considered a superior technique in treating Class III malocclusion, leaving us with hope and anticipation for the future of oral and maxillofacial surgery.

Keywords: Piezosurgery; Class III malocclusion; orthognathic surgery; osteotomy;

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OP – 139

Infection in Musculoskeletal Surgery: Prevention, Management, and Outcomes

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Abstract

Introduction: Infection following musculoskeletal surgery remains one of the most serious complications, often leading to prolonged hospital stays, increased healthcare costs, and compromised patient outcomes. Surgical site infections (SSIs) and periprosthetic joint infections (PJIs) are the most prevalent, posing significant challenges due to the complexity of bone and joint infections, the presence of foreign materials (e.g., implants), and the potential for chronicity. Effective prevention and management strategies are critical to minimize infection risks and optimize surgical outcomes.

This review discusses the risk factors associated with infection in musculoskeletal surgery, including patient comorbidities, prolonged operative time, and the use of implants. Preventive measures, such as perioperative antibiotic prophylaxis, meticulous surgical technique, and advanced infection-resistant implants, are highlighted. Furthermore, early diagnosis through clinical, microbiological, and imaging modalities is emphasized to ensure timely intervention.

Current treatment approaches for infected musculoskeletal tissues include debridement, implant retention or removal, local and systemic antibiotic therapy, and revision surgery or amputation in severe cases. The role of biofilm in persistent infections and the development of novel antimicrobial coatings and therapies are also explored. Emerging technologies, such as bacteriophage therapy and immune-modulating treatments, offer potential new avenues for managing complex infections.

Conclusions: Infection in musculoskeletal surgery poses significant risks, requiring a comprehensive approach to prevention, early detection, and aggressive treatment. Ongoing advancements in infection-resistant technologies and personalized treatment protocols promise to reduce the incidence and impact of these challenging complications.

Keywords: Musculoskeletal surgery, surgical site infection, periprosthetic joint infection, antibiotic prophylaxis, biofilm, infection management.

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OP – 140

Treatment of Massive Bone Defects: Current Approaches and Emerging Strategies

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Abstract

Introduction: Massive bone defects resulting from trauma, infection, tumor resection, or congenital conditions present a significant clinical challenge in orthopedic and reconstructive surgery. These defects often exceed the body's natural healing capacity, necessitating advanced treatment strategies to restore function, stability, and structural integrity. Traditional approaches, such as autografts and allografts, remain the gold standard for bone defect management but are often limited by donor site morbidity, graft rejection, and insufficient integration of insignificant defects. This review explores current treatment modalities for massive bone defects, including vascularized bone grafts, bone transport techniques (e.g., the Ilizarov method), and synthetic bone substitutes such as bioactive ceramics and scaffolds. It also examines the potential of emerging technologies such as tissue

engineering, 3D-printed implants, and gene therapy for their role in enhancing bone regeneration and promoting functional recovery in patients with complex bone loss.

Recent advances in biological augmentations, including growth factors (e.g., BMPs) and stem cell therapies, have shown promise in improving graft incorporation and accelerating the healing process. The choice of treatment is often dictated by defect size, location, patient comorbidities, and the need for functional restoration, making a tailored, multidisciplinary approach essential for optimal outcomes.

Conclusions: The management of massive bone defects requires a combination of surgical innovation and biological enhancement. While traditional grafting techniques remain foundational, integrating new biomaterials and regenerative therapies can revolutionize the treatment landscape and improve outcomes for patients with complex bone injuries.

Keywords: Massive bone defects, bone grafting, tissue engineering, bone regeneration, synthetic scaffolds, stem cell therapy.

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OP – 141

Osteosarcoma: Battling the Challenges of Diagnosis and Effective Treatment

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Abstract

Introduction: Osteosarcoma, the most common primary malignant bone tumor, primarily affects adolescents and young adults, presenting significant challenges in both diagnosis and treatment. Early symptoms, such as localized pain and swelling, are often mistaken for less severe conditions, leading to delayed diagnosis and, subsequently, poorer outcomes. Timely detection is crucial in improving survival rates, yet the disease's rarity can result in diagnostic delays, including misinterpretations during imaging or extended biopsy processes.

A multimodal diagnostic approach involving radiographs, MRI, CT scans, and biopsies is essential to confirm malignancy and assess the extent of the tumor. However, even with prompt diagnosis, the aggressive nature of osteosarcoma, particularly its propensity to metastasize to the lungs and its resistance to standard therapies, complicates treatment. The standard of care includes surgical resection of the primary tumor, often combined with neoadjuvant and adjuvant chemotherapy to target micro-metastatic disease.

Limb-sparing surgeries have revolutionized osteosarcoma management, offering patients the possibility of functional preservation. However, these procedures are technically demanding and carry risks such as incomplete tumor resection and local recurrence. Despite advances in treatment, outcomes remain suboptimal for many patients, underscoring the need for ongoing research and a multidisciplinary approach to refine treatment strategies and improve long-term survival.

Keywords: Osteosarcoma, malignant bone tumor, diagnosis, limb-sparing surgery, metastasis, chemotherapy, osteosarcoma treatment, adolescent cancer.

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OP – 142

Balloon Kyphoplasty and Vertebroplasty Cemented Augmentation of Vertebral Compression Fractures. Case Series Evaluation.

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Abstract

Introduction: Osteoporotic vertebral compression fractures, often following trauma, are common causes of pain, functional loss, and impaired mobility. These fractures are associated with increased morbidity and mortality, and conventional treatments such as bed rest, bracing, or osteosynthesis frequently yield suboptimal outcomes. Approximately 35% of patients experience severe pain and reduced mobility, sometimes resulting in prolonged bed rest, which can compromise pulmonary and cardiac function. Mortality rates in patients with osteoporotic vertebral fractures increase by up to 23% compared to the general population. This retrospective study evaluates the outcomes of balloon kyphoplasty and vertebroplasty cement augmentation in treating traumatic and osteoporotic vertebral fractures.

Material and Methods: From August 2018 to August 2023, 12 patients with vertebral compression fractures (Magerl type A) without neurological deficits underwent balloon kyphoplasty or vertebroplasty. We present postoperative and follow-up results at 12 and

24 months using the Visual Analogue Scale (VAS, 0-10) for pain assessment and the Roland Morris Disability Questionnaire (0-24). Preoperative CT scans and postoperative X-rays were used for clinical and radio morphometric evaluation.

Results: The mean initial vertebral deformity was compared with postoperative outcomes and the loss of correction at the two-year follow-up. Pain reduction was assessed via the VAS score immediately post-surgery, and at the last follow-up, improvement in disability was recorded based on the Roland Morris score. Procedure-related complications were also evaluated.

Conclusions: Balloon kyphoplasty and vertebroplasty offer a safe and minimally invasive treatment option for improving pain and disability in patients with acute osteoporotic fractures.

Keywords: Vertebral compression fracture, vertebroplasty, kyphoplasty, osteoporotic fractures.

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OP – 143

Aneurysmal Bone Cyst: Characteristics and Treatment in Pediatric Age

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Abstract:

Introduction: Aneurysmal bone cysts (ABCs) are benign, expansile bone lesions commonly found in the pediatric population, typically occurring in individuals aged 2 to 25. This study aims to explore the

characteristics, clinical presentation, diagnostic methods, and treatment modalities for ABCs in children. We conducted a retrospective review of pediatric patients diagnosed with ABCs at our institution over ten years, analyzing demographic data, clinical features, imaging studies, and treatment outcomes. ABCs frequently present as painful swellings or localized tenderness, with imaging studies often revealing characteristic cystic bone lesions that may be lytic and expansile. The treatment of choice varies according to the size and location of the lesion, ranging from conservative observation in asymptomatic cases to surgical interventions, including curettage and bone grafting or more extensive resections in cases with significant symptoms or risk of fracture. Our findings indicate that while ABCs have a favorable prognosis with appropriate management, recurrence remains a concern, particularly in lesions treated with curettage alone. Understanding the characteristics and treatment options for ABCs in pediatric patients is crucial for optimizing patient outcomes and minimizing complications.

Conclusion: Aneurysmal bone cysts in pediatric patients present unique challenges in diagnosis and management. Our study demonstrates that while these benign lesions often have a favorable prognosis with appropriate treatment, carefully considering the surgical approach is essential to minimize the risk of recurrence. Surgical intervention, particularly curettage combined with bone grafting, is effective for symptomatic lesions. Continued monitoring and follow-up are vital to ensure optimal outcomes and address any potential complications arising from the cysts. A multidisciplinary approach involving pediatric orthopedic specialists is recommended to tailor treatment strategies to each patient's individual needs.

Keywords: Aneurysmal bone cyst, pediatric age, diagnosis, recurrence, clinical characteristics, imaging studies, benign bone lesions.

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OP – 144

From Imaging to Surgery: Managing Osteochondroma, the Most Common Bone Tumor

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Abstract

Introduction: Osteochondroma is the most common benign bone tumor, predominantly affecting children and adolescents. It is characterized by an abnormal growth of cartilage and bone at the growth plate, commonly found near the knee and shoulder joints. While many osteochondromas remain asymptomatic, they can cause complications such as pain, restricted movement, or nerve compression, necessitating prompt diagnosis and management.

The diagnostic approach begins with radiographic imaging, where X-rays typically reveal a distinct bony protrusion. When necessary, advanced imaging techniques, such as MRI or CT scans, are employed to evaluate the tumor's size, location, and effects on adjacent structures. These modalities are essential for differentiating osteochondromas from other bone lesions and guiding surgical planning.

Surgical excision remains the treatment of choice for symptomatic cases. It aims to relieve symptoms and prevent further complications like fractures or, in rare cases, malignant transformation. Early diagnosis and timely surgical intervention are crucial to optimizing

patient outcomes, reducing the risk of long-term complications, and ensuring effective management of this common bone tumor.

Conclusion: While generally benign and asymptomatic, osteochondroma can lead to significant complications if not properly managed. Early and accurate diagnosis through imaging, followed by timely surgical intervention when necessary, is crucial to prevent pain, mobility issues, and the rare risk of malignant transformation. The comprehensive approach from imaging to surgery underscores the importance of a multidisciplinary strategy in optimizing patient outcomes and minimizing the risks associated with this common bone tumor.

Keywords: Osteochondroma, benign bone tumor, cartilage growth, tumor resection, MRI, CT scan, pediatric orthopedics, knee and shoulder tumors, surgical management.

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OP – 145

Degenerative Changes in the Knee

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Abstract

Introduction: Total knee arthroplasty, the gold standard for treating advanced knee joint arthrosis, is becoming increasingly important globally. The

incidence of knee arthrosis has risen, particularly among patients over 65 years old, necessitating surgical intervention.

Material and Methods: Between 2022 and 2024, 200 patients with gonarthrosis underwent total knee arthroplasty at the Orthopedic Clinic in Skopje. The patients were aged between 65 and 80 and were divided into groups based on age and gender. Postoperative follow-up was conducted at 6 and 12 months, including radiological and clinical evaluations.

Results indicate that total knee arthroplasty is not just effective, but significantly improves the quality of life in patients with advanced knee osteoarthritis, confirming its status as the most effective treatment. This should reassure and instill confidence in its use.

Keywords: Total knee arthroplasty; knee joint arthrosis; gonarthrosis; osteoarthritis; surgical intervention; quality of life; orthopedic surgery; postoperative follow-up.

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OP – 146

Postoperative Pain Control in Lower Limb Surgery

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Abstract

Introduction: Effective postoperative pain management is crucial for patient well-being, early mobilization,

on, and reduced hospitalization time. Local and regional anesthesia techniques are increasingly utilized to enhance recovery and facilitate pain control in the postoperative phase.

Materials and Methods: 215 patients undergoing various lower limb surgeries (e.g., prosthesis insertion, ACL reconstruction, and fracture repairs) were studied, all operated on by the same surgeon. The patients were divided based on the type of anesthesia used—general anesthesia (GA) versus regional (spinal or epidural) anesthesia. In particular, we focused on 104 patients who underwent hip or knee endoprosthesis procedures, comparing the outcomes of those receiving general anesthesia to those receiving spinal or epidural anesthesia. Additionally, 36 patients undergoing ACL repair were split into two groups: 20 with general anesthesia and 16 with spinal/epidural anesthesia. The remaining patients, who had fractures around the knee or crural fractures, were similarly divided and assessed based on the type of anesthesia used.

Results: Groups were matched for age and pathology to optimize postoperative pain, rehabilitation progress, and hospitalization duration comparisons. The results indicated significantly better clinical outcomes in patients who underwent surgery with general anesthesia, particularly when combined with loco-regional blocks. Postoperative pain control, mobility, and recovery were superior in the general anesthesia groups to those with spinal or epidural anesthesia.

surgeries involving bone procedures such as prosthetic implants, fractures, or bony drilling, general anesthesia combined with regional blocks leads to better postoperative outcomes than spinal or epidural anesthesia.

Keywords: Prosthesis, fractures, postoperative pain, general anesthesia, regional anesthesia, loco-regional block

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OP – 147

Monitoring the Reduction and Maintenance of Periprosthetic Bone Tissue in Cementless Primary Hip Endoprosthesis with Alendronate Therapy

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Abstract

Introduction: Periprosthetic bone loss is a common issue in patients with primary hip endoprostheses, and progressive loss can compromise the longevity of the implant. This study aimed to evaluate the effectiveness of Alendronate therapy in maintaining bone density in patients with total cement-free hip endoprosthesis (THP).

Material and Methods: Our study, which included fifty patients with THP, took a unique approach. The first group of 25 patients received Alendronate, calcium, and vitamin D3 orally postoperatively, while the second group of 25 patients did not receive any therapy. Both groups were monitored using radiographic imaging and dual-energy X-ray absorption-

metry (DXA) at 6 and 12 months post-surgery, providing a comprehensive view of the effectiveness of Alendronate therapy in maintaining bone density in patients with THP.

The results revealed notable differences in X-ray findings and the presence of osteolysis in specific Gruen zones. Changes in bone mineral density (BMD) and bone mineral content (BMC) were observed between the 6- and 12-month intervals in the group receiving Alendronate therapy. This therapy not only reduces periprosthetic bone loss and maintains bone mineralization but also significantly improves implant stability, highlighting its potential to enhance patient outcomes and the longevity of THP.

Keywords: Total hip prosthesis (THP), Alendronate therapy, bone mineral density, bone loss, DXA

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OP – 148

Management of Syndesmosis Injury

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Abstract

Introduction: Syndesmosis is a critical fibrous joint essential for regular ankle weight-bearing and movement. Syndesmosis injuries involve the disruption of one or more ligaments of the distal tibiofibular syndesmosis and are commonly associated with ankle fractures.

Purpose: This study aims to review the management strategies for syndesmosis injuries, ranging from

conservative treatment to surgical interventions, based on the severity of the injury.

Material and Methods: Managing syndesmosis injuries is not a one-size-fits-all approach. These injuries are classified into three grades, and the treatment options are adaptable to the severity of the injury. For grade 1 injuries, conservative treatment with immobilization is the norm, followed by a gradual return to activity. Grade 2 injuries, if stable, can be managed conservatively, but surgical treatment is often preferred. Grade 3 injuries involving complete disruption necessitate surgical reconstruction. The approach typically involves surgical reduction, fixation, and rebuilding when syndesmosis injuries are associated with ankle fractures.

Results: The choice of surgical method for syndesmosis repair is a decision that must be made with the patient's needs and the severity of the injury in mind. Each method, whether it's syndesmosis screws, fibula intramedullary nails, or dynamic button-suture fixation systems, has its own set of advantages and disadvantages, and it's crucial to weigh these factors carefully.

Conclusion: Effective management of syndesmosis injuries depends on the grade of injury and whether it is associated with an ankle fracture. Continued research into materials, devices, and techniques for surgical fixation is essential for improving outcomes in patients with syndesmosis injuries. This ongoing research is crucial as it can lead to developing new, more effective treatments and techniques, ultimately improving patient outcomes.

Keywords: ankle; syndesmosis injury; management;

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OP – 149

Ultrasound in Orthopedics: Help and Advantages in Clinical Practice

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Abstract

Introduction: Ultrasound technology has emerged as an invaluable asset in orthopedic practice, offering real-time imaging capabilities that enhance diagnostic accuracy and therapeutic outcomes. This non-invasive, radiation-free modality visualizes soft tissues, including muscles, tendons, and ligaments, making it particularly effective for diagnosing conditions such as tendonitis, ligament tears, and joint effusions. Beyond diagnostics, ultrasound significantly improves procedural accuracy in guiding injections, aspirations, and biopsies, resulting in better pain management and reduced complications. Its portability and cost-effectiveness also provide dynamic assessment capabilities, allowing clinicians to evaluate musculoskeletal conditions during movement. Although there is a learning curve associated with its use, the increasing availability of training resources and certification programs facilitates the proficiency of orthopedists. As mounting evidence underscores its effectiveness, ultrasound is becoming essential in modern orthopedic practice, enabling precise, efficient, and most importantly, patient-centered care.

Conclusions: The integration of ultrasound into orthopedic practice represents a significant advancement in the field, offering numerous benefits in diagnosis and treatment. Its ability to provide real-time imaging and enhance procedural accuracy empowers clinicians to improve patient outcomes.

Keywords: Ultrasound, Orthopedics, Diagnostic imaging, Musculoskeletal conditions

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OP – 150

Announcement of the Newest Method for the Treatment of Osteochondritis of the Knee Using the AMT (Autologous Micrograph Treatment) Method

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Abstract

Introduction: Osteochondritis dissecans (OCD) of the knee presents a significant clinical challenge, often resulting in pain and functional impairment. Traditional methods like Osteochondral Autograft (OCA) transplantation have shown favorable short- to midterm outcomes for symptomatic focal cartilage defects, with survival rates of 98.7%, 95.6%, 91.2%, 86.2%, and 81.8% at 1, 2, 3, 5, and 10 years, respectively. However, the procedure has a high reoperation rate, and data on long-term outcomes remain limited. To address these limitations, we introduce a novel treatment approach: Autologous Micrograph Treatment (AMT). This innovative method leverages autologous chondrocytes to restore cartilage function with improved long-term outcomes. This study aims to announce and discuss the early successful results of the AMT method, a new technique for treating knee osteochondritis that offers

an alternative to conventional osteochondral allograft transplantation.

Material and Methods: AMT utilizes autologous cartilage grafting, eliminating the need for cadaveric tissue traditionally used in osteochondral autograft transfers. By harvesting healthy cartilage from the patient, AMT enhances tissue compatibility and reduces the risk of rejection. This method offers reliable fixation and can convert uncontained lesions into contained defects suitable for cartilage restoration.

Results: Early results of the AMT method have demonstrated promising outcomes, particularly in treating larger cartilage defects. Patients experienced significant clinical improvements, most maintaining good or excellent results at two years post-surgery. Notably, only one patient showed a decline in clinical status during follow-up.

Conclusion: The AMT method offers a successful and innovative approach to the surgical treatment of unstable osteochondritis dissecans of the knee. It provides reliable fixation, enhances healing, and serves as a viable option for patients with significant, complex cartilage defects, potentially reducing the need for reoperation in the long term.

Keywords: Osteochondritis dissecans, Autologous Micrograph Treatment, AMT, Cartilage restoration, Focal cartilage defects, Osteochondral graft

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OP – 151***Liver Transplantation is the Best Treatment Method for End-Stage Liver Failure, Acute Liver Failure, and Tumor Cases.***

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*Head of Department of Organ Transplantation,
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Introduction: Liver transplantation remains the most effective and definitive treatment for patients suffering from **end-stage liver failure, acute liver failure**, and certain **hepatic tumors**. For individuals with chronic liver disease or cirrhosis, transplantation offers a life-saving solution by replacing the failing liver with a healthy donor organ, thus restoring liver function and improving overall survival and quality of life. In cases of acute liver failure, where rapid deterioration of liver function occurs, transplantation serves as an emergency intervention to prevent multi-organ failure and death. Additionally, in selected patients with liver tumors, particularly **hepatocellular carcinoma** (HCC), liver transplantation not only addresses the cancer but also eliminates the underlying liver disease that predisposes patients to malignancy.

Despite advancements in medical therapies and surgical techniques, liver transplantation remains the gold standard in managing these critical conditions. While complex, this procedure offers the highest survival rates compared to alternative treatments. However, challenges such as organ scarcity, postoperative complications, and the need for lifelong immunosuppression must be carefully managed to ensure the best outcomes for recipients. This review explores the current indications for liver transplantation, evaluates the success rates, and discusses the ongoing challenges in the field.

Conclusion: Liver transplantation stands as the gold standard for the treatment of end-stage liver failure, acute liver failure, and selected hepatic tumors, particularly hepatocellular carcinoma. The procedure offers unparalleled survival and quality of life benefits, effectively addressing both hepatic dysfunction and tumor burden. However, the procedure's success is contingent upon timely intervention, appropriate patient selection, and the management of post-transplant complications, including immunosuppressive therapy and organ rejection. Addressing the challenge of organ scarcity through innovations like living donor transplants and improved organ preservation techniques will be crucial in expanding access and improving outcomes.

Keywords: Liver transplantation; End-stage liver failure; Acute liver failure

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OP – 152***Rescue Surgery: Which is Not Only Surgery***

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Introduction: Rescue surgery encompasses a broad spectrum of surgical interventions to address critical, life-threatening conditions requiring immediate

surgical action. However, it transcends the conventional definition of surgery by integrating multidisciplinary approaches focusing on patient-centered care, rapid assessment, and innovative techniques. This abstract explores the multifaceted nature of rescue surgery and its implications for improving patient outcomes.

Discussion: Timely intervention is crucial in emergency surgery. Rescue surgery involves technical proficiency in surgical techniques and emphasizes comprehensive preoperative assessment, collaboration among specialists, and effective postoperative management. The application of advanced technologies, such as robotic surgery, enhances precision and minimizes recovery times, further highlighting the evolving landscape of emergency care.

Integrating non-operative management strategies, including resuscitation protocols and medical therapies, is essential for optimizing outcomes in critically ill patients. Rescue surgery often is a pivotal point in a patient's care trajectory, necessitating a holistic approach that addresses the treatment's surgical and medical aspects.

Conclusion: Rescue surgery embodies a paradigm shift from traditional surgical practices to a more inclusive model that prioritizes overall patient welfare. By embracing a multidisciplinary framework, health-care providers can significantly enhance rescue operations' effectiveness, ensuring successful surgical outcomes and improving long-term patient quality of life.

Keywords: Rescue surgery, emergency surgery, multidisciplinary approach, patient-centered care, robotic surgery.

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OP – 153

Surgical vs Non-Surgical Treatment of Pancreatic Tumors

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Abstract

Introduction: Pancreatic cancer primarily affects individuals over 50 and is often diagnosed in advanced stages. Men are more commonly affected due to lifestyle factors like alcohol and tobacco use. Surgery is typically palliative, with chemotherapy playing a major role.

Materials and Methods: This retrospective study reviews cases from 2017 to June 2023 at the University Hospital Center "Mother Teresa," focusing on surgical and palliative treatments, including ERCP.

Results: Pancreatic cancer predominantly affects males over 60, with the head of the pancreas being the most common tumor site. From 2017-2019, surgery was more common, but ERCP-based palliative care has increased since 2020. Surgical methods include biliary-digestive anastomosis, with one case of enucleation and two Whipple procedures documented.

Conclusion: While surgery remains essential, palliative care through ERCP is increasingly used, reflecting a shift towards less invasive treatments for advanced pancreatic cancer.

Keywords: Pancreatic cancer, surgery, ERCP,

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OP – 154

Role of Preoperative Vitamin D Supplementation in Reducing Post-Thyroidectomy Hypocalcemia

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Abstract

Introduction: Postoperative hypocalcemia is a common complication following thyroidectomy, often leading to prolonged hospital stays, delayed recovery, and a reduced quality of life. While vitamin D supplementation plays a critical role in managing postoperative hypocalcemia, the impact of routine preoperative vitamin D prophylaxis in preventing this complication has not been thoroughly investigated.

Materials and Methods: This study included patients undergoing total thyroidectomy at the TUHC. Preoperative vitamin D levels were assessed, and patients below or near the minimum threshold received vitamin D supplementation several days before surgery. The patients were divided into two groups: those who received preoperative vitamin D and those who did not. Postoperative clinical manifestations of hypocalcemia were evaluated in both groups.

Results: Patients who received preoperative vitamin D supplementation exhibited mild symptoms of hypocalcemia or were asymptomatic compared to those who did not. In contrast, patients without preoperative vitamin D supplementation commonly experienced symptoms such as tetany, carpopedal spasms, and perioral and digital paresthesia following surgery.

Conclusion: Given the widespread prevalence of vitamin D deficiency in the general population, prophylactic preoperative vitamin D supplementation significantly reduces the incidence of acute symptomatic hypocalcemia in patients undergoing thyroid surgery.

Keywords: Vitamin D deficiency; Thyroidectomy; Postoperative hypocalcemia; Preoperative supplementation

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OP – 155

Recurrent Sarcoma of Sacral Region Successful Case, Treated Surgically with a Multidisciplinary Team.

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Abstract

Introduction: Sarcomas are malignant tumors that arise from skeletal and extraskeletal connective tissues, including the peripheral nervous system. They can arise from mesenchymal tissue at any site. Soft tissue sarcomas (STS) are uncommon.

This topic will provide an overview of the necessity of a multidisciplinary surgical team and multimodality treatment of recidivant sarcoma in the sacral region.

Materials and Methods: In this presentation, we will present a successful case of a recurrent sarcoma of the

sacral region that was surgically treated by a multidisciplinary team of doctors. The intervention consisted of the resection at the healthy cube border of the sarcoma, including partial gastrectomy, resection of the right obturator muscle, partial resection of the elevator and, reconstruction with a semi-absorbable mesh of the pelvic floor and plastic covering with a musculocutaneous flap.

Results: Because of their rarity and the frequent need for multimodality treatment, evaluation, and management should ideally be carried out in a center with expertise in the treatment of patients with sarcomas, including general surgery, neurosurgery, plastic surgery, medical oncology, radiation oncology, and physical therapy. The multidisciplinary team approach to care for patients with recidivant sacral sarcomas optimizes treatment planning, minimizes duplication of diagnostic studies, and reduces the time to implement the definitive therapeutic protocol.

Conclusion: Although surgical resection is, in general, a necessary prerequisite for cure, the addition of radiation therapy is recommended for most patients to minimize the risk of a local recurrence and to maximize function and long-term survival.

Keywords: Recurrent sarcoma of the sacral region, multidisciplinary surgical team, multimodality treatment

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OP – 156

Small Bowel Perforation from Fishbone Leading to Formation of Abdominal Wall Abscess: The Crucial Role of Ultrasound in Diagnosis

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Abstract

Introduction: Accidental ingestion of foreign bodies, such as fish bones, is standard. However, gastrointestinal perforation due to such foreign bodies is rare, often leading to severe complications, including peritonitis and abscess formation. Timely diagnosis and intervention are essential to reduce morbidity and mortality.

Case Presentation: A 78-year-old male presented with a 10-day history of localized right lower quadrant abdominal pain, which began after a meal involving fish, although he did not recall ingesting any foreign object. He reported constipation for two weeks and denied previous abdominal surgeries. A tender, mobile swelling of approximately 6-7 cm on examination was palpated in the right lower abdominal wall. The patient was afebrile but complained of fatigue and reduced appetite.

Diagnostic Assessment: Given the clinical presentation, imaging was promptly performed. Abdominal ultrasound revealed a 60 x 30 mm fluid collection along the surface of the right lower abdominal wall, with a hyperechoic linear structure

(approximately 2 cm in length), likely a fish bone. A conservative approach with antibiotics was initially adopted. However, after five days, persistent symptoms prompted a CT scan, which confirmed the fluid collection and surrounding edema.

Conclusion: Fishbone ingestion is common, but bowel perforation and subsequent complications are rare. In this case, ultrasound proved invaluable in visualizing both the abscess and the foreign body. Ultrasound's noninvasive nature, accessibility, and ability to provide detailed insights without radiation exposure make it an ideal diagnostic tool in managing such cases. Moreover, it facilitated the avoidance of unnecessary laparotomy by guiding the successful minimally invasive approach.

Keywords: diagnostic imaging, Fishbone ingestion, small bowel perforation, ultrasound, abdominal wall abscess, non-invasive management.

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OP – 157

Acute Appendicitis and Appendiceal Cancer: Do We Have to Think About, and When?

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Abstract

Introduction: Acute appendicitis is one of the most common surgical emergencies encountered in clinical practice. While the majority of cases are benign and successfully treated with appendectomy, a subset of patients may present with appendiceal cancer, which can complicate the diagnosis and management. This abstract explores the relationship between acute appendicitis and appendiceal cancer, emphasizing the importance of differential diagnosis and the need for heightened clinical awareness.

Discussion: Patients with appendiceal cancer may initially present with symptoms mimicking those of acute appendicitis, leading to potential diagnostic challenges. Factors such as age, clinical history, and atypical symptoms should prompt consideration of the possibility of malignancy. Moreover, the presence of certain risk factors, including neuroendocrine tumors and mucinous adenocarcinomas, necessitates a more vigilant approach during surgical evaluation.

Imaging modalities, mainly CT scans, are crucial in differentiating between uncomplicated appendicitis and appendiceal malignancies. However, reliance on imaging alone may not be sufficient. A thorough intraoperative assessment and histopathological examination of the appendix are essential for accurate diagnosis.

Conclusion: Given the potential consequences of misdiagnosis, surgical practitioners must maintain a high index of suspicion for appendiceal cancer in patients presenting with acute appendicitis, particularly in atypical cases.

Keywords: Acute appendicitis, appendiceal cancer, diagnosis, surgical management, imaging.

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OP – 158***Surgical Treatment of Colorectal Cancer***

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Abstract

Introduction: Colorectal cancer is one of the most frequent malignant pathologies of the digestive tract. Also, this cancer is one of the most frequent causes of death in the world. Colorectal cancer is a multi-disciplinary disease, where the primary modality of its treatment is surgical treatment.

The purpose of the study: Evidence of the type of surgical techniques most frequently performed for the treatment of colorectal cancer.

Material and Method: This is a retrospective study analyzing the collected data of colorectal cancer cases treated in the First Clinic of General Surgery at UHC from January to December 2023.

In all cases, age, gender, tumor location, operative techniques, and histological type of biopsy were analyzed.

Results: 77 cases were analyzed, of which 54% were men. The average age was 54 years. 32% of cases belong to rectal cancer. 9% of cases were treated in the emergency department after they came as intestinal occlusions. Stage II and III - stage I of the disease predominates at 54% and 42%, respectively. The interventions performed were APR, LAR, hemicolectomy, and total colectomy.

Conclusion: Colorectal cancer surgery remains an essential line in the treatment of this disease. An aggressive surgical technique against the disease accompanied by lymphadenectomy increases the

survival of these patients and the success of subsequent treatment if necessary.

Keywords: Colorectal cancer, Surgical treatment, Operative techniques, Laparoscopic surgery,

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OP – 159***The Long-Term Prognostic Outcomes of Emergent Colon Cancer Surgery: A Single-Center Experience***

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Abstract

Introduction: Colorectal Cancer (CRC) ranks as the second most diagnosed and third most deadly cancer worldwide. Despite advancements in early diagnosis and treatment, CRC remains a leading cause of cancer-related deaths. Up to 30% of CRC patients are diagnosed during emergency department visits, leading to surgical procedures that may not adhere to oncological principles due to complications like obstruction, bleeding, or perforation. This study compares postoperative complications and long-term oncological outcomes between emergent and elective colon cancer surgeries.

Material and Methods: Retrospective analysis was performed on the data of patients who underwent

surgery for colonic adenocarcinoma from January 2018 to December 2021. Patients included were those diagnosed with colonic adenocarcinoma, excluding those under 18 years old or with other pathological results. Patients were examined under the elective and emergent surgery groups. The study examined demographic data, tumor localization, operation type, postoperative complications, and long-term oncological outcomes. A Cox proportional hazard model was used to perform multivariate analysis to identify prognostic variables for overall survival (OS) and disease-free survival (DFS).

Results: 318 patients were included, 62 undergoing emergent and 256 undergoing elective surgery. Patient demographics were similar between the groups. The emergent surgery group had a lower OS rate at 50 months (55%) compared to the elective surgery group (72%) ($P=0.002$). DFS at 50 months was also lower for the emergent surgery group (47%) compared to the elective surgery group (65%) ($P=0.202$). Poor prognostic factors included stage N, stage M, tumor diameter, neural invasion, and emergent surgery status.

Conclusion: Emergency surgery for colon cancer is associated with poor long-term outcomes due to shorter OS and DFS, highlighting the need for increased awareness and screening to reduce emergency colon cancer surgery.

Keywords: Colon cancer, Emergent surgery, Overall survival, Disease-free survival

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OP – 160

A Clinical Study of Intestinal Stomas in Emergency Laparotomies

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Abstract

Introduction: Intestinal stomas, a common feature in emergency surgeries, divert the fecal stream, facilitate healing of a distal anastomosis, or relieve obstructions. This study, focusing on identifying the primary indications for emergency laparotomy, the most commonly performed intestinal stomas, and the associated complications, provides crucial information that can significantly impact patient care.

Material and Methods: This retrospective study was conducted in the surgical unit of the Mother Teresa University Hospital Center from January 2021 to December 2023. Patients admitted through the emergency department who underwent surgery for various reasons and required intestinal stoma formation were included. Complications related to stoma formation were documented and analyzed.

Results: The study covered a wide spectrum of cases, with the most common indication for stoma formation being colorectal carcinoma ($n=77$), followed by sigmoid volvulus ($n=16$), perforated sigmoid diverticula ($n=12$), and rectosigmoid perforation due to foreign body ($n=6$). The variety of cases studied reflects the comprehensive nature of our research.

Conclusions: Fecal diversion via stoma formation is an essential, effective, and life-saving surgical intervention. It plays a crucial role in managing a wide range of gastrointestinal and abdominal emergencies, particularly in cases of obstructive cancer, inflammatory bowel disease, and anastomotic leaks.

Keywords: Intestinal stoma, fecal diversion, emergency surgery, and damage control surgery

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OP – 161

The Value of Intraoperative Evaluation of Colorectal Anastomosis: A Literature Review

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Abstract

Introduction: The safety and efficacy of colorectal surgery for oncological diseases have greatly improved over the past 50 years, driven by advancements in preoperative preparation, antibiotic prophylaxis, surgical techniques, and postoperative management. Traditional procedures such as abdominoperineal resection have evolved, with the introduction of minimally invasive techniques like laparoscopic and robotic surgeries, as well as endoluminal resections, which focus on achieving oncologically safe margins (R0 resection) while minimizing the risk of cancer cell dissemination during surgery.

Recent developments in minimally invasive approaches, particularly total transanal mesorectal excision, have resulted in significantly better clinical outcomes. The growing prevalence of robotic-assisted

surgeries has enhanced surgical precision and reduced invasiveness.

Despite these advancements, complications following colorectal surgery remain a critical concern, particularly anastomotic leaks (AL), which can have serious short- and long-term consequences. AL is associated with extended hospital stays, the need for reoperations, stoma formation, anastomotic strictures, and increased mortality, with reported incidence rates between 2.8% and 30%, particularly in rectal anastomoses. The mortality rate associated with AL ranges from 2% to 16.4%, while morbidity rates can reach 20% to 35%.

Achieving a technically sound colorectal anastomosis is crucial for optimizing surgical outcomes and minimizing AL risk. Attention to the mechanical configuration of the anastomosis and careful evaluation of tissue integrity and perfusion are essential.

This review focuses on modifiable surgical risk factors for AL, integrating recent evidence and best practices to approach the "perfect" colorectal anastomosis.

In conclusion, achieving the "perfect" colorectal anastomosis necessitates meticulous surgical technique, a comprehensive understanding of surgical principles, and incorporating innovative technologies to enhance patient outcomes and mitigate complications associated with colorectal surgery.

Keywords: Colorectal Anastomosis, Anastomotic Leak, Surgical Techniques

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OP – 162

Urgent Laparotomy in Double Malignant Gastric Outlet Obstruction: A Case Report

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Abstract

Introduction: Malignant gastric outlet obstruction (MGOO) is a clinical condition characterized by the mechanical obstruction of the pylorus or the duodenum due to tumor compression/infiltration, with consequent reduction or impossibility of adequate oral intake.

Material and Methods: The reported case is a 60-year-old patient, admitted as an emergency due to persistent vomiting and inability to process hard food one month before admission. Two gastroscopies were performed in the past 6 months with unclear diagnosis of chronic gastritis and incipient metaplasia. Abdominal CT revealed two pathological gastric masses, one cardio-fundal and the second antro-pyloric.

Results: The patient was briefly prepared and operated as a surgical emergency. Intraoperatively a large double gastric tumor mass was found that puts pressure on the liver, pancreas, and spleen. A total gastrectomy with regional lymphadenectomy was performed including spleen removal and Roux-en-Y, esophageal-jejunal anastomosis.

The histopathological findings revealed gastric lymphoma. The postoperative recovery was satisfactory; the patient started liquids after 2 days

and raw food on the sixth day. After 10 days, she was discharged in good condition and started oncological treatment.

Conclusions: Double malignant gastric outlet obstruction is a rare surgical condition in advanced cases with gastric tumors. However, as in the presented case, some cases can be surgically treated even if they seem inoperable with satisfactory results and adjuvant oncological treatment. The prognosis remains unknown.

Keywords: urgent laparotomy, gastric outlet obstruction, case report

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OP – 163

Revascularization of Symptomatic Carotid Artery Stenosis. Is There a Limit?

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Abstract

Introduction: Carotid artery stenosis (CAS) is a significant contributor to cerebrovascular events, including stroke. Revascularization of symptomatic carotid artery stenosis (CAS) is a widely accepted treatment to reduce the risk of stroke and improve long-term outcomes. However, the decision to

perform revascularization, particularly in patients with severe or high-risk lesions, raises the question: is there a limit to the benefit of revascularization, or does it always improve outcomes regardless of the degree of stenosis? This review aims to assess the benefits, risks, and limits of revascularization for symptomatic carotid artery stenosis.

Objective: To evaluate the indications, outcomes, and potential limits of revascularization procedures, including carotid endarterectomy (CEA) and carotid artery stenting (CAS), in patients with symptomatic carotid artery stenosis, and to explore the optimal selection criteria for these procedures.

Study Method: A comprehensive review of clinical trials, observational studies, and meta-analyses published between 2000 and 2023 was conducted. Data from patients with symptomatic CAS undergoing CEA or CAS were analyzed regarding procedural outcomes, complications, and long-term benefits, focusing mainly on patients with varying degrees of stenosis and associated risk factors.

Results: The analysis indicates that revascularization in patients with moderate to severe symptomatic carotid artery stenosis (70-99%) leads to significant reductions in stroke risk. However, in cases of very high-risk stenosis, particularly in elderly patients or those with extensive comorbidities, the benefits of revascularization may be less clear. In these populations, conservative medical management has shown comparable outcomes, significantly when the risk of perioperative complications is elevated. The threshold for revascularization, therefore, appears to be more complex in patients with extensive comorbidities or those at high surgical risk. Additionally, the timing of intervention plays a critical role, as early revascularization is associated with better outcomes compared to delayed procedures.

Conclusion: Revascularization of symptomatic carotid artery stenosis remains a cornerstone of stroke prevention, but its benefits are not uniform across all patient groups. The decision to perform CEA or CAS

should be individualized, considering factors such as the severity of stenosis, patient age, comorbid conditions, and overall surgical risk. In high-risk patients, the limits of revascularization may require a more cautious approach, emphasizing medical management and risk stratification. Further studies are needed to define optimal treatment thresholds and refine the decision-making process for patients with varying degrees of carotid artery stenosis.

Keywords: Carotid artery stenosis, revascularization, carotid endarterectomy, carotid artery stenting,

References

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OP – 164

Supra-Aortic Stenosis Surgery: Case Study

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Abstract

Introduction: This study aims to present a case of aorto-carotid bypass surgery in a patient with carotid artery stenosis, illustrating its efficacy as a preventive measure against ischemic stroke. Conducted at the University Hospital Center "Mother Teresa" (QSUT) in Tirana, the case involved a 63-year-old patient with atherosclerotic arteriopathy and hypertension who experienced episodes of dizziness and syncope. Doppler echocardiography indicated a significant increase in blood flow velocity in both the right and

left carotid arteries, exceeding 2.5 times normal values. Computed tomography angiography revealed stenosis of the right and left common carotid arteries, early-stage stenosis of the brachiocephalic trunk, and occlusion of the left subclavian artery.

The common carotid arteries were revascularized using a bifurcated 14x7 mm Dacron graft. The proximal end of the graft was anastomosed to the ascending aorta, while the distal ends were connected to both common carotid arteries.

Follow-up Doppler echocardiography demonstrated normalization of blood flow velocity in the carotid arteries, and the patient's neurological symptoms resolved entirely. After a 10-day hospital stay, the patient was discharged without complications.

This case underscores the utility of aorto-carotid bypass as an effective intervention for complex multi-segmental stenosis, ensuring optimal cerebral perfusion and serving as a preventive strategy against ischemic stroke in appropriately selected patients.

Keywords: aorto-carotid bypass, revascularization, synthetic graft, atherosclerosis, case report.

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OP – 165

Pseudoaneurysm Management in Vascular Accesses, Personal Experience.

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Abstract

Introduction: Pseudoaneurysm (PSA) formation is a known complication of hemodialysis arteriovenous accesses. It is associated with an increased risk of massive bleeding, infection, and pain. They represent a significant challenge threatening the patient's life and vascular access.

Materials and Methods: This is a retrospective review of medical records from January 2019 to September 2024, from my personal experience. It revealed 17 patients with a hemodialysis AVF or AFG pseudoaneurysm. Indications for repair included PSA with active bleeding (n=8), PSA with skin erosion (n=3), and infected PSA (n=6). Outcome measures were technical success, secondary interventions, and complications.

Results: In 17 patients (10 males; 7 females), Arterio-venous fistula, n=10, arteriovenous graft, n = 7. Surgical procedures used (Pseudoaneurysm resection with AVF, AVG extirpation (n= 10; 58.8 %, PSA resection with interposition of PTFE graft in the brachial artery n=3; 17.6 %, PSA resection with arterial primary repair, n= 2; 12 %, PSA resection with brachial artery patch repair (n=1; 5.8%), PSA resection, repair of the brachial artery with autologous vein, n= 1; 5.8 %). Complications included, (wound bleeding n=2; 12%; brachial artery pseudoaneurysm n=2; 12 %).

Conclusions: Pseudoaneurysm of vascular access is a surgical emergency. It needs prompt intervention for life and limb salvage. Regular surveillance of vascular accesses in hemodialytic patients allows early detection and timely treatment of these complications. More attention is needed from the nephrologists and nurses caring for dialytic patients.

Keywords: Pseudoaneurysm, vascular access, hemodialysis, active bleeding.

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OP – 166

Endovenous Laser Ablation (EVL) of the Great Saphenous Vein vs. High Ligation and Stripping (HL/S) in Varicose Vein Patients: Short-term Results

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Abstract:

Introduction: Endovenous laser ablation (EVL) of the great saphenous vein (GSV) has emerged as a preferred treatment for varicose veins due to its minimally invasive nature and reduced postoperative morbidity, in contrast to the traditional high ligation and stripping (HL/S) procedure. Despite these advantages, few studies have directly compared both methods in parallel patient groups.

Material and Methods: Patients with GSV insufficiency underwent either EVL or HL/S under spinal or local anesthesia with IV sedation. In both groups, mini phlebectomies were performed as needed. Follow-up assessments were conducted preoperatively and at 12 days, 1, 3, and 6 months postoperatively. Parameters such as sick leave duration, pain scores, use of analgesics, Aberdeen and VCSS scores, quality of life (SF-36), and complication rates were analyzed.

Conclusion: Historically, HL/S has effectively treated GSV insufficiency, improving disease-specific outcomes and quality of life. However, it is associated with significant postoperative pain, prolonged recovery, and complications such as bruising, infection, and nerve damage. On the other hand, EVL has demonstrated high success rates, with GSV closure exceeding 90% for up to 3 years. EVL also offers benefits like reduced postoperative pain, shorter recovery time, and faster return to normal activities. These advantages, alongside fewer complications, make EVL a compelling alternative to HL/S, although its higher equipment costs should be considered. Randomized controlled trials are still needed to assess EVL's long-term efficacy and cost-effectiveness compared to HL/S.

Keywords: Endovenous laser ablation (EVL), high ligation and stripping (HL/S), GSV

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OP – 167

Deep Vein Thrombosis in Young Patients

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Abstract

Introduction: During the last few years, we have noticed a high incidence of Deep venous Thrombosis (DVT) in young patients. DVT is the formation of a thrombus in the deep veins of extremities, more often

in the lower part of the body. This can occur after a specific event like recent surgery, trauma, prolonged hospitalization, postpartum, or without an underlying cause. In this case, it can be an inherited unknown disease. Ultrasound imaging, D-Dimer measurements, and clinical evaluation are used to diagnose, treat, and follow up patients with DVT.

This is a prospective study where 130 patients were hospitalized in the Department of Vascular Surgery, UH 'Mother Theresa,' for two years, diagnosed with Deep venous thrombosis. All these patients were treated with intravenous anticoagulants or LMWH, followed up with aPTT every 6 hours, and least compressive stockings according to their limb and body mass. Tumoral markers, total blood count, and biochemical analyses were taken regularly during hospitalization. All patients performed the necessary imaging examinations. Our objective in this study is to detect the leading causes of deep vein thrombosis in the young population and its correlation with D-dimer values. We also want to assess the impact of genetic factors in these patients.

In conclusion, we noticed a predominance of female patients in this two-year study. Most of them were diagnosed with malignant tumors or undergoing chemotherapy; the other ones were young females, pregnant or in the period after giving birth (postpartum). D-dimer can be used to rule out the presence or absence of DVT. Ultrasound imaging remains the best examination for detecting the thrombus, evaluating the dimensions, and following up on the progress of the thrombus. Because of the high costs of genetic testing and the impossibility of doing these tests in our hospital, we could not correlate DVT and the results of genetic testing. Another reason is that we need feedback about the results of these tests from most of our patients after doing them.

Keywords: DVT, young, anticoagulation, genetic tests, compression stockings.

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OP – 168

Complications of Permanent Hemodialysis Catheter.

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Abstract:

Introduction: Permanent hemodialysis catheters are essential for providing long-term vascular access in end-stage renal disease (ESRD) patients who require ongoing dialysis. While these catheters serve as a critical lifeline, they are associated with various complications that can significantly impact patient outcomes and quality of life. This review highlights the common complications of permanent hemodialysis catheters, focusing on infection, thrombosis, catheter malfunction, and mechanical issues.

Infections, particularly catheter-related bloodstream infections (CRBSIs), are the most frequent and severe complications, often leading to hospitalization and increased mortality. Thrombosis and catheter dysfunction, resulting from fibrin sheath formation or vessel occlusion, are also prevalent, causing interruptions in dialysis and necessitating

intervention. Mechanical complications, including catheter migration and breakage, further contribute to patient morbidity and treatment delays.

Early detection, preventive measures, and prompt management of these complications are essential to improving patient outcomes. Strategies such as antibiotic prophylaxis, regular catheter maintenance, and technological advancements have been developed to reduce these risks. However, long-term solutions require a multidisciplinary approach to balance adequate dialysis access and minimizing complications.

Conclusions: Permanent hemodialysis catheters, while necessary, pose significant risks of infection, thrombosis, and mechanical failure. Ongoing vigilance and adopting best practices in catheter care are crucial to mitigating these complications and improving patient care in the hemodialysis population.

Keywords: Hemodialysis catheter, complications, infection, thrombosis, catheter malfunction, ESRD.

References

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OP – 169

Carotid Endarterectomy with Subacute Stroke and Occlusion of Contralateral Carotid Artery

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Abstract

Introduction: Carotid endarterectomy (CEA) is a common procedure for treating carotid artery atherosclerosis. It is typically performed when stenosis exceeds 80%. In symptomatic patients with severe contralateral stenosis or occlusion, early CEA may be considered despite the recommended delay of 6-8 weeks following an acute stroke.

Case Presentation: We report the case of a 68-year-old man who presented to the emergency department with sudden motor deficits, speech impairment, and agitation. Initial evaluation revealed hypodensities in the right fronto-temporal region on CT, indicative of a subacute stroke. A CT angiogram confirmed right internal carotid artery occlusion and severe pre-occlusive stenosis of the left carotid artery. After thorough multidisciplinary discussions, early contralateral CEA was performed on day 13 post-stroke. The patient experienced no new neurologic deficits or myocardial ischemia and was discharged six days later with appropriate medical management.

Discussion: Bilateral carotid occlusive disease is rare, and the role of contralateral stenosis in perioperative risks remains debated.

Conclusion: This case illustrates that carotid endarterectomy can be safely performed in patients with contralateral occlusion, leading to favorable outcomes without major adverse neurological events.

Keywords: Carotid endarterectomy, subacute stroke, contralateral carotid occlusion,

References:

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OP – 170

***Infected Femoral Artery
Pseudoaneurysm in a 38-Year-Old
Woman Addicted to Heroin; A Case
Report of the Importance of Profunda
Artery in Revascularization.***

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Abstract

Introduction: Infected femoral artery pseudoaneurysm with exsanguination is a severe complication in parenteral drug abusers, with complex and controversial management. The management of this case was complex, and the consequent results, such as intermittent claudication and limb amputation, were expected.

Clinical Case: A 38-year-old woman with a long-term history of intravenous heroin use was admitted to the emergency department with pain and active bleeding in the inguinal and femoral regions. Upon admission, the patient was confused, pale, and febrile. Clinical examination: The limb appears edematous with an ulcerative lesion with a diameter of 10 cm, suspected infected ruptured pseudoaneurysm. Laboratory investigation showed anemia (HCT= 23.3 %), elevated leukocytosis (22 K/uL), and an elevated CRP. The patient was transferred to the surgical ward, where intravenous administration of antibiotics was initiated. A left inguinal incision was carried out. After preparation, AFC is received in laco. AFP is hardly observed. It is observed as a suppurating hematoma with a putrid smell and destruction of surrounding tissues. After clamping of AFC and heparin administration, two puncture sites are identified and sutured, and AFS is tied at the origin.

Discussion: The profunda femoris artery is an important vessel that supplies blood to the thigh, and in cases of superficial femoral artery stenosis, ligation or occlusion, it becomes the main source of blood supply to the lower extremity through collaterals

Keywords: Profunda femoris artery, Hemorrhage, Necrotizing fasciitis, Limb salvage

References:

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OP – 171

***Rezūm Therapy: A Minimally Invasive
Treatment for Benign Prostatic
Hyperplasia (BPH)***

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Abstract

Introduction: Rezūm Therapy offers a minimally invasive solution for men experiencing symptoms of benign prostatic hyperplasia (BPH) due to enlarged prostates. This innovative treatment aims to alleviate symptoms without the common side effects associated with traditional BPH medications.

Why Choose Rezūm Water Vapour Therapy?

- **No dependence on BPH medications:** Patients can discontinue medications that often come with adverse effects.

- **Rapid symptom relief:** Most patients report improvement within two weeks post-treatment.
- **Preservation of erectile and urinary functions:** The procedure is designed to maintain these crucial functions.
- **Quick recovery:** Patients typically resume regular activities within a few days.
- **No permanent implants:** The treatment involves using water vapour, which does not require any permanent devices.

The number of water vapour treatments varies based on prostate size, and the procedure is completed in a single appointment. It is important to note that while the accompanying images illustrate the procedure's mechanism, they do not guarantee individual patient outcomes.

Indications and Risks: The Rezūm™ System is intended to relieve urinary symptoms and obstructions associated with BPH and is indicated for men with a prostate volume ≥ 30 cm³, particularly for those with hyperplasia of the central zone and a median lobe. Potential risks may include dysuria (painful urination), hematuria (blood in urine), hematospermia (blood in semen), decreased ejaculatory volume, urinary tract infections (UTIs), and urinary frequency, retention, or urgency. Patients must discuss the benefits and risks with their healthcare provider before treating.

Conclusion: Rezūm Therapy represents a promising option for men suffering from BPH, providing significant symptom relief with a favorable safety profile.

Keywords: Benign prostatic hyperplasia, Rezūm Therapy, minimally invasive treatment, urinary symptoms, prostate volume.

References:

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OP – 172

Sacrocolpopexy for Severe Pelvic Organ Prolapse

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Abstract

Introduction: Sacrocolpopexy is considered a reference operation for pelvic organ prolapse repair, but its indications and technical aspects are not standardized. A faculty of urogynecology surgeons critically evaluated the peer-reviewed literature published until September 2015, to produce evidence-based recommendations. The aim is to assess the clinical outcome of abdominal vault suspension (sacro-colpopexy, hysteropexy, or cervicopexy) using non-absorbable mesh, with burial of mesh by closure of the peritoneum.

Material and Methods: From 2008 to 2021, 55 patients had the vault, uterus, or cervix suspended from the sacral promontory using a monofilament polypropylene mesh in open surgery. The pelvic peritoneum was closed over the mesh. Patients were followed up every six months for three years.

Result: After a median follow-up of 25 months (1.5–62), there were no complications due to mesh implementation. Three patients had asymptomatic vaginal mesh erosion, which required minor surgical intervention.

Conclusions: Surgical treatment of vaginal apical prolapse can be achieved through a variety of vaginal or abdominal approaches. Abdominal sacral colpopexy is a well-accepted and durable repair for apical vaginal prolapse. It is considered the procedure of choice as symptoms of the vault prolapse are relieved, and the vaginal function is maintained or restored with

minimal changes to the vaginal anatomy and function. Intraoperative and perioperative complications are uncommon in the open colpopexy procedure.

Keywords: Efficacy; Pelvic organ prolapse; Sacrocolpopexy;

References:

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OP – 173

Spontaneous Renal Pelvis Ruptures as Surgical Emergencies

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Abstract

Introduction: Renal pelvis rupture (RPR) is an underreported clinical emergency with the clinical presentation of acute abdomen with specific etiology and differentiating the diagnosis.

Material and Methods: Twelve patients were admitted with clinical presentation as acute abdomen, flank pain, nausea, and vomiting with or without a previous history of urinary stones. After clinical examination, they were all diagnosed with ileus due to bowel distension, but after performing CT urography besides bowel distension, a contrast extravasation from the renal pelvis was observed. In all patients, distal ureteral obstruction from calculus with different dimensions was seen,

Results: Immediate endoscopic treatment with double-J stent was performed, and a wide range of

antibiotics and fluid resuscitation was given. No contrast extravasation was seen at the control CT urography, and bowel distension was spontaneously resolved.

Conclusion: Patients presenting with acute abdomen and flank pain should be evaluated for renal pelvis rupture with prompt diagnosis and management since they are surgical emergencies that have good prognosis.

Keywords: renal pelvis rupture, acute abdomen, endoscopy, double-J

References:

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OP – 174

Uteropexy – An Ancient Modernized and Highly Demanded Technique. Our Experience

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Abstract

Introduction: Uterine prolapse occurs due to the weakening of the supportive system of female genital organs. Uterine prolapse is relatively common and is often associated with cystocele and rectocele. Currently, an increasing percentage of women, ranging from 25% to 42%, seek to preserve the uterus during surgical correction of prolapse.

This study aims to evaluate the outcomes of sacrospinous uteropexy using the i-stitch technique in treating grade 3 and 4 prolapse by assessing the

positioning level of the uterus 6 months and one-year post-intervention. Additionally, the intervention outcomes were evaluated by assessing patients' quality of life (QoL) 6 months and one year after the procedure. QoL was studied before and after surgery in all patients involved using the Incontinence Impact Questionnaire (IIQ-7) and standardized Incontinence Quality of Life (I-QOL) questionnaires. Patients with grade 3 and 4 uterine prolapse, with or without cystocele, were included, excluding those with recurrences, those requiring Le Fort, and those requiring hysterectomy. In incontinent patients, a TOT sling was placed during the same intervention.

Results: Six months and one year after the operation, there was only one case of recurrence. The uterus was positioned at level 0 in 72% of patients and at level 1 in 28%. There was a significant improvement in quality of life.

Conclusion: Uteropexy using the i-stitch technique is an effective method for treating grade 3 and 4 uterine prolapse.

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OP – 175

A New Technique of Vaginal Hysterectomy

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Abstract

Introduction: The vaginal route for benign hysterectomy is widely recognized as the preferred minimally invasive approach; however, its utilization remains low in the United States. Transluminal endoscopic surgery via the natural vaginal route (v-NOTES) presents a promising alternative that could change this perception. The potential benefits of v-NOTES compared to traditional laparoscopic and robotic methods include reduced pain, shorter operative time, enhanced cosmetic outcomes, and minimized complications. Notably, v-NOTES facilitate a transition from laparoscopic and robotic techniques back to vaginal approaches, depending on the surgeon's expertise.

Materials: Due to the novelty of this technique, both globally and in Albania, our initial experience is limited. Thus far, we have performed one case using the v-NOTES technique, but we aim to establish it as a routine surgical procedure in the future. Our team has extensive experience in vaginal surgery, having conducted over 3,000 vaginal hysterectomies and more than 1,500 other vaginal procedures. This foundational expertise enabled us to successfully implement the first v-NOTES procedure in Albania, a technique approved by the FDA in 2019.

Material and Method: The v-NOTES procedure is conducted using an FDA-approved platform. The operation begins with a vaginal hysterectomy until the uterine arteries are clamped. A single-port platform is then positioned, and laparoscopic instruments are introduced—typically, two instruments are placed on the left side with optics on the right. A low pneumoperitoneum is established. Using a laparoscopic bipolar ligation instrument, the uterus is detached while ensuring complete hemostasis is achieved. The operative field is cleared, the single-port platform is removed, and the vaginal stump is sutured via the vaginal route.

Conclusion: While we acknowledge the advantages of v-NOTES, we maintain that vaginal hysterectomy offers distinct benefits as well. We believe that v-

NOTES may enhance procedures such as cystectomy, uterine fixation to the uterosacral ligament for hysteropexy, and complex hysterectomies. However, further multicenter studies and extensive surgical experience are essential to draw definitive conclusions regarding the efficacy and safety of this innovative technique.

Keywords: Vaginal Hysterectomy, v-NOTES, Minimally Invasive Surgery, Transluminal Endoscopic Surgery

References:

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OP – 176

Plastic Surgery in Pediatric Urology

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Abstract:

Introduction: Pediatric urology encompasses a range of conditions affecting the urinary tract and genitalia in children, often requiring surgical intervention. Plastic surgery addresses congenital anomalies, reconstructs anatomical defects, and enhances functional outcomes in pediatric urological patients.

Material and Methods: A comprehensive literature review focused on recent advancements in plastic surgery techniques relevant to pediatric urology. Key areas of interest included hypospadias repair, correction of urinary incontinence, and managing

genital anomalies. Data from clinical studies, surgical outcomes, and patient satisfaction were analyzed to assess the efficacy of these interventions.

Results: The review revealed that plastic surgical techniques, such as tubularized incised plate urethroplasty for hypospadias and bladder augmentation using bowel segments, have significantly improved functional and aesthetic outcomes. Complication rates have decreased due to advancements in surgical techniques and preoperative planning.

Conclusions: Plastic surgery is integral to pediatric urology, providing practical solutions for various congenital and acquired conditions. Continued innovation and research are essential for enhancing surgical techniques, minimizing complications, and improving long-term outcomes for pediatric patients. Interdisciplinary collaboration between pediatric urologists and plastic surgeons will further optimize care in this specialized field.

Keywords: Pediatric urology, plastic surgery, hypospadias repair, urinary incontinence, congenital anomalies.

References

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OP – 177

Cholangiocarcinoma Development in the Context of Recurrent Pyogenic Cholangitis: A Case Study and Clinical Implications

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Abstract:

Introduction: Cholangiocarcinoma (CCA), a malignant tumor of the biliary epithelium, is a rare but aggressive cancer often associated with poor prognosis. Chronic inflammation of the bile ducts, as seen in recurrent cholangitis, is a well-established risk factor for the development of CCA. Recurrent cholangitis can lead to persistent bile duct injury, cholestasis, and subsequent dysplastic changes in the biliary epithelium, creating a carcinogenic environment.

Material and Methods: This case study is based on the clinical evaluation and diagnostic workup of a 55-year-old female patient, F.N., with a history of cholecystectomy due to gallstones. Over 3 years, she experienced recurrent episodes of pyogenic cholangitis. Clinical data were collected from multiple hospital admissions, including physical exams, laboratory results, and imaging studies (ultrasound, CT, MRI, and MRCP). A biopsy of a hepatic lesion in the left lobe confirmed CCA. Follow-up imaging and clinical assessments were used to monitor disease progression.

Conclusion: The development of CCA in this context may be linked to chronic inflammation and continuous damage to the bile duct epithelium, which occurs during recurrent episodes of cholangitis. Studies show that the incidence of cholangiocarcinoma development in patients with recurrent pyogenic cholangitis ranges from 1.5% to 11%. In this case, the lesion detected in the left lobe of the liver was confirmed as a ductal tumor proliferation, suggesting a diagnosis of cholangiocarcinoma.

This case illustrates the importance of careful monitoring of patients with recurrent pyogenic cholangitis due to the potential risk of developing a malignant tumor such as cholangiocarcinoma.

Keywords: cholecystectomy, cholangitis, MRI, follow-up, biopsy.

Reference:

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OP – 178**BRCA Mutation in Oncology**

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Abstract

Introduction: BRCA1 and BRCA2, known as "Breast Cancer" genes, are crucial in preventing cancer by repairing damaged DNA and acting as tumor suppressor genes. While these genes do not inherently cause cancer, mutations in BRCA1 and BRCA2 significantly increase the risk of breast and ovarian cancer in affected individuals. This abstract explores the implications of BRCA mutations in oncology, focusing on genetic risks and clinical interventions.

Epidemiology and Risk: Approximately 0.25% of the general population (1 in 400 individuals) carry BRCA mutations, significantly elevating their cancer risk. Women with a BRCA1 mutation have a 55-72% lifetime risk of developing breast cancer and a 39-44% risk of ovarian cancer. For those with a BRCA2 mutation, the risk of breast cancer is 45-69%, with an 11-17% risk for ovarian cancer. Additionally, women who have already been diagnosed with breast cancer and carry these mutations face a 20-30% risk of developing cancer in the contralateral breast within the first 10 years, increasing to 40-50% over 20 years.

Genetic Testing and Clinical Management: BRCA mutation testing is typically conducted through blood or saliva analysis after genetic counseling. These tests

are not recommended for individuals under 18. For mutation carriers, preventive surgical interventions such as bilateral mastectomy and ovarian surgery are common. Advanced surgical techniques like Nipple-Sparing Bilateral Mastectomy with Immediate Reconstruction using prostheses and biological materials (e.g., acellular dermal matrices, ADM) are viable options for breast cancer prevention.

Conclusion: BRCA mutations significantly impact cancer risk, particularly for breast and ovarian cancers. Early detection through genetic testing and personalized surgical interventions can improve outcomes for individuals at high risk. Multidisciplinary management involving oncologists, genetic counselors, and surgeons is essential for optimizing patient care.

Keywords: BRCA mutation, breast cancer, ovarian cancer, genetic testing, surgical prevention

References:

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OP – 179

The International Association for the Study of Lung Cancer Lung Cancer staging (IASLC) Of the TNM Stage (Ninth) Edition of the New TNM Classification for Lung Cancer.

Fadil Gradica, Ylber Vata, Lutfi Lisha, Dhimitraq Argjiri, Fahri Kokici, Ilir Peposhi, Daniela Xhemalaj, J. Tula, Muharrem Rama, Skender Buci, Melaim Damzi, Agron Dogjani.

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Abstract

Introduction: The TNM classification of lung cancer is periodically revised. The International Association for the Study of Lung Cancer collected and analyzed a new database to inform the forthcoming ninth edition of the TNM classification.

Material and Methods: The proposed new N2 subcategories (N2a, involvement of single ipsilateral mediastinal or subcarinal nodal station, and N2b, involvement of multiple ipsilateral mediastinal nodal stations with or without involvement of the subcarinal nodal station) and the new M1c subcategories (M1c1, multiple extrathoracic metastases in one organ system, and M1c2, multiple extrathoracic metastases in various organ systems) were considered in the survival analyses. Several potential stage groupings were evaluated using various studies, including recursive partitioning, assessment of homogeneity within and discrimination between potential groups, clinical and statistical significance of survival differences, multivariable regression, and broad evaluation of generalizability.

Results: T1N1, T1N2a, and T3N2a subgroups are assigned to IIA, IIB, and IIIA stage groups, respectively. T2aN2b and T2bN2b subgroups are assigned to IIIB. M1c1 and M1c2 remain in stage group IVB. Analyses reveal consistent ordering, discrimination of prognosis, and broad generalizability of the proposed ninth-edition stage classification of lung cancer.

Conclusions: The proposed stages for the ninth edition TNM improve the granularity of nomenclature about anatomic extent, which has benefits as treatment approaches become increasingly differentiated and complex.

Keywords: New System, TNM, Lung Cancer.

References:

1. The Proposed 9th Edition TNM Classification of Lung Cancer Frank C. Detterbeck, Gavitt A. Woodard, Anna S. Bader; Michael J. Grant, Henry S. <https://doi.org/10.1016/j.>

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OP – 180

Thymus Hyperplasia and Thymoma Type B in Patients with Myasthenia Gravis: Two Case Reports

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Abstract:

Introduction: The thymus gland is a vital component of the immune system. However, abnormalities such as thymic hyperplasia (HT) and thymoma can present significant diagnostic and therapeutic challenges, particularly in patients with Myasthenia Gravis (MG). Both conditions may manifest with similar clinical features, complicating diagnosis, and surgical intervention often serves diagnostic and therapeutic purposes.

We present two cases of patients with MG who were referred to our clinic for surgical management. The first patient, diagnosed with thymic hyperplasia, underwent a standard sternotomy, while the second patient, diagnosed with Type B thymoma, underwent a minimally invasive mini-sternotomy. Both surgeries

aimed to excise thymic tissue, providing relief from MG symptoms and enabling a definitive diagnosis. The postoperative course was challenging, with complications arising in both cases, though surgical resection remains the gold standard for treating thymic pathologies.

Conclusion: Surgery remains the cornerstone of treatment for thymic hyperplasia and thymoma in patients with MG. Despite potential postoperative challenges, thymectomy provides both therapeutic and diagnostic benefits, and minimally invasive techniques can yield excellent results.

Keywords: Thymoma, Thymic Hyperplasia, Myasthenia Gravis, Thymectomy, Minimally Invasive Surgery

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OP – 181

Correlation of Breast Ultrasound with Elastography and Tumor Marker CA 15-3 as a Detecting Combination for Breast Lesions

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Abstract

Introduction: Early detection of breast lesions is

critical for timely diagnosis and treatment of breast cancer. Breast ultrasound, elastography, and the tumor marker CA 15-3 have individually shown diagnostic value. This study aims to evaluate the combined efficacy of breast ultrasound, elastography, and CA 15-3 levels in detecting and characterizing breast lesions.

Materials and Methods: A retrospective study was conducted on patients who presented with breast lesions at the General Surgery Department of University Hospital Center "Mother Teresa." Data on breast ultrasound findings, elastography results, and CA 15-3 levels were collected. The study included cases from January 2020 to June 2023, assessing the correlation between imaging and tumor marker levels in differentiating benign from malignant lesions.

Results: The combination of breast ultrasound and elastography enhanced the accuracy of distinguishing between benign and malignant breast lesions. Elevated CA 15-3 levels were more commonly associated with malignant tumors, particularly when combined with abnormal ultrasound and elastography findings.

Conclusion: The integration of breast ultrasound, elastography, and CA 15-3 tumor marker assessment improves the detection and characterization of breast lesions.

Keywords: Breast lesions, ultrasound, elastography, CA 15-3, breast cancer, tumor markers.

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OP – 182

Innominate Artery Cannulation is a Simple and Safe Method for Cerebral Perfusion in Aortic Dissection

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Abstract

Introduction: Aortic dissection is a life-threatening condition often requiring surgical intervention, with cerebral perfusion being a critical factor in patient outcomes. Innominate artery cannulation has emerged as a straightforward and effective technique to ensure cerebral perfusion during aortic surgery. This study aims to evaluate the safety and efficacy of innominate artery cannulation in patients undergoing aortic dissection repair.

Materials and Methods: This retrospective study analyzed data from patients who underwent aortic dissection surgery between 2018 and 2023 at University Hospital Center "Mother Teresa." The technique of innominate artery cannulation for cerebral perfusion was employed, and patient outcomes, including neurological function and postoperative complications, were assessed.

Results: Innominate artery cannulation was performed in all cases, providing adequate cerebral perfusion throughout the procedure. The method demonstrated a high safety profile, with no significant neurological complications or adverse events directly related to the cannulation. Postoperative recovery was favorable, with minimal instances of cerebral ischemia or stroke. The technique was also simple, allowing for rapid implementation in emergencies.

Conclusion: Innominate artery cannulation is a safe, effective, and simple for ensuring cerebral perfusion during aortic dissection repair. Its high success rate

and low complication profile make it a reliable technique, particularly in urgent surgical settings.

Keywords: Innominate artery cannulation, cerebral perfusion, aortic dissection, aortic surgery,

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OP – 183

Unknown Origin of a Rare Case of Chylopericardium

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Abstract:

Introduction: Chylopericardium is a rare condition where chyle accumulates in the pericardial space due to lymphatic system disruption. It can be idiopathic or secondary to underlying conditions. Effective management often involves surgical intervention to stop the leakage and drain the fluid. This case report details a 64-year-old male patient presenting with dyspnea. An echocardiogram revealed a pericardial effusion, but further medical evaluation could not identify a secondary cause. Pericardiocentesis showed a milky fluid high in lymphocytes, confirming chylopericardium. Initially, conservative treatment, including a low-fat diet, medium-chain triglycerides,

total parenteral nutrition, octreotide, and pericardiocentesis, was attempted but failed after three weeks. Surgical intervention, involving a pericardial window and thoracic duct ligation, was then performed. The surgery was successful, and no fluid reaccumulation was observed in the pericardial or pleural cavities after resuming a normal diet. The patient was discharged in good condition seven days post-surgery.

Conclusion: Chylopericardium is a rare clinical entity, with 39.4% of patients being asymptomatic. Dyspnea is a common symptom in symptomatic cases. While nearly half of the patients respond to conservative management, the rest require surgical intervention for successful resolution.

Keywords: Chylopericardium, pericardial effusion, lymphatic system, thoracic duct ligation, pericardial window, idiopathic, surgical intervention, conservative treatment.

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OP –184

Perivalvular Abscess in Prosthetic Aortic Valve Endocarditis: Case Report and Literature Review

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Abstract:

Introduction: Perivalvular abscess is a severe and life-threatening complication of infective endocarditis, commonly affecting patients with prosthetic heart valves. It carries a high risk of morbidity and mortality if not promptly diagnosed and managed. The incidence of perivalvular abscesses in infective endocarditis patients ranges from 30% to 40%, with the aortic valve being more frequently involved than the mitral valve. Prosthetic valve endocarditis (PVE) has a higher predisposition for abscess formation than native valve endocarditis, with *Staphylococcus aureus* being the most frequently isolated pathogen. Surgical intervention is often required, and the timing of surgery is critical in achieving optimal outcomes. We report the case of a 72-year-old patient with prosthetic aortic valve endocarditis (PVE) complicated by a perivalvular abscess located in the non-coronary sinus 25 years after the initial aortic valve replacement. The abscess measured approximately 1.2 cm and was associated with vegetation, causing severe aortic regurgitation due to paravalvular leakage. During surgical exploration, a minor subaortic ventricular septal defect (VSD) was identified. The causative organism, isolated from blood cultures, was *Staphylococcus aureus* (non-MRSA). The patient underwent successful surgical management, including complex reconstruction of the aortic root and valve replacement.

Discussion: Perivalvular abscesses in PVE represent a surgical challenge due to the extensive tissue destruction and anatomical complexities involved. This case highlights the importance of early surgical intervention and the need for individualized treatment strategies based on the patient's condition and anatomical findings.

Conclusions: Aortic valve endocarditis complicated by perivalvular abscess formation is a significant therapeutic challenge, necessitating timely and meticulous surgical intervention. The choice of

surgical technique depends on the extent of tissue damage and the need for aortic root reconstruction.

Keywords: Infective endocarditis (IE), Prosthetic valve endocarditis (PVE), Perivalvular abscess, Aortic valve replacement, *Staphylococcus aureus*, Ventricular septal defect (VSD)

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OP-185

Optimizing Preoperative Decision-Making and Surgical Outcomes for Ductal-Dependent Pulmonary Blood Flow in Infants: A Patient-Specific Hemodynamic Simulation Approach

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Abstract

Introduction: Because of their intricate and diverse cardiovascular anatomy, managing infants with Pulmonary Atresia (PA) and Patent Ductus Arteriosus (PDA) requires careful decision-making. Patient-specific assessments of hemodynamics provide a unique, personalized method to assist in planning preoperative strategies for cardiovascular procedures in pediatric patients with PA related to PDA. This research assesses the effectiveness of custom

hemodynamic simulations to enhance surgical results for these at-risk infants.

Material and Methods High Resolutions CT/MRI images, 3D Slicer Software, Geomagic Software, Sketch CAD, Simscale Software, Material Properties (Blood Properties), Clinical Reports, Doppler Data, 3D Printer, and 3D Printing Material (clear resin). Five patients with PA and PDA agreed to participate in this study, and computed tomography CT image datasets constituted the initial input of the study. Image processing toolkits obtained the image-based three-dimensional (3D) model. Open-source CAD tools were utilized to create virtual models and shunts. Blood was characterized as a Newtonian fluid with a kinematic viscosity of 0.004 m²/s and a 1060 kg/m³ density. Finite Element Analysis (FEA) was used to model pressure variations, flow velocities, and wall shear stress (WSS) in two distinct surgical situations: PDA closure before shunt insertion compared to after shunt insertion. The results were examined to find the best treatment for each patient depending on flow dynamics and risk of vascular remodeling.

Results: Hemodynamic simulations showed custom differences in the best surgical strategies for each patient. Closing the PDA before shunting in 40% of infants led to stable pulmonary blood flow and a notable decrease in pressure gradients (average of 15 mmHg). In the other 3 instances, placing the shunt before closing the PDA showed better flow patterns, avoiding disruptions and decreasing areas of high WSS that can lead to complications after surgery.

Conclusions: Patient-specific hemodynamic modeling significantly improves tailoring surgical interventions in infants with PA and PDA. This method allows medical professionals to decide on the best intraoperative plan—either ligating the PDA before or after placing the shunt—by considering each patient's unique anatomical and hemodynamic characteristics, leading to better postoperative results and fewer complications.

Keywords: Pediatric Cardiology, Pulmonary Atresia, Patent Ductus Arteriosus, Hemodynamic Simulation, Surgical Planning, Patient-Specific Treatment

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OP – 186

Delayed Retrograde Type A, Aortic Dissection 5 Years after Thoracic Endovascular Aortic Repair (TEVAR). A Case Report.

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Abstract

Introduction: Diseases of the descending thoracic aorta present significant challenges in cardiovascular surgery. Thoracic endovascular aortic repair (TEVAR) has become a widely accepted intervention; however, it is associated with complications, including retrograde acute ascending aortic dissection (RAAD).

Case Presentation: A 65-year-old woman with a history of hypertension presented to our institution 5 years after a successful TEVAR procedure, reporting a sudden onset of severe chest pain. Computed tomography angiography (CTA) revealed an acute retrograde dissection extending from the stented

segment to the ascending aorta. The patient was promptly taken to the operating room, where a median sternotomy was performed. Cardiopulmonary bypass (CPB) was established via right subclavian artery cannulation, with hypothermia induced to 23°C and complete circulatory arrest utilized for antegrade cerebral perfusion. The ascending aorta was excised, and a 28-mm Dacron graft was anastomosed to both the stent graft and the aortic wall. The patient tolerated the procedure well, and the postoperative period was uneventful.

Discussion: Retrograde aortic dissection can occur as late as 51 months post-TEVAR. In our case, the acute dissection originated at the stented site and extended towards the aortic root 5 years after the initial intervention, which is considered atypical based on existing literature. This complication necessitates urgent open surgical repair.

Conclusion: While TEVAR is a viable treatment option for descending thoracic aortic dissections, lifelong surveillance is crucial due to the risk of late-onset type A dissections. Maintaining optimal control of arterial pressure is essential to minimize the risk of aortic trauma.

Keywords: thoracic endovascular aortic repair, type A aortic dissection, retrograde dissection, ascending aorta replacement

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OP – 187

A Case Report of Isolated Cor Triatriatum Sinister

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Abstract

Introduction: Triatrial heart is a rare congenital anomaly, reported by Jeiger in 0.4% of patients with congenital heart disease (1) and found in less than 0.1% of clinically diagnosed cardiopathies (2). Even though Church first described it in 1868 as a left atrium divided by an abnormal septum, Borst named it “cor triatriatum” in 1905 (3). It involves usually the left atrium (cor triatriatum sinister) and rarely the right atrium (cor triatriatum dexter).

Cor triatriatum can be an isolated lesion (approximately 25% of cases) (3), but in many cases, it is associated with other congenital cardiovascular anomalies. We will discuss isolated cor triatriatum sinister (CTS), which is defined as a fibromuscular membrane that divides the left atrium into two chambers: a more posterior pulmonary venous chamber and a more anterior chamber, the “true” left atrium. Symptoms in patients with CTS are related to obstruction of pulmonary venous drainage, pressure loading of the right side of the heart, and congestive cardiac failure.

We report a case of CTS in a pediatric patient (3 months old) who presented in the emergency department with pale skin, frequent episodes of apnea, and grunting. After hospitalization, the child’s condition was evaluated as critical with poor hemodynamic parameters, chronic hepatic congestion, congestion in the pulmonary circuit, and inotropic support. Subsequent imaging diagnosed cor triatriatum sinister. Transthoracic echocardiography

visualized the supramitral membrane, with a small opening of ~ 4 mm that mimics severe mitral stenosis. The patient underwent surgical correction immediately which consisted of resection of the mitral sub-valvular membrane under CPB. The condition post-intervention gradually stabilized, and overall, the postoperative course was uneventful.

This case report aims to establish how accurate imaging is in reaching a correct diagnosis and draw attention to the timing of surgery and the importance of clinical symptoms in defining when to conduct surgery in CTS. Cor triatriatum sinister rarely causes cardiogenic shock in newborns, but in these cases, emergency surgery is the only treatment option. In uncomplicated cases with timely surgical correction, the long-term prognosis and quality of life are excellent.

Keywords: Congenital heart defects; Cor triatriatum sinister; Surgical repair; Transthoracic

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OP – 188

Coronary Artery Fistula to Pulmonary Artery: Case Report and Literature Review.

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Abstract

Introduction: Congenital coronary artery fistulas are rare anomalies. The prevalence has been reported as 0.002% in the general population, but the prevalence is higher among patients undergoing conventional catheter angiography (0.05–0.25%). Coronary artery fistulas are abnormal terminations of the coronary arteries. The coronary artery terminates into a cardiac chamber, the coronary sinus, the superior vena cava, or the pulmonary artery or pulmonary vein. The arterial blood bypasses the regular myocardial capillary network. Clinically, CAFs are the most common congenital coronary anomaly to cause hemodynamic change. These fistulas are often incidentally identified in the adult and pediatric populations. Correct diagnosis of coronary artery fistulas is essential, and early surgical correction is indicated because of the high prevalence of late symptoms and complications. As coronary angiography and multidetector computed tomography have become more accessible, they have been increasingly used in the investigation of chest pain and heart failure. Traditionally, conventional angiography has been used for the diagnosis of coronary anomalies. Coronary artery fistulas are often incidental findings, which raises the question of how patients with this condition should be managed. Intervention with either transcatheter closure or surgical closure is often technically possible.

Material and Methods: case report

Results: Cortisone therapy is started in a patient with post-interventional pericardial fluid. The patient responds well to the treatment, and the dose is gradually reduced until it is stopped after two months.

Conclusions: Our case is an example of properly managing a rare coronary artery disease. The surgical approach was chosen after the development of coronary artery disease with significant stenosis of the main vessels (LAD), superimposed here, and the coronary 'steal phenomenon.' Myocardial

protection requires special care to avoid perioperative myocardial infarction (care is also needed when putting the patient in cardiopulmonary bypass (CPB)).

Keywords: Cardiac surgery, coronary artery disease (CAD), Pulmonary artery, Congenital coronary artery fistula, Incidental finding

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OP – 189

Challenges of Giant Aneurysms of Ascending Aorta

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Abstract

Introduction: Aneurysms of the aortic root and ascending aorta are the most common thoracic aortic aneurysms (TAA), accounting for around 60% of cases. These conditions present significant risks, especially in older adults, with factors such as aneurysm size, growth rate, and calcification influencing rupture risk.

Case Summary: We present three cases of giant ascending aortic aneurysms, all incidentally diagnosed with dilation ranging up to 9 cm. Two patients presented in the emergency department with symptoms of chest pain and dyspnea, raising suspicion of dissection. The first case involved a 68-year-old male with a coronary angiogram showing no significant stenosis. However, a CT angiogram revealed aneurysmal dilation of the right

coronary sinus (39 mm x 32 mm) and severe aortic valve regurgitation on transthoracic echocardiogram (TTE). The second case was a 69-year-old female involved in a road accident. A CT angiogram revealed an 86 mm dilatation of the ascending aorta with a 40 mm pericardial effusion. TTE confirmed the ascending aorta had enlarged to 90 mm. The third case involved a 66-year-old female with chronic chest pain and dyspnea for over a month. CT angiography revealed a saccular aneurysm of 53 mm, located 1.6 cm above the aortic bulb, with signs of chronic dissection.

All three patients underwent surgical intervention, including ascending aorta replacement, a modified Bentall procedure, and hemiarch repair with circulatory arrest. All surgeries were successful, and the patients showed good postoperative recovery.

Conclusion: Giant ascending aortic aneurysms are often asymptomatic but can present with life-threatening complications. Multimodal imaging is critical for diagnosis, and surgical treatment remains the gold standard for managing these cases. Various surgical techniques tailored to the patient's condition prevent further complications and ensure good outcomes.

Keywords: Aneurysm, ascending aorta, thoracic aortic aneurysm, surgery, dissection, Bentall procedure.

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OP – 190

Aortic Valve Surgery in Patients Over 75 Years Old: Early Results and Predictors of Hospital Mortality

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Abstract

Introduction: Aortic valve surgery is crucial to heart valve interventions globally. In recent decades, the demographic profile of patients undergoing this surgery has evolved, with a notable increase in the age of patients, particularly in our country.

This study aims to evaluate the early outcomes of aortic valve replacement surgery in patients 75 and older and identify negative predictors of hospital mortality.

Materials and Methods: We conducted a retrospective analysis of 73 patients aged over 75 who underwent aortic valve surgery from 2014 to 2021 at the Cardiac Surgery Service of the University Hospital Center “Mother Theresa” in Tirana. Patient demographics and preoperative, operative, and postoperative variables were extracted from hospital medical records. Data are presented as means with standard deviations, and statistical analyses were performed using t-tests and chi-squared tests.

Results: The cohort comprised 73 patients (50 males and 23 females) aged 75 to 85 years (mean age: 77.12 ± 2.31 years). The hospital mortality rate was 4.1%. Significant perioperative complications included low cardiac output (6.8%), stroke (2.7%), respiratory issues (4.1%), bleeding (2.7%), atrial fibrillation (21.9%), wound infection (2.6%), and conduction disturbances (4.2%).

Conclusions: Aortic valve surgery in patients over 75 years can yield favorable outcomes. However, concurrent procedures, prolonged extracorporeal circulation, and emergency interventions significantly increase operative risk.

Keywords: Aortic valve surgery, aortic prosthesis, elderly patients, hospital mortality

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OP – 191

Formation in the Left Atrium in an 80-Year-Old Woman

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Abstract

Introduction: Formations in the left atrium can be benign or malignant tumors (the most common being myxoma, a benign tumor), thrombi, vegetations, and, rarely, non-pathological variants of the valve. Ultrasound examination plays an essential role in differential diagnosis. This is important since formations, according to etiology, have different treatment alternatives.

Case report: A woman, 80 years old, presented to the emergency department with difficulty in breathing and pronounced physical weakness. The patient was treated only for HTA. During the objective examination: heart with arrhythmic tones with FC ~ 110/min, TA 135/75 mmHg, sat O₂ 94% under ambient O₂, the patient is afebrile; Standard laboratory examination was regular; ECG – AF with

fc ~ 100/min; in cardiac ECHO, a formation in LA ~ 2cm² is seen, dilating LA and RA.

Keywords: left atrium, tromb, myxoma

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OP – 192

Mitral Valve Surgery Through Mini-thoracotomy: Initial Team Experience and Short Review

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Abstract

Introduction: Minimally invasive mitral valve surgery (MIMVS) has become an effective alternative for patients requiring mitral valve intervention. This technique is associated with several advantages, including reduced trauma, less bleeding, decreased pain, and lower risk of wound infections, all of which contribute to faster recovery times and lower healthcare costs. This study presents our initial outcomes and offers a brief review of MIMVS based on current literature.

Material and Methods: This is a single-center retrospective study involving patients who underwent MIMVS by a single surgical team at the Cardiac Surgery Service of UHC "Mother Theresa." Patient data were extracted from medical records. Statistical

analyses were conducted using IBM SPSS version 24.0 software (SPSS, Inc., Chicago, IL, USA). Categorical variables were summarized using frequencies and percentages, while continuous variables were reported as mean $\pm$ standard deviation or median with range, as appropriate.

Results: The surgical technique involved either mitral valve repair or replacement through a right lateral mini-thoracotomy, utilizing a 5-7 cm incision in the 4th to 5th suitable intercostal space. Open femoral arterial and venous cannulation was employed for cardiopulmonary bypass (CPB), with jugular venous cannulation utilized in the first three patients. The mini-thoracotomy approach was associated with prolonged operative times; the mean CPB duration was 120 ± 20 minutes, and the mean cross-clamp time was 50 ± 15 minutes. The mean ICU stay was 30 ± 5 hours, and prolonged ventilation (>12 hours) was required for two patients, with a mean blood transfusion rate of 1.8 units per patient. Unfortunately, one patient experienced acute massive bleeding due to disruption of the atrioventricular sulcus, resulting in mortality 6 hours post-operation. Discharge occurred between the 5th and 8th postoperative days. Postoperative echocardiography demonstrated no mitral valve regurgitation in repair patients and satisfactory function of prosthetic valves.

Conclusion: Minimally invasive mitral valve surgery can be performed safely, comparable to the standard approach. However, larger studies are needed to validate this technique's additional advantages.

Keywords: Minimally Invasive Mitral Valve Surgery (MIMVS); Mitral Valve Repair; Mitral Valve Replacement; Minithoracotomy

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OP – 193***Reoperations to the Aortic Root After the Failure of the Freestyle Bioprosthetic Xenograft: A Real Surgical Challenge***

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Abstract

Introduction: The Medtronic Freestyle stentless porcine aortic root bioprosthesis has been approved by the U.S. Food and Drug Administration since 1997. It is known for its excellent hemodynamic properties and low late structural valve deterioration rates. However, reports of structural abnormalities, particularly pseudoaneurysm formation, have emerged since 2005. Notably, Ozaki et al. identified a unique failure mode characterized by degeneration of the porcine aortic root sinus of the Valsalva wall, resulting in perforation and pseudoaneurysm formation.

Material and Methods: We present two cases of redo-aortic root replacement following previous aortic valve replacement (AVR) with the Freestyle bioprosthesis using the complete sub-coronary implantation technique. Patient 1 presented with heart failure due to massive regurgitation of the Freestyle valve, while Patient 2 developed a rupture and pseudoaneurysm 11 and 16 years after Freestyle implantation, respectively. The report includes detailed descriptions of the operative interventions, preoperative workup, and perioperative management.

Results: Both cases illustrate the complexities of valve explantation due to dense adhesions between the Freestyle prosthesis and native aortic tissue, which can lead to significant damage during removal.

Conclusions: This report demonstrates safe and effective strategies for addressing the challenges posed by failed Freestyle valves. The choice of the prosthesis, after various factors, including patient preferences, anticoagulation tolerance, root anatomy, and the necessity for concurrent procedures, influence valve explantation. Ultimately, these operations can be conducted with favorable outcomes despite the inherent difficulties.

Keywords: Aortic root replacement; Freestyle bioprosthesis; Pseudoaneurysm; Valve explantation

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OP – 194***Selection of Prosthesis in Aortic Valve Surgery: A Short Review and Trends in Our Practice Over the Last 10 Years***

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Abstract

Introduction: Aortic valve surgery has evolved significantly over the past decade, particularly in our country, where the primary condition historically treated was rheumatic aortic valve disease, predominantly affecting patients under 60. Recent shifts in lifestyle, increased life expectancy, and advancements in surgical techniques have led to a rising incidence of atherosclerotic aortic valve disease requiring surgical intervention. This paper aims to

address current issues in selecting aortic valve prostheses, emphasizing both prosthesis-related and patient-related factors while examining trends in prosthesis utilization in our practice over the past decade.

Materials and Methods: We retrospectively reviewed the mechanical and bioprosthetic valves utilized in our clinic over the last ten years at the Cardiac Surgery Service of the University Hospital Center "Mother Teresa." This review included an analysis of relevant literature, studies, and guidelines from prominent European and American cardiology associations regarding heart valve management.

Conclusion: The prosthesis for aortic valve replacement is a critical decision influenced by patient-specific factors and the characteristics of the prosthetic options. Our findings highlight the need for a personalized approach in selecting the appropriate prosthesis, guided by established recommendations, the expertise of the surgical team, and informed patient preferences, all while considering each type's inherent benefits and risks.

Keywords: Prosthesis Selection, Aortic Valve Surgery, Bioprosthetic Aortic Valve, Mechanical Aortic Valve Prosthesis

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OP – 195

Risk Factors for Surgery Indication in Infective Endocarditis Patients

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Abstract

Introduction: Infective endocarditis (IE) is a life-threatening heart infection, with mortality rates ranging from 12.2% in native valve infective endocarditis (NVIE) to 23.8% in prosthetic valve infective endocarditis (PVIE). Identifying the risk factors for surgical intervention in IE patients is crucial for improving patient outcomes.

Material and Methods: This study is a combined observational, retrospective, and prospective analysis of 267 patients diagnosed with IE between 2016 and 2022 at Monaldi Hospital, Naples, Italy. General clinical, hematochemical, and imaging data were collected, focusing on the clinical outcomes, particularly the indication for cardiac surgery.

Results: Of the 267 patients, 177 (66.3%) were male, with a median age of 65 (IQR 54-73). Surgery was indicated in 193 (73.9%) patients, but only 168/193 (87%) underwent surgery. Univariate analysis showed that surgery was more frequently indicated in males ($p=0.011$), in patients with higher copeptin levels ($p=0.020$), in cases of CIED-related endocarditis ($p<0.001$), and in NVIE compared to PVIE ($p<0.001$). Larger vegetation size was also associated with increased surgical indication ($p=0.016$). However, logistic regression analysis revealed that none of these factors were independent predictors of surgical

indication. Additionally, surgery indication was not associated with higher mortality ($p=0.273$) or embolic complications ($p=0.231$).

Conclusions: Cardiac surgery was more commonly indicated in males with native valve IE, CIED-related infections, higher copeptin levels, and larger vegetations. However, these factors did not independently predict surgery indication in logistic regression analysis.

Keywords: Infective endocarditis, Cardiac surgery, Mortality, CIED, Native valve.

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OP – 196

Intrabulbar Foreign Body (Trauma) Case Report

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Abstract

Introduction: Intrabulbar foreign bodies (IOFBs) can lead to significant ocular damage and visual impairment due to initial laceration or hemorrhage at the time of injury. Subsequent complications, such as retinal detachment or endophthalmitis, may further compromise visual outcomes. Various factors influencing final visual prognosis in IOFB cases include initial visual acuity, size and location of the IOFB, entry wound characteristics, presence of a

relative afferent pupillary defect (RAPD), intraocular hemorrhage, retinal detachment, and endophthalmitis.

Method: A 55-year-old male patient (Sh.L.) presented to our clinic with diminished vision in the left eye following an incident involving a metallic object during work.

Ophthalmological examination findings:

Right Eye (RE): Healthy, Left Eye (LE): Hand movements perceived only. Bulbous hypotonia upon palpation Supratemporal corneoscleral perforation, corneal imbibition, hyphema, and vitreous hemorrhage were noted. A computed tomography (CT) scan confirmed the presence of an intrabulbar foreign body.

Technique: Phacoemulsification with intraocular lens implantation (IOL) + Pars Plana Vitrectomy (PPV) + Foreign body removal using Pars Plana + Endolaser + Fluid-Air Exchange + Silicone Oil (1000 centistokes)

Results: Clinical examination alone often fails to identify all IOFBs. Therefore, ocular imaging modalities, including plain radiography, CT, magnetic resonance imaging (MRI), and ultrasonography (USG), are essential for ruling out multiple IOFBs and aiding in their accurate localization.

Conclusion: Ocular trauma remains a leading cause of visual impairment, with IOFBs contributing significantly to ocular morbidity associated with open globe injuries. This study highlights the clinical presentation, characteristics, management, treatment outcomes, and prognostic factors of IOFBs. Specifically, posterior segment IOFBs and retinal detachment correlate significantly with poor final visual outcomes.

Keywords: Intrabulbar Foreign Body (IOFB); Ocular Trauma; Visual Impairment; Retinal Detachment

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OP – 197***Immunocompromised Patients in Oral and Maxillofacial Surgery: Part I***

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Abstract

Introduction: Immunocompromised patients are at significantly higher risk of developing severe oral and maxillofacial pathologies than their healthy counterparts. These individuals often present with atypical or delayed symptoms, making early diagnosis and management challenging. It is crucial for oral and maxillofacial surgeons and emergency medicine providers to maintain a high level of suspicion for severe complications in this vulnerable population.

This review focuses on the comprehensive management of immunocompromised patients, including those who have undergone solid organ transplantation (SOT), stem cell transplantation (SCT), chemotherapy, radiation therapy, long-term corticosteroid therapy, or tumor necrosis factor-alpha (TNF- α) inhibitor therapy. Additionally, it covers patients with conditions such as human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS), chronic hepatitis B (HBV), and chronic hepatitis C (HCV) infections. We will discuss the specific risk factors for these patients' viral, bacterial, and fungal infections and outline a systematic approach to their diagnostic evaluation and treatment.

Conclusion: Immunocompromised patients undergoing oral and maxillofacial surgery require meticulous evaluation and tailored management due to their increased susceptibility to infections and atypical disease presentation. Understanding the underlying immunosuppressive conditions and associated risks of viral, bacterial, and fungal infections is critical for

optimizing outcomes. A multidisciplinary approach involving collaboration between oral surgeons, infectious disease specialists, and emergency medicine providers is essential to ensure timely diagnosis and effective treatment for this high-risk patient population.

Keywords: Immunocompromised patients, oral and maxillofacial surgery, solid organ transplantation,

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OP – 198***Immunocompromised Patients in Oral and Maxillofacial Surgery: Part II***

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Abstract

Introduction: A subset of patients presenting for outpatient oral and maxillofacial surgical treatment are immunocompromised due to underlying diseases or medical therapies. Common conditions associated with immunosuppression include rheumatologic diseases, solid organ transplantation, HIV, cancer, and primary immunodeficiencies. This review will focus on these diagnoses and their specific challenges in the outpatient surgical setting.

Clinicians managing immunocompromised patients must remain vigilant for infections, as these individuals often exhibit atypical presentations due to

an impaired ability to mount an adequate inflammatory response. Infections may progress silently, remaining occult for extended periods, only to escalate rapidly once symptoms manifest. Given the higher risks, when an immunocompromised patient requires admission to the surgical ICU, swift and aggressive diagnostic and therapeutic interventions are critical to improve outcomes. Understanding these complexities and adopting a proactive approach in outpatient and ICU settings can prevent severe complications and optimize patient care.

Conclusion: Outpatient surgical management of immunocompromised patients requires heightened vigilance due to their increased susceptibility to infections and atypical presentations. Conditions such as rheumatologic disease, HIV, cancer, organ transplantation, and primary immunodeficiencies necessitate tailored approaches to ensure safe and effective care. The potential for rapid disease progression in these patients, especially in the setting of infection, underscores the importance of timely and aggressive diagnostic and therapeutic interventions, particularly in the ICU.

Keywords: Immuno-compromised patients, outpatient surgery, oral and maxillofacial surgery,

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OP – 199

A Challenging Trauma Case of Repeated Penetrating Keratoplasty with Poor Outcomes

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Abstract

Introduction: Penetrating keratoplasty (PK) is a complex surgical procedure with a significant risk of graft failure, particularly in patients with a history of trauma or other complicating factors. This case report presents a challenging instance of repeated PK with poor outcomes, underscoring the difficulties in managing corneal graft failures and the importance of tailored treatment strategies. To present and analyze a case of repeated PK in a patient with corneal trauma, emphasizing the challenges encountered, postoperative complications, and potential lessons for improving future management of similar cases.

Case Report: A 68-year-old female patient with a history of corneal trauma underwent an initial penetrating keratoplasty (PK) due to severe visual impairment from a full-thickness central corneal scar. She presented to our clinic two months after the initial PK, which was performed elsewhere, with a "melting" cornea and a failed graft. The affected eye exhibited conjunctival injection, hypopyon, and severe pain bordering on endophthalmitis.

Aggressive treatment with systemic and topical medications was immediately initiated to preserve the eye. Ultrasound imaging confirmed an attached retina with no posterior segment complications. Despite this intervention, the patient experienced persistent visual deterioration and corneal decompensation, necessitating a second PK three weeks later.

Post-operatively, the graft appeared stable with a well-formed anterior chamber. However, a glaucomatous optic nerve was identified on day one. Two weeks after the second PK, the patient returned with uncontrolled intraocular pressure (IOP) of 65 mmHg, significant pain, and graft rejection signs, including corneal neovascularization, central haze, and peripheral anterior synechiae (PAS). Despite interventions to

lower IOP, break the PAS, and administer immunosuppressive therapy, the graft failed, and the patient's visual acuity did not improve. Further corneal surgery or keratoprosthesis was not considered due to optic nerve damage.

Results: This case highlights the considerable challenges of repeated PK, particularly in patients with multiple risk factors for graft failure, such as trauma and potential immune-related complications. Despite aggressive surgical and medical management, graft rejection and failure occurred. Contributing factors, including infection risk and immune response, were significant in this patient's outcome.

Conclusion: Repeated penetrating keratoplasty presents unique challenges, especially in cases of prior graft failure. This case underscores the need for personalized and proactive treatment strategies and close post-operative monitoring to mitigate the risk of graft rejection and optimize outcomes in complex cases.

Keywords: Penetrating keratoplasty, corneal graft failure, graft rejection, corneal transplantation, trauma,

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OP – 200

From Dog Bites to Tear Rights: A Case Study in Canalicular Reconstruction

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Abstract

Introduction: Traumatic canalicular lacerations can significantly impair tear drainage and ocular function, particularly in cases resulting from animal bites. Prompt and precise surgical intervention is crucial for optimal recovery.

We report a 17-year-old male patient who presented to our clinic a canalicular laceration due to a dog bite, presenting with extensive tissue damage. Detailed imaging and direct examination were done to assess the injury. The surgical approach involved careful debridement of necrotic tissue, followed by microsurgical anastomosis of the affected canalicular structures, aiming to restore anatomical and functional integrity. Follow-up evaluations demonstrated satisfactory restoration of tear drainage and minimal scarring. Lacrimal system patency was confirmed through canalicular irrigation to confirm successful surgical repair.

Conclusion: This case highlights the importance of timely surgical intervention and correct reconstruction techniques in managing canalicular injuries. A thorough preoperative examination is essential for effective surgical planning.

Keywords: bite, canalicular, laceration, surgical, reconstruction,

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OP – 201***Evaluating Surgical Techniques in Upper and Lower Blepharoplasty: A Comparative Study***Alda Zani ¹, Eglantina Bulica ²,¹ Polyclinic of Specialty no. 2, Tirana, Albania² Ophthalmologist, Health Center Kamez, Tirana, Albania**Abstract**

Introduction: In this paper, we will present the use of surgical techniques of palpebral reconstruction after tumor removal and the selection and adaptation of the method for each patient included in the study. On our part, 208 cases of patients with palpebral tumors were studied during 2020-2023 at the Oculus Ophthalmological Clinic in Tirana.

Material and Methods: All presented cases have undergone palpebral reconstruction interventions: lower palpebral reconstruction, medial angle reconstruction, and superior palpebral reconstruction. The most used techniques are direct closure, lateral canthotomy, Hughes technique, Cutler-Beard technique, Tenzel rotary technique, glabellar flap, free graft, and nasojugal flap transposition.

Results: Most tumors were located in the lower eyelid (164 cases), in the medial canthus (37 cases), and in the upper eyelid (7 cases). Direct closure with lateral canthotomy was the most used surgical technique in the lower eyelid for defects smaller than 1/3 of the lid. The lateral advancement flap is often used for defects smaller than 2/3 of the eyelid. The Hughes flap technique is often used for defects of over 2/3 of the eyelid.

Conclusion: The eyelids are complex and dynamic structures at the same time. Therefore, their reconstruction is not easy. The strict selection and application of the technique ensures that the patient

has a satisfactory functional and aesthetic result after the operation. Basal cell carcinoma is the most common tumor of the eyelids and is mainly located in the lower eyelid. Reconstruction and selection of surgical technique depend on the dimensions and position of the tumor. Large tumors create greater difficulties in palpebral reconstruction and also functionally and aesthetically create unsatisfactory results. One of the main problems in Albania is late diagnosis. Patients consult a specialist when the tumor mass of the eyelid is very large, which complicates its reconstruction and increases the possibility of recurrence.

Keywords: palpebral reconstruction, Cutler-Beard technique, Hughes technique, basal cell carcinoma,

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OP – 202***Odontogenic neck region infections requiring hospitalization. (Clinical cases report).***

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Introduction: Odontogenic inflammatory processes are the most frequent pathologies in the oro-maxillo-facial region. The most common pathogens in neck infections are streptococcus viridans, streptococcus pyogenes, anaerobic pepto-streptococcus species, hemolytic streptococcus, and staphylococcus aureus.

Mortality rates of deep neck infections range from 1% to 25 %.

Materials and Methods: In this oral presentation, we introduce some clinical cases of neck infections associated with clinical signs such as high temperature, dysphagia, pain in neck movements, and third-degree trismus. The diagnosis was made based on the patient's history, clinical examination, and X-ray or CT scan imaging. Surgical management is based on the basic protocol: incision and drainage(I&D), and it is supported by different types of antibiotics, steroids, and nonsteroid anti-inflammatory medicaments by intravenous perfusion.

Conclusions: Neck infections cause high temperature, dysphagia, dysphonia, trismus, pain in neck movements, and respiratory distress. The most severe complications include airway obstruction, descending mediastinitis, significant vessel thrombosis, necrotizing fasciitis, and sepsis. The purulent material can spread very quickly into the pharyngeal space and downwards into the mediastinum; in this case, the infection is life-threatening for the patient. Prognosis is variable depending on the immunological status of the host, severity, and location of the infection. time.

Keywords: Odontogenic neck infection, trismus, incision and drainage(I&D).

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OP – 203

Cognitive Dysfunction in Advanced Chronic Kidney Disease: Prevalence and Risk Factors in The Albanian Population

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Abstract

Introduction: Cognitive impairment (CI) is increasingly prevalent among chronic kidney disease patients, particularly those undergoing renal replacement therapy, emerging as an independent risk factor for CI when compared to the general population. This dysfunction can severely impact treatment adherence and overall quality of life; however, its prevalence and associated factors within the Albanian population remain inadequately studied. In this study, we aimed to determine the prevalence of CI and identify the possible critical demographic and clinical factors associated with cognitive decline.

Material and Methods: We performed an observational, cross-sectional study to evaluate cognitive function using the Montreal Cognitive Assessment (MOCA) test in hemodialysis patients. Patients with a diagnosis of dementia or severe neurologic impairment, active cancer, or infection were excluded.

Results: We evaluated 93 patients with a current mean age of 59 years old; 68% were male. The prevalence of CI assessed by the MOCA test was 60.4 % of the participants had MCI, 30% had moderate cognitive impairment, and only 9.6% of dialysis patients in our study were normal. Memory and attention were the most severe impaired domains in the major cognitive impairment group. Factors associated with major CI included age, education level, history of comorbidities, dialysis vintage, and single pool Kt/V.

Conclusions: We reveal a high prevalence of cognitive impairment in this population, with significant correlations to specific demographic and clinical variables. Addressing cognitive impairment in chronic

kidney disease is crucial for improving treatment adherence and patient outcomes. Ultimately, this research will lay the groundwork for future investigations into targeted interventions to improve cognitive function and quality of life in this vulnerable population.

Keywords: Cognitive dysfunction, mild cognitive impairment, Hemodialysis patients, MOCA test

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OP – 204

Compartment Syndrome and Kidney Failure: A Critical Connection

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Abstract

Introduction: Compartment syndrome is a severe and potentially life-threatening condition that often follows trauma or surgery but may also result from other triggers, such as substance abuse, intense physical exertion, immobilization, and vascular injuries. One of the lesser-known yet critical complications of compartment syndrome is its ability to cause acute kidney failure, frequently through rhabdomyolysis. In severe cases, muscle breakdown leads to the release of myoglobin, a muscle protein, into the bloodstream, which can damage renal function. The presence of toxic byproducts and systemic inflammatory responses further impairs

kidney function, making the condition particularly difficult for individuals with pre-existing renal dysfunction.

The link between compartment syndrome and renal failure often progresses to acute kidney injury (AKI) and, in severe cases, acute tubular necrosis (ATN), potentially necessitating hemodialysis. Although these two conditions are distinct, their interplay can significantly influence patient outcomes and treatment strategies.

Conclusion: Early recognition of compartment syndrome, followed by timely surgical intervention (such as fasciotomy) and aggressive fluid management, is vital in preventing kidney damage. Interdisciplinary management approaches are essential to addressing the complex interrelationship between compartment syndrome and kidney failure, ensuring better outcomes for affected patients. Further research and education are critical to enhancing clinical practice and reducing the risks associated with these interconnected conditions.

Keywords: compartment syndrome, kidney failure, rhabdomyolysis, acute tubular necrosis,

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OP – 205

Pathophysiology and Treatment of Membranous Nephropathy

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Abstract

Introduction: Due to immune complex deposition, the thickening of glomerular capillary walls characterizes membranous nephropathy (MN), leading to significant proteinuria. Historically, patient outcomes followed the "rule of thirds," but advancements in immunosuppressive therapies, particularly cyclophosphamide, have reduced the need for kidney replacement therapy.

Recent discoveries, including identifying the M-type phospholipase A2 receptor (PLA2R) as a critical auto-antigen, have improved the understanding of MN as an autoimmune disease. Despite treatment options like cyclophosphamide and calcineurin inhibitors showing effectiveness, challenges remain regarding toxicity and relapse rates. The efficacy of rituximab, while promising, has yet to be fully established in preventing disease progression.

Current clinical trials have not resolved the debate between the toxicity of cyclophosphamide and the efficacy of CD20-targeted therapies, indicating a need for novel treatment strategies. Ongoing research continues to explore the pathogenesis and management of MN.

Conclusions: Membranous nephropathy is primarily an autoimmune condition characterized by immune complex deposition leading to significant proteinuria. While immunosuppressive therapies have improved patient outcomes, the optimal treatment remains controversial due to varying efficacy and potential side effects. Identifying specific auto-antigens, particularly PLA2R, has enhanced our understanding of the disease's pathophysiology. Future research should focus on refining therapeutic approaches to balance efficacy with safety, aiming to improve long-term outcomes for patients with membranous nephropathy.

Keywords: Membranous nephropathy; Proteinuria; Autoimmune disease; Phospholipase A2 receptor

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OP – 206***How to Determine the Cardiovascular Status of Patients Undergoing Non-Cardiac Surgery***

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Abstract

Introduction: The role of preoperative cardiac evaluation is to determine the stability of the patient's cardiovascular status and whether the patient is in optimal medical condition. The evaluation should provide patients with a comprehensive understanding of the upcoming process.

Material and Methods: A history and cardiovascular examination are crucial to identify severe cardiac conditions such as unstable coronary syndromes, serious arrhythmias, decompensated HF, and valvular disease. These conditions would place the patient in a high surgical risk category. In some situations, an additional diagnostic cardiac evaluation is necessary based on the results of the initial preoperative test. In an acute surgical emergency, preoperative evaluation might be limited to simple tests,

Results: Only the most essential tests and interventions are appropriate until the acute surgical emergency is resolved. Under other, less urgent circumstances, the preoperative cardiac evaluation may lead to various responses, including delay or

cancellation of surgery until the cardiac problem has been clarified and treated appropriately. **Conclusions:** Preoperative cardiac evaluation is very important for all the patients undergoing noncardiac surgery because cardiac-related perioperative complications are well-known in general practice

Keywords: noncardiac surgery, perioperative cardiac evaluation, perioperative complications,

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OP – 207

Ultrasound in Kidney Transplant Follow-Up: Old but Still the Gold Standard of Modern Care

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Abstract

Introduction: Although newer imaging technologies have emerged, ultrasound remains the gold standard in the follow-up care of kidney transplant patients. Its non-invasive nature, accessibility, and real-time feedback make it a reliable tool for assessing graft function and detecting early complications. Despite being an older technique, it is key in guiding clinical decisions and complementing more advanced diagnostics. This review highlights the ongoing relevance of ultrasound, particularly Doppler ultrasound, in the early monitoring of kidney transplants. It focuses on its use in evaluating vascular

perfusion, identifying fluid collections, and monitoring parenchymal health, reinforcing its value in clinical practice.

Material and Methods: A comprehensive literature review was conducted on using conventional and Doppler ultrasound to assess transplanted kidneys. Key parameters analyzed include the resistance index (RI), renal perfusion, and identification of fluid collections such as hematomas, lymphoceles, and urinomas.

Result: Vascular Assessment: Doppler ultrasound measures the resistance index (RI), with average values ranging from 0.5 to 0.7. Deviations may indicate vascular complications such as stenosis, thrombosis, or acute graft rejection. Fluid Collections: Post-operative findings, including hematomas and lymphoceles, are easily detected with ultrasound. These fluid accumulations can compress renal tissue, affecting graft function. Parenchymal Health: Ultrasound helps detect signs of parenchymal distress, such as changes in echogenicity and edema, which are early indicators of potential complications. Looking Ahead: While MRI and elastography offer additional insights, ultrasound remains the first-line tool due to its practicality. Advances such as 3D ultrasound may further improve its effectiveness in transplant care.

Conclusions: Although ultrasound is an older technology, it remains the gold standard for kidney transplant follow-up. Its ability to provide quick, reliable, and noninvasive assessments makes it indispensable for routine care. Regular use ensures optimal short—and long-term outcomes, maintaining high standards in transplant patient management.

Keywords: Kidney, Ultrasound, Transplant

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OP – 208

Silent Threat: Unusual Onset of Diffuse Large B-cell lymphoma with Abdominal Pain and Thrombocytopenia

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Abstract

Introduction: Diffuse large B-cell lymphoma (DLBCL) is the most common subtype of non-Hodgkin lymphoma, known for its aggressive course. It typically presents with B symptoms, including fever, night sweats, and weight loss. However, atypical presentations, especially in elderly patients with comorbidities, can complicate diagnosis, particularly in the absence of systemic symptoms. Timely recognition and appropriate biopsy methods are essential for accurate diagnosis and initiation of treatment.

Material and Methods: Case report

Results: Case report: We present the case of a 73-year-old female with a history of hypertension who came to the emergency department with persistent abdominal pain and splenomegaly. Laboratory evaluation revealed thrombocytopenia without other significant abnormalities. Imaging confirmed splenomegaly without lymphadenopathy or other mass lesions. Due to her low platelet count, a bone marrow biopsy was performed instead of a splenic biopsy, leading to the diagnosis of DLBCL. The patient did not exhibit typical B symptoms, making this an unusual presentation. She was promptly started on an immune-chemotherapy regimen, with careful monitoring for treatment response and potential complications.

Conclusions: This case highlights the importance of considering DLBCL in elderly patients with atypical presentations, such as abdominal pain and thrombocytopenia, without classic B symptoms. Bone marrow biopsy can be a valuable diagnostic tool when splenic biopsy is not feasible. Early diagnosis and treatment initiation are key to improving prognosis in aggressive lymphomas like DLBCL.

Keywords: Splenomegaly, Diffuse large B-cell lymphoma, Bone marrow biopsy.

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Infectious Discitis as an Overlooked Complication in Hemodialysis Patients: A Case Report

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Abstract

Introduction: Discitis and spondylodiscitis are severe but rare infectious complications in patients on chronic hemodialysis involving the intervertebral disc and adjacent vertebral bodies. Hemodialysis patients are particularly susceptible to bacteremia due to their immunocompromised state, underlying comorbidities,

vascular access, repeated vascular punctures, or the presence of central venous catheters [1-5]. While recurrent bacteremia is a key contributor, spondylodiscitis may stem less commonly from ascending urinary tract infections or prior surgical procedures [1-5]. The true prevalence of discitis and spondylodiscitis is likely underestimated, as diagnosis can be challenging due to their subtle and nonspecific clinical presentation.

Material and Methods: Case Report

Results: A 45-year-old male presented to the Emergency Department with a one-week history of severe abdominal and lumbar pain, accompanied by restricted lower limb movements, unresponsive to conventional analgesics. His symptoms had developed insidiously over the previous four weeks, progressively worsening a week before admission.

Conclusions: Infectious discitis remains an uncommon yet severe complication in patients on maintenance hemodialysis. Its insidious onset and non-specific symptoms often delay diagnosis, contributing to high rates of morbidity, mortality, and prolonged hospitalizations. A high index of suspicion and prompt imaging in patients presenting with persistent back pain, even in the absence of fever or overt signs of infection, are essential to ensure timely diagnosis and avoid permanent neurological deficits.

Keywords: infectious discitis, hemodialysis, vascular access, back pain

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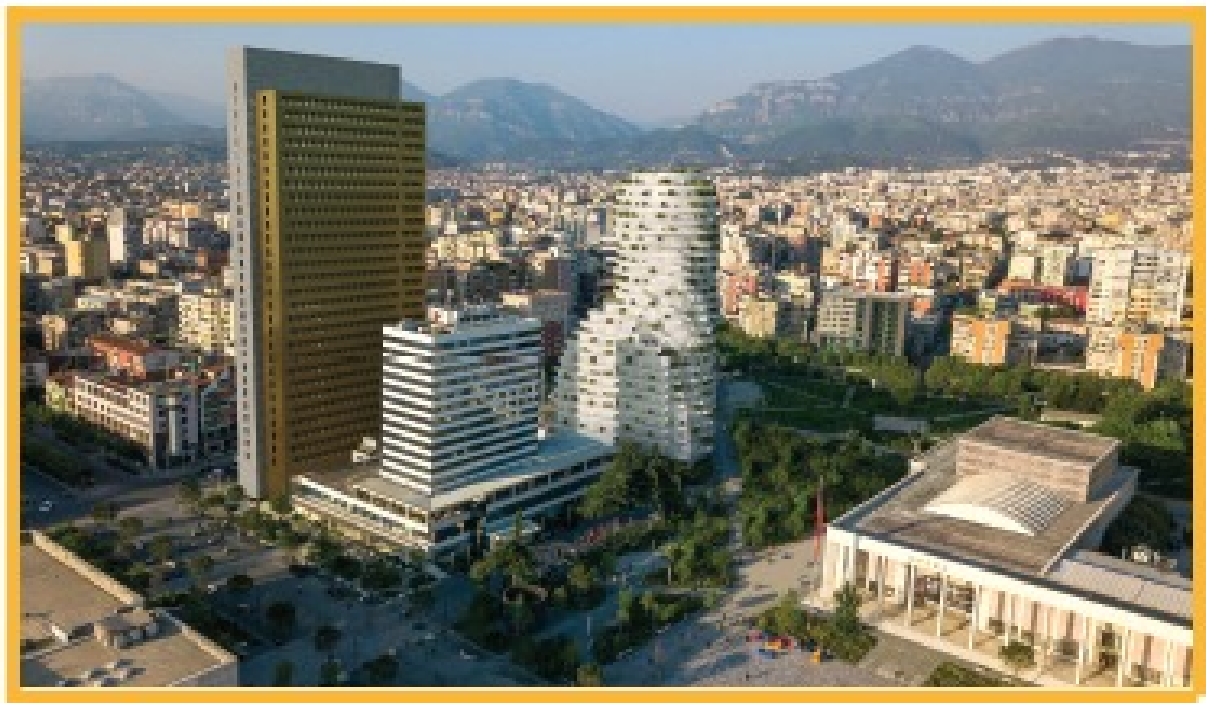


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