

Volume 72 | Supplement 1 | 2026

# ACTA MARISENSIS SERIA MEDICA

OFFICIAL PUBLICATION OF THE

GEORGE EMIL PALADE UNIVERSITY OF MEDICINE, PHARMACY, SCIENCE, AND TECHNOLOGY OF TARGU MURES



**UMFST-UMCH  
Research Days 2026**

---

**BOOK OF ABSTRACTS**

ISSN: 2668-7755 • Online ISSN: 2668-7763 • [www.actamedicamarisensis.ro](http://www.actamedicamarisensis.ro)



# **Acta Marisiensis - Seria Medica**

Volume 72 | Supplement 1 | 2026

**UMFST-UMCH  
Research Days 2026**

**BOOK OF ABSTRACTS**

# Acta Marisiensis - Seria Medica

## Editor-in-Chief

Professor Adrian Man  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

## Assistant Editors

Associate professor Anca Mare –  
clinical section editor  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Lecturer Cristina Ciurea – preclinical section editor  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Lecturer Andrei-Șerban Gâz-Florea -  
Pharmacology  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

## Editorial Secretariat

Lecturer Anca Cighir  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

## Technical Editor

Lucian Morariu  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

## Associate Editors

Professor Leonard Azamfirei  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Vladimir Bacărea  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor György Benedek  
*University of Szeged, Faculty of Medicine, Hungary*

Professor Imre Benedek  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Angela Borda  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Klara Brânzaniuc  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Constantin Copotoiu  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Ovidiu Cotoi  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Carol Csedő  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Dan Dobreanu  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Minodora Dobreanu  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Daniela Dobru  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Tiberiu Ezri  
*Wolfson Medical Center, Holon, Affiliated to Tel Aviv University, Israel*

Professor István Édes  
*University of Debrecen, Hungary*

Professor Dietmar Glogar  
*Medical University of Vienna, Austria*

Professor Gabriel M. Gurman  
*Ben Gurion University of Negev, Faculty of Health Sciences Beer Sheva, Israel*

Professor Simona Gurzu  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Silvia Imre  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Miklós Kásler  
*National Institute of Oncology, Budapest, Hungary*

Professor Marius Mărușter  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Associate Professor Monica Monea Pop  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Daniela Lucia Muntean  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Örs Nagy  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Aurel Nireștean  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Francisco Nogales  
*University of Granada, Faculty of Medicine, Spain*

Professor Sorin Popșor  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Lucian Pușcașiu  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Rosa Marin Saez  
*University of Valencia, Spain*

Professor Ario Santini  
*University of Edinburgh, Scotland, UK*

Professor Toru Schimizu  
*Institute of Multidisciplinary Research for Advanced Materials, Sendai, Japan*

Professor Francisc Schneider  
*University of Medicine and Pharmacy Timișoara*

Professor Dan Teodor Simionescu  
*Clemson University, Department of Bionengineering, Clemson, USA*

Professor Emese Sipos  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Mircea Suci  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Béla Szabó  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Zoltán Szentirmay  
*National Institute of Oncology, Budapest, Hungary*

Professor Tibor Szilágyi  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

Professor Peter Szmuk  
*University of Texas Southwestern Medical Center, Dallas, USA*

Associate Professor Luca Testarelli  
*Sapienza University of Rome, Italy*

Professor Camil E. Vari  
*George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures*

*Acta Marisiensis - Seria Medica* (ISSN 2668-7755) is the official publication of the George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures, being published by University Press, Targu Mures.

The journal publishes high-quality articles on various subjects related to research and medical practice from the all the medical and pharmaceutical fields, ranging from basic to clinical research and corresponding to different article types such as: reviews, original articles, case reports, case series, letter to editor or brief reports. The journal also publishes short information or editorial notes in relation to different aspects of the medical and academic life.

## Information for contributors

Manuscripts must be submitted via editorial manager system, available online at <https://ojs.actamedicamarisiensis.ro/>

## Correspondence

All correspondence should be addressed to the Editorial Office:

George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

38, Gh. Marinescu St, 540139 Tîrgu Mureș, Romania

**Editor-in-chief** Professor Adrian Man

or sent by e-mail to [ammjournal@umfst.ro](mailto:ammjournal@umfst.ro)

## Copyright statement

Under the Creative Commons Attribution-NonCommercial-NoDerivs license, the author(s) and users are free to share (copy, distribute and transmit the contribution) under the following conditions: 1. they must attribute the contribution in the manner specified by the author or licensor, 2. they may not use this contribution for commercial purposes, 3. they may not alter, transform, or build upon this work.

**Acta Marisiensis - Seria Medica** is indexed in the following international databases:

- SCOPUS
- DOAJ
- EBSCO Discovery Service (since 01 July 2010, first indexed number - no.4/2010)
- National Library of Medicine
- Sciendo
- Baidu Scholar
- Celdes
- Google Scholar
- J-Gate
- Publons

**DTP and Website Management**  
Editura Prisma

## Disclaimer

The views expressed in this journal represent those of the authors or advertisers only. In no way can they be construed necessarily to reflect the view of either the Editors or the Publishers.



---

## UMFST-UMCH Research Day for Medical Students 2026

### Organizing Committee

Prof. Simona Gurzu  
Prof. Simona Mureşan  
Prof. Mihaela Kardoş  
Prof. Anca Bacărea  
Prof. Andreea Varga  
Secretary Groşan Dan  
Secretary Moldovan Anca  
Secretary Popa Laura

### Scientific Committee

Prof. Man Adrian  
Prof. Muntean Carmen  
Prof. Mureşan Simona  
Prof. Puşcaşiu Lucian  
Prof. Stoian Adina  
Prof. Tero-Vescan Amelia  
Prof. Varga Andreea  
Assoc. Prof. Nagy Enikő  
Assoc. Prof. Pop Marian  
Lecturer Baniás Laura  
Lecturer Bauer Orsolya  
Lecturer Caraşca Cosmin  
Lecturer Gliga Florina  
Lecturer Halaşiu Bogdan  
Lecturer Hogeá Timur  
Lecturer Kosovski Bianca  
Lecturer Moldovan Flaviu  
Lecturer Zazgyva Ancuţa  
Assist. Botoncea Marian  
Assist. Branea Oana  
Assist. Butiulcă Mihaela  
Assist. Butiurcă Vlad-Olimpiu  
Assist. Chiciudean Rebeca  
Assist. Cozac Dan  
Assist. Esther Dho-Nagy  
Assist. Mariean Raluca  
Assist. Niculescu Raluca

## PERSISTENT ACTIVE ACROMEGALY AFTER TRANSSPHEOIDAL RESECTION – A CASE OF TREATMENT RESISTANCE AND COMPLEX MULTISYSTEM INVOLVEMENT

Iulian Engelmann-Aldea<sup>1</sup>, Maximilian Cosma Gliga<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Endocrinology, UMFST Tîrgu Mureş

**Background:** Acromegaly is a rare chronic disorder caused by a growth hormone (GH)-secreting pituitary adenoma, leading to elevated IGF-1 levels and progressive multisystem involvement. Macroadenomas pose clinical challenges when surgical cure is not achievable and medical resistance complicates long-term management. **Case presentation:** A 40-year-old female with longstanding hypertension presented with enlargement of the hands and feet and fronto-occipital headaches. Laboratory workup revealed significantly elevated IGF-1 levels (680 ng/ml, confirmed at 665 ng/ml). Pituitary MRI demonstrated a 26mm GH-secreting macroadenoma. A diagnosis of active acromegaly was established, and transsphenoidal resection was performed. Histopathology confirmed a sparsely granulated GH-secreting neuroendocrine tumor. Post-operative follow-up revealed persistent tumoral remnant in the sphenoid sinus and nasal fossa, demonstrated on serial MRI. First-line medical management with first-generation somatostatin analogues (octreotide LAR 30mg every 28 days) was initiated but demonstrated treatment resistance with persistently elevated IGF-1 levels (676.90 ng/ml). Pegvisomant (GH receptor blocker, 30mg/week) was subsequently added as second-line therapy but caused hepatotoxicity and inadequate biochemical control (IGF-1: 718.60 ng/ml). Given persistent biochemical activity and hepatotoxicity, treatment was switched to pasireotide 40mg every 28 days (a second-generation somatostatin analogue) combined with cabergoline 4mg/week. This adjustment was based on the tumor's sparsely granulated histopathological subtype, which expresses higher levels of somatostatin receptor subtype 5 (SSTR5). Pasireotide demonstrates superior binding affinity to SSTR5 compared to first-generation analogues (octreotide and lanreotide), which predominantly target SSTR2. Under this regimen, IGF-1 levels improved to 284 ng/ml (1.3× upper limit of normal). Neurosurgical re-evaluation concluded that reintervention was precluded by anatomical constraints. Gamma Knife stereotactic radiosurgery is under consideration given the sparsely granulated tumor subtype, significant residual tumor burden, and incomplete biochemical response to first-generation somatostatin analogues—recognized indications for radiotherapy in treatment-resistant acromegaly. **Case particularities:** This case illustrates the complexity of acromegaly with a large invasive macroadenoma, where surgical cure was unachievable and sequential medical therapies proved insufficient. The coexistence of multiple comorbidities—including treatment-related diabetes, cardiovascular risk factors, and gynecological complications—necessitated a comprehensive, multidisciplinary approach. Anatomical constraints precluding reoperation and ongoing consideration of Gamma Knife radiosurgery highlight challenges of managing persistent, treatment-resistant acromegaly. **Conclusion:** Active acromegaly with incomplete surgical resection and resistance to first-generation medical therapy represents a significant clinical challenge. This case highlights the importance of multidisciplinary involvement, vigilant comorbidity management, and individualized therapeutic escalation based on tumor histopathological characteristics. The stepwise progression from first-generation somatostatin analogues through GH receptor blockade to second-generation therapy (pasireotide), selected based on the tumor's sparsely granulated subtype and SSTR5 expression, illustrates personalized treatment strategies. Gamma Knife stereotactic radiosurgery is being considered—an approach particularly indicated for sparsely granulated tumors with significant residual burden and biochemical resistance to first-generation agents—highlighting the need for multimodal approaches in treatment-resistant disease.

**Keywords:** acromegaly, pituitary macroadenoma, pasireotide, Gamma Knife, multisystem comorbidities

## MORTALITY AND ORGAN FAILURE PATTERNS IN GRAM-POSITIVE AND GRAM-NEGATIVE SEPSIS: A SINGLE-CENTER ICU CASE SERIES

Anton Sebastian Baur<sup>1</sup>, Alexandra - Elena Lazar<sup>2</sup>, Oana - Elena Branea<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Anesthesiology and Intensive Care Medicine I, UMFST Tîrgu Mureş

**Background:** Sepsis constitutes a significant complication and a leading cause of mortality in intensive care units worldwide. Identifying the pathogen through blood cultures is a crucial component of sepsis diagnosis and guiding targeted therapy. However, which bacterial type is associated with worse outcomes and increased mortality?

**Objectives:**

The objective of the study is to examine mortality and severity of sepsis cases in the ICU, with differentiation between gram-negative and gram-positive sepsis. **Material and method:** The study included all patients diagnosed with primary or secondary sepsis and with a positive blood culture. Data collection was conducted using a patient sheet that focused on patient demographics (e.g., age), laboratory values (e.g., pH, lactate), scores (e.g., SOFA), organ dysfunction (e.g., AKI, ARDS), antibiotic treatment, and vasopressive treatment. **Results:** The study cohort consisted of 16 patients with a mean age of 73.2 years and an even gender distribution (female n=8, male n=8). The mean BMI was 28.3. Laboratory findings showed a mean lactate of 2.0 mmol/l ( gram positive mean= 2.11, gram negative mean= 1.98) and a mean pH of 7.295 (gram positive mean= 7.2245, gram negative mean= 7.336). The mean SOFA score was 9.63, indicating high disease severity. Organ dysfunctions have been observed frequently, with the following numbers: AKI n=9, hepatic failure n=4, ARDS n =3. Septic Shock occurred in 10 patients. The microbiological assessment indicates a heterogeneous distribution. The most common pathogens have been *Enterococcus Faecalis* (n=3), *Pseudomonas Aeruginosa* (n=3), and *Klebsiella Pneumoniae* (n=3). Other pathogens have included *Acinetobacter Baumannii*, *Enterobacter hormaechei*, MSSA, *Proteus mirabilis*, and *Streptococcus agalactiae* and *salivarius*. Overall, Gram-negative pathogens dominated (n=10). Mortality in gram-negative patients 80% and 50% in gram-positive patients. Organ dysfunction was distributed nearly evenly. AKI in gram-positive n=5 in gram-negative n=4. In septic shock, both groups had 4 patients. The SOFA score did not correlate with mortality, and the relationship was paradoxical. Mean SOFA survivors 10.4, mean SOFA non-survivors 9.27. The BMI was slightly higher in non-survivors (28.63) than in survivors (27.51). Age differences have been minimal, with the female group slightly older (male = 71.63, female = 74.53). Vasopressor use has been associated with high mortality. Noradrenaline n=13 ( deaths=8 survival=5), dobutamine n=5 (death =3 survival=2). **Conclusion:** So far, the results show that the mortality in the gram-negative cohort is markedly increased, with a prominent role of gram-negative multidrug-resistant pathogens. The burden of disease has been high for the whole cohort in both groups, with acidosis being more pronounced in the Gram-positive group. The SOFA findings have been unexpected and paradoxical. Vasopressor use indicated a poorer outcome. The discrepancies between the biological markers and the outcome may indicate the multifactorial nature of sepsis. Overall, the current findings show that a larger sample size is needed to be more precise and to generate a hypothesis.

**Keywords:** Sepsis, ICU-mortality, organ-dysfunction, gram-positive, gram-negative

## WHEN ECLAMPSIA MASQUERADES AS SUBSTANCE-RELATED SEIZURE: LESSONS FROM A MISSED DIAGNOSIS

Stefanie Wendler <sup>1</sup>, Teodora Sorana Truță<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Anesthesiology and Intensive Care Medicine (II) and Emergency Medicine, UMFST-UMCH Hamburg

**Background:** Eclampsia is a hardly observed, yet life-threatening complication of preeclampsia, a pregnancy-related hypertensive disorder. It is defined by the new onset of generalized seizures in preeclamptic women occurring in the setting of elevated blood pressure and proteinuria and often preceded by neurological symptoms including headache. The pathophysiology involves the dysfunctional implantation of the placenta leading to an impairment of spiral artery remodeling resulting in endothelial dysfunction, vasoconstriction and end-organ involvement. The development of seizures is thought to arise from the hyper perfusion of cerebral tissue which may cause endothelial injury, disruption of the blood-brain-barrier and vasogenic edema. The condition typically arises after the 20<sup>th</sup> week of gestation and may also present in the postpartum period. Although rare, eclampsia remains to be one of the leading causes of maternal death with mortality rates ranging from 5.6 % to 14 %. In addition to a substantial risk of fatal outcomes, eclampsia is associated with maternal morbidity with multisystem involvement including renal, hepatic, neurological and hematological systems. **Case presentation:** We describe a case of a 37-year-old female patient who initially presented with new-onset seizures and severe hypertension during an unrecognized pregnancy. Due to being unaware of her pregnancy at hospital admission, the clinical presentation was initially attributed to her substance use and therefore the eclampsia was overshadowed by a clinical masquerade. In the context of a positive toxicology screen for cocaine and amphetamines and unremarkable neurological evaluation, the presumptive diagnosis of acute intoxication was reaffirmed. After five days of therapy-resistant hypertension with no diagnostic suggestive of the underlying cause, beta-human chorionic gonadotropin ( $\beta$ -HCG) was determined to exclude a pregnancy-related hypertensive disorder. Given the markedly elevated value and confirmed proteinuria, an obstetric ultrasound examination was conducted that identified a fetus at estimated gestational age of 20 weeks leading to the diagnosis of eclampsia six days after initial presentation. An emergency caesarean section was conducted at which only fetal demise could be

pronounced. Following delivery, the patient's clinical condition stabilized. **Case particularities:** This case is noteworthy, as eclampsia was initially overlooked in the setting of confirmed substance use. The initial presentation led to a fixation on a preliminary diagnosis as the consideration of alternative etiologies, including the possibility of a pregnancy-related complication, occurred only after several days, delaying the underlying diagnosis of eclampsia. Therefore, this case serves as a clear example of anchoring bias within the emergency department setting. **Conclusion:** This case underscores how eclampsia can constitute a diagnostic challenge as the clinical picture can be overshadowed by a clinical masquerade. The consideration of pregnancy-related conditions, such as eclampsia, in the differential diagnosis of all women of reproductive age, can decrease the incidence of premature closure and ensure appropriate management of the patient. By implementing a clear and systematic approach, the risk of anchoring bias can be reduced. A low threshold for pregnancy testing should be maintained to prevent missed diagnoses.

**Keywords:** anchoring bias, diagnostic delay, eclampsia, emergency department

## GUIDELINE-COMPLIANT USE OF SGLT2 INHIBITORS IN HEART FAILURE: A CASE SERIES

Joseph Fischmann<sup>1</sup>, Andreea Varga<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Internal Medicine , UMFST-UMCH Hamburg

**Background:** To provide a practical overview of the use of SGLT2 inhibitors for the management of heart failure across the range of LVEF based on clinical evidence and contemporary data. The aim is to provide nine case studies of hospitalized patients with heart failure by ejection fraction phenotype and the use and barriers to SGLT2 inhibitor therapy and to provide context to recent evidence around the use of SGLT2 inhibitor therapy in heart failure by way of a systematic review of guideline implementation studies. **Case presentation:** In a series of nine hospitalized patients with heart failure, use of SGLT2 inhibitors increased greatly during hospitalization, particularly in those with reduced and preserved ejection-fraction heart failure. However, initiation of therapy was limited in the mildly reduced ejection-fraction cohort. **Case particularities:** This case series combines real world treatment data from a regional hospital and a targeted literature review to highlight phenotype specific gaps in guideline-directed therapy. **Conclusion:** Despite systematic optimization of hospital treatments with evidence-based heart-failure drugs, adherence to pharmacotherapy guidelines in clinical practice is low and SGLT2 inhibitors have improved, but not normalized, adherence. Sodium-glucose co-transporter 2 (SGLT2) inhibitors are now a major class of guideline-directed medical therapy for heart failure, as seen in the nine out of 75 patients (hospitalized during an acute decompensation) where SGLT2 inhibitors prescriptions for reduced and preserved ejection fraction patients were increased dramatically. There was less up-titration of therapies for patients with mildly reduced left ventricular ejection fraction. This might reflect a lower level of evidence and recommendation for this group and the lower rate of utilization ACE inhibitor or ARNI, beta-blocker and MRA in patients with mildly reduced left ventricular ejection fraction. The case series and the literature synthesis of this report, suggests that strategies to increase understanding of the guidelines, make medication available, and start treatment early in hospital settings may help people adopt evidence-based therapies discussed in this case series and narrow the gap between guideline-directed care and hospital practice.

**Keywords:** Heart failure, SGLT2 inhibitors, Guideline adherence, Mildly reduced ejection fraction, Preserved ejection fraction

## CARDIAC ARREST AND MASSIVE HEMORRHAGE SECONDARY TO AMNIOTIC FLUID EMBOLISM: CASE REPORT

Yasmin Schäffter<sup>1</sup>, Erika Gyöngyi Bán <sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Pharmacology, UMFST-UMCH Hamburg

**Background:** Amniotic fluid embolism (AFE) is a rare, life-threatening emergency that arises between 1.9-6.1 in 100.000 deliveries , characterized by sudden cardiovascular collapse and disseminated intravascular coagulation (DIC). Our objective is to highlight the current understanding of AFE as a catastrophic obstetric condition, marked by abrupt cardiopulmonary collapse, coagulopathy, and severe hemorrhage requiring immediate multidisciplinary

management. **Case presentation:** We present the case of a 39-year-old primigravida who underwent an elective primary cesarean section. During surgery, she developed sudden hemodynamic instability progressing to cardiopulmonary collapse, requiring immediate cardiopulmonary resuscitation. After return of spontaneous circulation, she was transferred to the intensive care unit, where high-dose catecholamine support and aggressive volume resuscitation were initiated. Shortly after, recurrent hemodynamic instability developed secondary to uterine atony, requiring emergency re-laparotomy. The patient progressed to hemorrhagic shock with massive bleeding, leading to the activation of a massive transfusion protocol and a supracervical hysterectomy. Ongoing hemorrhage from the right ovarian vein required a second re-laparotomy and right-sided oophorectomy. The clinical presentation, and laboratory-confirmed DIC, was highly suggestive of AFE. **Case particularities:** This case is notable for the combination of intraoperative cardiac arrest, severe DIC, refractory uterine atony requiring hysterectomy, and subsequent recurrent hemorrhage requiring repeat surgical intervention. Despite the severity of presentation and extensive multiorgan involvement, the patient survived without neurological sequelae. The case highlights the complexity of balancing hemodynamic support, massive transfusion, and correction of coagulopathy in the setting of ongoing bleeding. **Conclusion:** This case demonstrates that maternal survival is achievable even in severe AFE complicated by cardiac arrest, refractory uterine atony, and recurrent hemorrhage. Key factors contributing to the favorable outcome included immediate CPR with successful ROSC, early activation of massive transfusion protocols, timely surgical escalation to hysterectomy, and postoperative monitoring that enabled rapid detection of delayed ovarian vein hemorrhage. Clinicians should remain aware that DIC-related bleeding may persist from unexpected sources even after definitive uterine surgery.

**Keywords:** Amniotic fluid embolism, Disseminated intravascular coagulation, Cardiac arrest, Postpartum hemorrhage, Cesarean section

## SERONEGATIVE MYASTHENIA GRAVIS: A CASE REPORT

Ana Garafulla Cruz<sup>1</sup>, Laura Barcutean<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Neurology, UMFST Tîrgu Mureş

**Background:** Myasthenia Gravis (MG) is a rare autoimmune disease in which antibodies act against the components of the neuromuscular junction, such as the nicotinic acetylcholine receptor (AChR), muscle-specific tyrosine kinase (MuSK) or low density lipoprotein related to receptor 4 (LRP4). A minority of MG cases are seronegative. Clinically, MG is characterized by fluctuating muscle weakness and fatigue that worsens with physical exercise. According to the Myasthenia Gravis Foundation of America (MGFA), it is classified as Ocular MG with symptoms such as ptosis or diplopia (Class I), generalized MG (Class II-IV) if the weakness involves the bulbar respiratory or limb/axial muscles and severe (Class V) defined by the need for intubation. Additional classifications involve the serological phenotype evolution and response to therapy. MG diagnosis is suspected in patients who present with various degrees of muscle weakness. The gold standard electrophysiological test for diagnosis is represented by the single-fiber electromyography. The clinical suspected diagnosis needs to be confirmed by the previously mentioned antibodies, additional electrophysiological test and autoimmune screening. Abnormalities or tumors in the thymus are present in 15% of patients with MG. Management combines symptomatic therapy with pyridostigmine, - a reversible acetylcholinesterase inhibitor, and corticosteroids or other immunosuppressive agents that control autoimmune activity. Therapeutic plasma exchange or intravenous immunoglobulins provide a viable alternative for severe and refractory cases. Thymectomy is the indicated surgical treatment in patients with thymoma. **Case presentation:** A 67-year old male presents to the Emergency Department with a history of fluctuating bilateral ptosis more pronounced in the left eye, facial muscle fatigue, hypophonia, dysphagia, and upper limb muscle weakness. Upon neurological examination he exhibited horizontal diplopia, bilateral ptosis, weakness of the neck extensor muscles which worsened with repetitive movements and brachial diparesis (Medical Research Council grade 3). Muscle strength in the lower limbs was preserved. Serological testing for Ach-R and MuSK-R were negative. MG was diagnosed on the basis of increased jitter on single-fiber electromyography of spinal muscle. Upon admission, the patient was started on pyridostigmine. Due to the severity of the clinical presentation, the management was intravenous immunoglobulins and oral immunosuppressants with azathioprine. The patient presented with a favorable neurological clinical course in five days with the regression of the ptosis, bulbar syndrome and motor deficit. Testing for antibodies against low-density lipoproteins receptor-related protein 4 (LPR4) would be useful for diagnosis in this group of seronegative presentation. These specific tests were not available. **Case particularities:** This is a case of seronegative generalized MG that was managed with immunosuppressive therapy and intravenous immunoglobulins with a

favorable outcome. **Conclusion:** Myasthenia Gravis is a rare autoimmune disease. This case highlights the importance of considering the neurological clinical features such as ptosis and fluctuating muscle weakness. The clinical evaluation and electrophysiological studies were essential for diagnosis. An early diagnosis and appropriate treatment are key to reduce mortality and improve the patient's quality of life.

**Keywords:** Myasthenia Gravis, anti-acetylcholine antibody, anti-Musk antibody, anti-LPR4 antibody, electrophysiological studies

## MULTIMODAL MANAGEMENT OF ESOPHAGEAL ADENOCARCINOMA TREATED WITH FLOT-REGIMEN AND HYBRID ESOPHAGECTOMY: A CASE REPORT AND REVIEW OF COMBINED ONCOLOGICAL AND SURGICAL STRATEGIES

Darya Mavaji<sup>1</sup>, Peter Markus<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Surgery , Partner hospital

**Background:** Esophageal adenocarcinoma of the gastroesophageal junction is one of the most rapidly increasing malignancies worldwide, especially in Western countries and is frequently arising from Barrett's esophagus as a premalignant condition. Due to their complex anatomical location and heterogenous biological behavior, tumors at the gastroesophageal junction pose a major diagnostic and therapeutic challenge. It represents an aggressive malignancy that often presents at an advanced stage and requires a multimodal treatment strategy. The combination of neoadjuvant systemic therapy and surgical resection has become an established approach to improve oncological outcomes. **Case presentation:** We report the case of a 66-year-old male patient diagnosed with locally advanced adenocarcinoma of the gastroesophageal junction, classified as AEG II, after the patient presented with progressive dysphagia and high-grade esophageal stenosis. Diagnostic workup and staging revealed a uT3, N+, M0 tumor. The patient received neoadjuvant chemotherapy using the FLOT regimen and subsequent hybrid thoracoabdominal esophagectomy with gastric conduit reconstruction and en bloc lymphadenectomy. Histopathological examination revealed R0 resection with limited residual viable tumor and one positive lymph node, corresponding to a pathological stage of pT3, pN1, pL0, pV0, pPn0. The postoperative evolution was adequate but notable for transient hypotension associated with peridural analgesia and a left-sided pleural effusion, both of which were managed appropriately. The patient recovered and was discharged in a stable condition, with the recommendation of further systemic oncologic therapy. **Case particularities:** The present case illustrates the successful implementation of guideline-based and multimodal treatment strategies incorporating neoadjuvant FLOT chemotherapy in combination with minimally invasive hybrid esophagectomy in the treatment of locally advanced esophageal adenocarcinoma. **Conclusion:** This case report demonstrates the successful multimodal management of locally advanced esophageal adenocarcinoma of the gastroesophageal junction by applying neoadjuvant FLOT chemotherapy followed by minimally invasive hybrid thoracoabdominal esophagectomy. The chosen therapeutical strategy enabled a complete oncological resection with tumor-free margins and an acceptable postoperative morbidity.

**Keywords:** Esophageal adenocarcinoma, FLOT chemotherapy, Hybrid esophagectomy

## DRUG ADDICTION AND CHILD SEXUAL ABUSE- A CASE PRESENTATION

Angelica Thuy Mi Bogris<sup>1</sup>, Otilia Butiu<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Psychiatry, UMFST Tîrgu Mureş

**Background:** There is a significant amount of research concluding that child sexual abuse (CSA) leads to an increased risk of psychiatric problems. Traumatic events are known to have high importance as a risk factor for numerous psychiatric disorders. However, less clear conclusions have been made concerning the concurrence of these psychopathologies in victims of CSA, leading to complicated diagnostic decisions and thus, difficult treatment choices. **Case presentation:** The following case clearly demonstrates this complexity: a 17-year-old male patient with a history of psychiatric disorders attended an appointment made by his mother at the pediatric neuro-psychiatric clinic. He presented with suicidality, substance abuse (to cannabis, opioids, alcohol), irritability, psychomotor agitation and hallucinations (auditory and visual). The patient's symptomatology progressively worsened with a consumption of oxycodone due to his aggravating anxiety 4 days before the decision for

hospitalization was made for specialized treatment. During hospitalization, the patient elucidated experiencing sexual abuse by older men at the age of 10 years old. He expresses difficulties with interpersonal relationships and with adapting to school tasks and community duties. He evoked fluctuating affective states and a risk of psychotic decompensation. He exhibits manipulative and addictive behaviour, self harm as well as hyperprosexia of his feelings, furthermore demonstrating borderline traits. The patient was later discharged with Olanzapine, Trihexyphenidyl and Sodium Valproate, as well as recommendations for psychotherapy, recreational drug prohibition and permanent supervision. **Case particularities:** This case highlights the polymorphism of this patient's psychiatric presentations following CSA. **Conclusion:** To avoid errors in diagnoses and, subsequently, treatment decisions, it is important to illuminate the co-occurrence of psychiatric pathologies in patients victims of CSA, as well as the neuropsychiatric development in order to better understand the presentation. Co-occurrence of specific behaviours and psychiatric pathologies in victims of CSA are still little understood, providing strong reason for more research on the effect that trauma, especially in childhood, can have on neuropsychiatric development.

**Keywords:** CSA (child sexual abuse), addiction, drug abuse, psychiatric comorbidity, psychiatric risk factors

---

## WHEN INFLAMMATION MIMICS MALIGNANCY: A DIAGNOSTIC PITFALL IN THE CONTEXT OF SUBACUTE THYROIDITIS

Arianna Portulano<sup>1</sup>, Maximilian-Cosma Gliga<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Endocrinology, UMFST Tîrgu Mureş

**Background:** Subacute thyroiditis (SAT), also named De Quervain's thyroiditis, represents an inflammatory disease of the thyroid parenchyma. In the majority of cases, the presumptive etiology is a viral infection or a postviral inflammatory process, with patients presenting with a history of an upper respiratory infection, preceding the onset of thyroiditis. Clinical experience typically identifies anterior neck pain as the dominant symptom, nevertheless asymptomatic cases have been reported in the literature. The estimated incidence of the disease is low, reported around 12 cases per 100,000 people, nonetheless it is important to be considered in the differential diagnosis of thyroid nodular lesions. **Case presentation:** A 46-year-old female patient visited our outpatient endocrinology department with a recent-onset anterior neck pain, associated with visible thyroid enlargement, tenderness on palpation and complaints of mild palpitations and night sweats. Initial radiologist-performed ultrasound imaging showed irregular and heterogeneous areas in both thyroid lobes, raising concerns about a suspicious nodule, and fine-needle aspiration biopsy (FNAB) was recommended. However, laboratory investigations revealed thyrotoxicosis and inflammatory syndrome, confirmed by increased C-reactive protein (CRP). Despite initial suspicion of malignancy, clinical and laboratory evaluation pointed towards a diagnosis of subacute thyroiditis (SAT). The patient expressed concerns about the initiation of corticosteroid therapy and its related possible adverse effects and refused it. Ibuprofen 500 mg twice daily for 10 days was prescribed. Nevertheless, symptoms did not improve and laboratory reevaluation showed persistently elevated inflammatory markers and lack of resolution of thyrotoxicosis. After initiation of methylprednisolone at a dose of 24 mg/day, and following 6 weeks of treatment, with appropriate tapering down, complete resolution of clinical picture, normalization of laboratory values and absence of residual suspicious lesions on ultrasound were achieved. **Case particularities:** Diagnostic challenges may be encountered in clinical practice when approaching lesions of the thyroid, which show a mass-like appearance on ultrasound or on palpation. In the context of subacute thyroiditis or De Quervain's thyroiditis, pain in the cervical region and inflammatory syndrome, associated with changes in thyroid hormone levels, help establish an appropriate diagnosis and treatment of patients. Nevertheless, as illustrated in this case, ultrasound findings may be misleading, mimicking suspicious nodular lesions through hypoechoic areas or pseudonodules. These changes, however, are the results of inflammatory reaction of SAT on thyroid parenchyma and their reversibility with anti-inflammatory and corticosteroid therapy supports the diagnosis. **Conclusion:** This case highlights the importance of considering subacute thyroiditis in the differential diagnosis of suspicious thyroid nodular lesions, particularly in the context of recently enlarged thyroid mass, associated to pain and history of previous upper respiratory tract infection. Early recognition of this condition can help avoid unnecessary invasive procedures and ensure timely and effective treatment.

**Keywords:** Subacute Thyroiditis, diagnostic pitfalls, pseudonodules

---

## THE USE OF MICROSURGERY IN POLYTRAUMATIC PATIENTS: CASE REPORT OF RECONSTRUCTIVE SURGICAL TECHNIQUES

Achiropita Benedetta Genova Pezzella<sup>1</sup>, Cristian Trâmbițaș<sup>2</sup>, Tímea Madaras<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureș

<sup>2</sup>Plastic Surgery, UMFST Tîrgu Mureș

**Background:** In case of extensive post-traumatic soft tissue loss over functionally critical structures, such as the Achilles tendon and calcaneus, they require complex microsurgical reconstruction to restore durable coverage and preserve limb function. The anterolateral thigh (ALT) flap is a well-established workhorse in reconstructive microsurgery, providing a large skin–fascia paddle on a reliable perforator system suitable for complex lower limb injuries. **Case presentation:** A 50 year old male patient presented to our department with a post-traumatic skin necrosis localized in the right Achilles region. Our patient with no significant prior medical history, was admitted to the Plastic and Reconstructive Surgery Department of the Emergency County Hospital Targu Mures. The initial assessment revealed a precarious situation: the wound margin appeared devitalized with understandable signs of deep-seated ischemia; the situation was immediately recognized and treated to ensure a good integrity of the underlying region. The patient underwent radical necrectomy and surgical debridement, followed by profuse antiseptic irrigation. Negative Pressure Wound Therapy (NPWT) was used to promote the formation of healthy granulation tissue and reduce local edema. The local evolution was highly encouraging, as the wound appeared clean. The positive clinical picture provided us the "window of opportunity" needed to perform a safe and complex ALT free flap reconstruction. Our reconstructive strategy was driven by the need for a solution that was not only stable but also capable of enduring the constant mechanical stress applied at Achilles region. ALT flap was harvested from the middle third of the right thigh where we identified the descending branch of the Lateral Circumflex Femoral Artery (LCFA); isolating the perforator vessels was essential to tailor and guarantee the long-term viability and vascular robustness of the flap. Via a termino-lateral anastomosis to the perforating branches of the Posterior Tibial Vessels we performed the successful reconstruction. In the end, we used to obliterate dead space with resorbable sutures, and we placed a suction drainage at the donor site. **Case particularities:** The uniqueness of this case is defined by the successful management of a postoperative crisis that pushed the limits of standard reconstruction: the interplay of complex microsurgery and an unpredictable systemic complication created a high-stakes scenario requiring immediate emergency intervention. Even though the wound environment was severely compromised, the ALT flap proved its worth as a critical scaffold. The technique was specifically chosen to preserve distal flow to the foot while ensuring a high-pressure arterial inflow to the flap. By providing a stable and trophic envelope over the calcaneal complex, it laid the necessary foundation for the patient to progress from a state of critical necrosis to full, functional weight-bearing. **Conclusion:** This case highlights the essential role of microsurgical free tissue transfer in limb salvage for complex post-traumatic lower extremity defects with exposed tendinous and osseous structures. The ALT flap offers reliable vascular anatomy, large surface area, and contour adaptability, making it a versatile possibility for reconstruction in polytraumatized patients and emphasizing the value of advanced microsurgical techniques in achieving stable coverage and functional recovery.

**Keywords:** microsurgical reconstruction, necrectomy, anterolateral thigh flap (ALT), lateral circumflex femoral artery (LCFA), Achilles tendon

---

## DIAGNOSING AN ATYPICAL NEUROINFLAMMATORY DISEASE (ATYPICAL CIDP, NEUROSARCOIDOSIS OR ALS): DIFFICULTIES AND PROSPECTS

Rascal Werner<sup>1</sup>, Sylvia Kotterba<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Neurology, UMFST – Partner Hospital

**Background:** Chronic inflammatory demyelinating polyneuropathy (CIDP), neurosarcoidosis and amyotrophic lateral sclerosis (ALS) are three neurological diseases with the potential to cause great morbidity and mortality. CIDP can best be defined as a spectrum of polyneuropathies that are all caused by a sensitization of the immune system to components of axons, Schwann-cells and myelin. Neurosarcoidosis is a severe complication of pulmonary or systemic sarcoidosis, and the formation of granulomas disturbs neuronal signaling. ALS represents the most severe diagnosis in this case report, and the destruction of motor neurons leads to respiratory arrest

within 3 to 5 years. All three diagnoses can affect the peripheral nervous system (PNS) while neurosarcoidosis and ALS may also impair the central nervous system (CNS). Their clinical presentations overlap and many of their symptoms can mimic other neurological diseases. Additionally, imaging and laboratory results can often be unspecific, and diagnoses must be determined by exclusion of other diseases. **Case presentation:** This case report describes the fatal disease course of Mr. A.A. at the Klinikum Leer and explains why CIDP, neurosarcoidosis or ALS was considered to be the cause for his condition. Neurological symptoms in the case of Mr. A.A. were first noted while he was admitted to the hospital because of pulmonary sarcoidosis. They included a parkinsonian gait and intermittent loss of muscle strength in the lower limbs. This led to a presumptive diagnosis of Parkinson's disease. The condition, however, quickly developed into a complex combination of neurological symptoms. The patient developed dysarthria and loss of muscle mass in the lower limbs which can be symptoms of CIDP, but a cytoalbuminic dissociation could not be found in a cerebrospinal fluid analysis. Later, neurosarcoidosis was considered because the patient was diagnosed with pulmonary sarcoidosis and he showed signs of CNS involvement. He suffered two seizures with respiratory acidosis, and his cognitive state was declining. An MRI of the brain was performed to confirm neurosarcoidosis, but it revealed lesions on the pyramidal tracts that are associated with a diagnosis of ALS and not neurosarcoidosis. However, the evidence was not sufficient for a diagnosis of ALS either. Despite the diagnostic effort and treatment attempts with corticosteroids and immunoglobulins, Mr. A.A.'s condition progressed to a fulminant neuroinflammatory disease with cognitive and respiratory impairment. This led to his death. **Case particularities:** The particularity in this case report lies in the fact that laboratory and imaging investigations only offered clues to the patient's diagnosis but never confirmed it. **Conclusion:** Retrospectively, ALS can be determined as the final diagnosis of the case because of the severe disease progression and the exclusion of other neurological diseases. The aim of the case report is to describe the unique combination of symptoms of patient A.A. and to illustrate how differently a theoretically well-characterized disease can present in the clinic compared to what is taught in the medical literature. The report can help physicians recognize an atypical presentation of ALS earlier and it will be especially helpful in the future when neuroinflammatory diseases are understood even better and more treatment options are discovered.

**Keywords:** Chronic inflammatory demyelinating polyneuropathy, Neurosarcoidosis, Amyotrophic lateral sclerosis, Differential diagnosis, Respiratory failure

## THE RELATIONSHIP BETWEEN DEMENTIA AND DEPRESSION: THE RELEVANCE OF PSYCHOSOCIAL FACTORS AND THERAPEUTIC APPROACHES

Chiara Testoni<sup>1</sup>, Adriana Mihai<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Psychiatry, UMFST Tîrgu Mureş

**Background:** The progressive aging of the population is a universal process that brings with it a threatening growth in the number of people affected by two major disabling disorders: depression and dementia. Each of these two diseases, in itself, is associated with serious negative impact on health and consequences on psychophysical balance of older adults, such as physical and psychosocial limitations and impaired quality in daily activity, social relationships, and pleasure of living. The influence of depression on the risk of suicide among affected patients is the subject of particular attention by experts due to its high impact and terrible consequences. The combination of the two pathologies makes the diagnosis difficult to determine and it is a real challenge for the doctors. Improper treatment of depression in older patients is likely due to poor diagnostic assessment in patients with cognitive impairment such as dementia. When co-exist, the severity of combined symptoms increases, due to worsening cognitive decline, dysfunctional behaviour, the need for care and assistance, and generates stress among families and caregivers. **Objectives:** Analyze the correlation between dementia and depression, the incidence of psychosocial risk factors in predisposing the onset of depressive syndrome. Moreover it was considered the therapeutic approaches and the need for a social network support. **Material and method:** A retrospective study conducted on a sample of 56 patients - categorised into two groups: patients presenting with diagnosis of dementia and depression and patients presenting with diagnosis of dementia – confirmed the relationship between dementia and depression and the relevance of psychosocial factors of those patients by extrapolating any information from the medical records collected at the Psychiatric clinic in Targu Mures during the period 2020-2025: - psychosocial and environmental factors - neuropsychiatric and behavioural symptoms - consciousness of the medical condition. The data from the medical records were reported in an Microsoft excel file, returning graphs and tables for the behavioural analysis. **Results:** The analysis demonstrates that suicide risk, conflictual relationship with family, aggressivity and anxiety are the most relevant manifestations of mental illness in patients developing depression.

There is evidence that antidepressant treatment may be considered an effective therapy for patients with dysfunctional behavioral disorders and varying degrees of cognitive decline. The analysis carried out shows that the treatment of symptoms due to depression in patients affected by dementia is still unsuccessful. The caregiver support can be necessary for the adherence of the treatment. **Conclusion:** The study has revealed that the conflictual relationship with the family influences the state of mind of the examined patients who tend to develop recurrent negative thoughts towards family members, the future and health. The patients presented ideas of inability and uselessness because of the loss of their independence due to the cognitive functional impairment. As a consequence anxiety and insomnia are developed on all of them.

**Keywords:** Dementia, Depression, Psychosocial factors, Negative thoughts, Therapeutic approaches

## LOWER EYELID RECONSTRUCTION AFTER TUMOR EXCISION: SURGICAL TECHNIQUES AND AESTHETIC RESTORATION

Eulalia Di Nella<sup>1</sup>, Cristian Trâmbițaș<sup>2</sup>, Tímea Madaras<sup>3</sup>

<sup>1</sup>UMFST Tîrgu Mureș

<sup>2</sup>Plastic Surgery, UMFST Tîrgu Mureș

<sup>3</sup>Plastic Surgery, UMFST Tîrgu Mureș

**Background:** A significant surgical challenge in restoring full-thickness lower eyelid defects following malignant tumor excision is the concurrent need for therapeutic oncological clearance and the meticulous restoration of both function and aesthetics. The primary goal is to provide a comprehensive reconstruction of the internal lining (tarsus/conjunctiva) and the external coverage (skin/muscle). This abstract explores the complex bilamellar reconstructive plan successfully employed in an 82 year old woman after the wide local excision of a malignant cutaneous tumor. **Case presentation:** The patient, an 82 year old woman with a history of Grade II Essential Arterial Hypertension, underwent definitive tumor excision. The surgical procedure involved a full-thickness "V" shaped incision. Intraoperative frozen section analysis confirmed that all three submitted specimens had tumor free margins. As a result, the resulting full-thickness central eyelid defect necessitated an immediate and complex reconstruction. **Case particularities:** The dual component approach utilizing a free cartilage graft and a pedicled flap proved to be highly successful in restoring both lamellae. Reconstruction of the posterior lamella used to create support and lining was performed with a free cartilage graft taken from the left retroauricular area to provide a solid structural base. Reconstruction of the anterior lamella used for external covering was performed with a Tripiier flap (bipedicled upper eyelid myocutaneous transposition flap). The Tripiier flap was essential because it provided an excellent match, both in terms of texture and color to the native tissue and transferred functional orbicularis muscle with minimal morbidity to the upper eyelid donor site. The postoperative course was very favorable, with no contusion or inflammation at the surgical site, and the transposed flap was fully viable. **Conclusion:** The use of a retroauricular free cartilage graft together with the Tripiier flap method has produced impressive results in achieving total and permanent restoration of both functionality and the lower eyelid. A sophisticated combination of these two techniques as a single stage composite procedure could yield immediate structural stability, as well as optimal long-term functional and aesthetic results to the patient.

**Keywords:** Tripiier Flap, Eyelid Reconstruction, Retroauricular Graft, Cutaneous Tumor, Aesthetic Restoration

## ALPINE CARDIAC ARREST: ENVIRONMENTAL IMPACT ON RESUSCITATION AND AIRWAY MANAGEMENT

Klemens Rungger<sup>1</sup>, Sorana Truta<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Anesthesiology and Intensive Care Medicine (II) and Emergency Medicine, UMFST-UMCH Hamburg

**Background:** The rising number of ski-related accidents is attributed to increased slope congestion, higher speeds

and insufficient physical and technical preparation. Not only the well-known traumatic events lead to an emergency evacuation, but also medical conditions like hypoglycaemia, stroke, convulsions or cardiovascular pathologies require assistance from the local ski patrol. Rescue operations in alpine settings face harsh conditions including cold temperatures, glare from snow influencing visibility and constraints on equipment and personnel. Such natural challenges contrast sharply with urban emergency scenarios. **Case presentation:** In January 2025 in Obereggen, Italy, the local ski patrol was called to a cardiac arrest on a flat snow-covered plateau in front of a mountain hut. The ski patrol arrived within 2-3 minutes by snowmobile while the patient had an estimated no-flow time of 3-4 minutes. Immediate Basic Life Support with bag-valve-mask ventilation and oxygen was initiated. After successful defibrillation with an AED, circulation returned, followed by a recurrent cardiac arrest, discovered while doing continuous surveillance using the xABCDE approach. The arriving HEMS team continued Advanced Life Support, established peripheral venous access, administered adrenaline and amiodarone and delivered a second shock, leading to sustained ROSC. A difficult intubation was performed under bright, reflected sunlight using a videolaryngoscope, requiring improvised shading with a blanket for adequate visualization. The patient was transported by helicopter to the emergency department shock room in Bolzano, extubated in the intensive care unit after 5 days and discharged from Bolzano Hospital after 2 weeks. **Case particularities:** An anatomically simple endotracheal intubation becomes a difficult airway solely due to alpine environmental impacts. In addition, cold exposure, terrain and limited resources require continuous adaptation of standard resuscitation algorithms. **Conclusion:** This case report emphasizes the need for adaptation of national guidelines due to mountainous and high-altitude challenges. Early Basic Life Support, rapid defibrillation and structured reassessment are critical for survival. Simple adaptive measures, such as shielding videolaryngoscopy from sunlight, can be decisive for procedural success. Prehospital alpine emergency medicine is a race against time, the environment and human physiology. With interdisciplinary teamwork favourable patient outcomes can be achieved even under extreme conditions.

**Keywords:** Alpine rescue, Cardiac arrest, Prehospital emergency medicine, Airway management, Videolaryngoscopy

## UNUSUAL COMPLICATIONS FOLLOWING A LYMPHADENECTOMY IN ENDOMETRIAL CANCER: A CASE REPORT

Ariana Patricia Beizaga Aguilar<sup>1</sup>, Dr. Prof. Lucian Puscasiu<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Gynecology , UMFST Tîrgu Mureş

**Background:** Lymphadenectomy is a common procedure for the surgical management established for selected patients suffering endometrial cancer. Despite being generally considered a safe surgical approach, some uncommon difficulties may occur during or after surgery. These complications usually affect the retroperitoneal wall structures that may involve a significant therapeutic and medical challenges in the gynecological field. **Case presentation:** A 56-years old women underwent a total laparoscopic hysterectomy accompanied by bilateral adnexectomy following a pelvic and paraaortic lymphadenectomy for a suspected malignancy. Endometrioid endometrial carcinoma was revealed, in addition to high-grade serous carcinoma on the left fallopian tube. During the postoperative interval, the patient suffered abdominal pain followed by clinical worsening with signs indicating sepsis. Imaging studies confirmed the diagnose, leading to an urgent reintervention. During laparotomy, a juxta duodenal abscess with biliary content was detected in addition to a 5mm perforation at the level of Treitz angle suggesting a possible duodenal wall necrosis. Surgical management included abscess drainage, two-layer duodenorrhaphy and peritoneal lavage. **Case particularities:** In this case, duodenal perforation was extremely rare after a lymphadenectomy during an oncological gynecological operation. Furthermore, the location of the lesion at the level of the angle of Treitz is not close anatomically to the site of gynecological surgical field. This can explain a possible indirect mechanism of injury, like thermal damage by laparoscopic energy or, ischemia due to vascular compromise forming necrosis related to paraaortic lymphadenectomy. Although is difficult to diagnose due to non-specific symptoms, is essential to be attentive for an optimal diagnosis and to prevent complications such peritonitis or sepsis, in order to treat it immediately. **Conclusion:** Duodenal perforation should be considered as a possible uncommon complication in case a patient undergoes a deterioration after a lymphadenectomy. By this reason, early diagnosis and management is very important to avoid future bad outcomes and to reduce morbidity and mortality.

**Keywords:** endometrioid, lymphadenectomy, complication, perforation, sepsis

---

## EVOLUTION OF VACCINATION COVERAGE IN THE COMMUNITY: THE ROLE OF FAMILY MEDICINE PRACTICE (2017-2024)

Andreea - Daniela Cașcaval<sup>1</sup>, Dr. Monica Marcela Pușcaș<sup>1</sup>, Dr. Andreea Varga<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureș

<sup>2</sup>Department of Internal Medicine III and Family Medicine, UMFST Tîrgu Mureș

**Background:** Childhood vaccination remains a cornerstone of public health, preventing life-threatening diseases. WHO has a 90% coverage target. Romania reports coverage significantly below EU average, with further declines during the COVID-19 pandemic. The 2016-2018 measles epidemic further exposed these pre-existing gaps. Practice-level data can reveal patterns that national statistics cannot show. **Objectives:** In this study, we analyzed mandatory vaccination schedule coverage in a pediatric cohort registered at a single family medicine practice in Romania, over the period 2017-2024. Secondary objectives included optional vaccine uptake, dropout points identification, and pandemic impact assessment. **Material and method:** A retrospective study based on anonymized routine clinical records from a single family medicine practice in Targu Mures, Romania. We studied 159 pediatric patients, 8 birth cohorts between 2017 and 2024. Mandatory vaccines included HepB1, BCG, three doses each of hexavalent and pneumococcal conjugate vaccines, MMR doses 1 and 2, and tetravalent booster; optional vaccines included rotavirus, varicella, hepatitis A, meningococcal, and influenza. Coverage was calculated as vaccinated divided by eligible patients, multiplied by 100. The documented refusals were excluded from the denominator. Late doses (MMR2, Tetra) were analyzed only in the 74 age-eligible patients from the 2017-2019 cohorts, who had reached age 5-6 by 2024. Vaccination dates were unavailable; timeliness analysis and classification of delay could not be performed. **Results:** The study population comprised 159 patients, 10 (6.3%) were documented refusals, leaving 149 eligible for analysis. Overall early mandatory completion: 133/148 = 89% completed the early mandatory sequence (HepB1 through MMR dose 1). The first dropout occurred at Hexavalent dose 3/ PCV dose 3: -2.8 percentage points and second drop at MMR dose 1: -3.6 percentage points. Late dose coverage among 74 age-eligible patients (2017-2019 cohorts) was MMR dose 2 = 85.1% and Tetravalent booster = 86.5%. The 2020 cohort recorded the lowest completion rate at 72.2%. The largest single drop was between 2019 and 2020: -23.0 percentage points. Early mandatory completion was 91.9% in the pre-COVID period (2017-2019), declining to 84.4% post-COVID (2022-2024), representing a persistent deficit of 7.5 percentage points. Rotavirus was the most accepted optional vaccine, peaking at 54.2% in the 2021 cohort. Influenza vaccination was present in 7.7-23.8% of cohorts between 2017-2021 and completely absent from 2022 onward. **Conclusion:** The mandatory coverage reached its lowest point in 2020 during the pandemic, and did not fully recover to pre-pandemic levels. The principal dropout points occurred at 11-12 months visit (hexavalent dose 3, PCV dose 3, MMR dose 1) and the 5-6 year booster (MMR dose 2, tetravalent booster). Rotavirus uptake increasing while influenza vaccination disappeared after 2021. Coverage at this practice remains above the Romanian national average, though below European targets. These findings highlight the central role of the family medicine doctor as primary vaccination provider and the need for structured catch-up protocols and sustained parental counseling.

**Keywords:** Vaccination coverage, Family medicine, Romania, Vaccine hesitancy, Immunization

---

## PEMBROLIZUMAB INDUCED ENCEPHALOPATHY IN NSCLC TREATMENT: A CASE REPORT AND LITERATURE REVIEW ON IMMUNE-RELATED ADVERSE EVENTS, ITS PROGNOSTIC SIGNIFICANCE AND LONG-TERM OUTCOME

Simon Furgler<sup>1</sup>, Luca Tondulli<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Oncology, UMFST – Partner Hospital

**Background:** Recently the use of immune checkpoint inhibitors (ICI) such as pembrolizumab has become the standard in the treatment of non-small cell lung carcinoma (NSCLC), one of the most common and deadliest malignancies worldwide. Since its introduction, various kind of complications such as neurologic immune related adverse events (n-irAEs) have been reported. The presence of immune related adverse events (irAEs) has been suggested to be a favourable prognostic factor regarding outcome and long-term response. Furthermore, ICI seem to be capable to induce a long-lasting anti-tumour immunity in certain patients. **Case presentation:** The patient, 47-year-old women, former smoker with 15 pack years, was referred by her family doctor due to exertional

dyspnoea, mild cough, weight loss, dysphagia and dysphonia. She also reported a pulling/stabbing pain in her left thorax (03.2017). Investigations revealed a solid tumour in the left upper lobe, left pleural effusion and left pleural thickening. Pleural biopsies performed during thoracoscopy, confirmed a stage IV NSCLC with pleural carcinosis. Immunohistology and molecular profiling resulted negative for EGFR, ALK, KRAS mutation and highly positive for PDL-1 expression. First line chemotherapy with cisplatin/pemetrexed was initiated, followed by pemetrexed maintenance therapy. After seven months, further progression of the main tumour mass, appearance of new nodules and lymphadenopathy was detected. Second line immunotherapy with pembrolizumab was then commenced initially showing a good response. After five cycles the patient was admitted to the emergency room and diagnosed with an encephalitis, most likely an autoimmune manifestation attributable to the pembrolizumab treatment. Subsequently the therapy was terminated and follow up initiated. **Case particularities:** The patient developed a rare n-irAE followed by early termination of treatment yet maintained complete remission without further oncologic treatment for more than eight years. **Conclusion:** This case illustrates the potential of PD-1 blockade to induce long-lasting antitumor immunity. It emphasizes the importance of recognizing and managing irAEs underlining their positive prognostic value and the possibility of sustained disease control despite therapy interruption.

**Keywords:** NSCLC, immune related adverse event, pembrolizumab, encephalitis, immune check point inhibitors

## DOES LABOR INDUCING MEDICATION HELP IN REDUCING THE NEED OF CAESAREAN SECTIONS IN RISK PATIENTS?

Jana Karlina Bitzan<sup>1</sup>, Amelia Tero-Vescan<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Biochemistry, UMFST-UMCH Hamburg

**Background:** Labor induction is an obstetric intervention which is more commonly and frequently performed in pregnancies with complications due to maternal or fetal risk factors. Another procedure which is rising in numbers through the recent years, is caesarean section. This is especially interesting in regards to the connection of both interventions. However, evidence regarding this research topic remains scarce. **Objectives:** The aim of this study was to identify a link between both interventions and to establish the correlation of reduced caesarean section rates when inducing labor in pregnant patients with identified obstetric risk factors. **Material and method:** This study connects retrospectively caesarean section rates between women who have identified risk factors throughout their pregnancy receiving a birth induction and those who did not receive intervention. The data collection took place in the Delme Klinikum Delmenhorst throughout the entire year of 2023. Inclusion criteria for pregnant patients were obstetric risk factors defined as maternal body mass index over 30, advanced maternal age over 35 years of age, maternal weight gain during pregnancy of less or equal than 10 kg or more or equal than 16 kg, multiple pregnancy, and previous caesarean section. Moreover, following birth induction methods were included: oral and vaginal prostaglandins, balloon catheter induction, oxytocin administration, and amniotomy. **Results:** We could establish a coherent association between labor induction in women who have had a previous caesarean section regarding the caesarean section rates in the birth processes included in this study. In contrast to this finding, there was no connection found between the other obstetric risk factors and the caesarean section rates. This indicates the relationship between analyzed risk factors and shows that more research regarding this topic needs to be done in order to be able to better define these associations. **Conclusion:** In conclusion, this topic highlights the importance of further research in the field of labor induction and pregnant patients with obstetric risk factors. As discussed, the rates of caesarean sections and birth induction were reduced in women with a previous caesarean section as obstetric risk factor that received a birth induction in comparison to other obstetric risk factors. Therefore, it can be said that there is a coherent association regarding this specific obstetric risk factor receiving labor induction and caesarean section rates. Looking ahead, it is essential to consider a broader study setting with multiple hospitals as well as more patients in order to achieve a more significant outcome in all studied obstetric risk factors.

**Keywords:** labor induction, obstetric risk factors, caesarean section

---

## SEVERE ADNEXAL TORSION OF A GIANT OVARIAN TERATOMA IN AN ADOLESCENT: A CASE REPORT

Stefania Lilla Sandor<sup>1</sup>, Karl Tas Kovacs<sup>1</sup>, Vlăduț-Bogdan Săsăran<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureș

<sup>2</sup>Department of Gynecology, UMFST Tîrgu Mureș

**Background:** Mature ovarian teratomas are ubiquitous benign ovarian germ cell tumors that are found in the general female population, predominantly in the reproductive years. Teratomas are composed of mature tissues derived from the three germinal layers, consisting substantially of sebaceous material. They often go unnoticed and are usually discovered incidentally or upon presentation of nonspecific abdominal symptoms. Mature ovarian teratomas are diagnosed efficiently with ultrasound and are confirmed histopathologically post-operatively. Although they are benign in nature, in some instances they may exhibit potentially serious complications such as torsion, rupture, infection, sepsis, and even malignant transformation. **Case presentation:** An 18-year-old female patient presented to the gynecology and obstetrics hospital with symptoms mimicking an acute abdomen, the chief complaint being diffuse lower abdominal tenderness. Ultrasonographic examination revealed a right adnexal mass suggestive of an ovarian teratoma. Diagnostic laparoscopy was performed shortly after, which confirmed the presence of a tumor in the right ovary with a size approaching approximately 13 centimeters with a four-fold torsion around its own axis. During the procedure, the right uterine adnexa was visualized with ischemic and necrotic phenomena. Following surgical detorsion of the ovary with the teratoma, unilateral right adnexectomy was deemed necessary and was executed successfully. The postoperative period was uncomplicated, and speedy recovery ensued. Post-operative histopathological examination verified a mature cystic teratoma without signs of malignancy. **Case particularities:** This case is distinguished by the coexistence of a giant teratoma in a female this young is quite atypical, much less so for a torsion to occur to such an extreme extent. This case is notable for an unusually severe degree of torsion that implicated strangling of the vasculature of the adnexa, which consequently resulted in ovarian necrosis. Although conservative laparoscopic management is strongly advocated, due to irreparable damage suffered by the right gonads, preservation unfortunately was not feasible. This event highlights the narrow time window available for ovarian salvage in ovarian torsion. Nevertheless, owing to the timely recognition and management by the attending gynaecologist, potentially life-threatening complications were evaded on time despite the inability to preserve the ovary. Handling patients in their reproductive years necessitates particular attention due to the risk of sabotaging their fertility and disabling the possibility of successful future pregnancies. Patients as young as the one mentioned in this case are especially vulnerable to suffering psychological distress brought about by the potential loss of fertility. **Conclusion:** This case demonstrates that large teratomas in young females, despite generally being benign, sometimes may produce severe ovarian torsion leading to irreversible necrosis, possible infertility, and death. All in all, early intervention is fundamental to preventing consequential complications and ensuring the best outcomes for patients.

**Keywords:** Ovarian, Teratoma, Torsion, Adnexa, Fertility

---

## ANAPHYLAXIS IN THE SETTING OF CARDIOVASCULAR POLYPHARMACY - A CLINICAL REVIEW

Karl Tas Kovacs<sup>1</sup>, Márton Kóbori<sup>1</sup>, Stefania Lilla Sandor<sup>1</sup>, Erika-Gyöngyi Bán<sup>2</sup>, Corina Ureche<sup>3</sup>

<sup>1</sup>UMFST Tîrgu Mureș

<sup>2</sup>Department of Pharmacology, UMFST Tîrgu Mureș

<sup>3</sup>Department of Allergology, UMFST Tîrgu Mureș

**Background:** With the evolution of cardiovascular diseases, patients often require increasingly complex pharmacotherapy. Concomitantly, the rising prevalence of allergies further complicates management of patients with cardiovascular disorders, making polypharmacy a significant clinical challenge. **Objectives:** The aim of this clinical review is to highlight the pharmacological challenges encountered during the management of anaphylactic events in cardiovascular patients receiving multiple medications. **Methods:** We conducted a literature review using the PubMed database. In addition, a retrospective analysis of a clinical case was performed, illustrating the therapeutic difficulties arising during the management of an anaphylactic event in a cardiovascular patient with a multi-drug regimen. **Results:** The combination of medications used in the treatment of cardiovascular diseases

carries a considerable risk of drug-drug interactions, requiring thorough pharmacological knowledge for optimal patient care. In the case, an elderly patient receiving multiple medications developed an anaphylactic reaction following fish consumption, characterized by upper lip edema, fatigue, headache, and dizziness. The patient was treated promptly with antihistamines, corticosteroids, adrenaline, and intravenous fluid resuscitation. No complications occurred. However, our literature review identified several cases and research studies emphasizing the clinical relevance of pharmacological interactions with the immune system. Of particular significance, the unfavorable effects of beta-blockers during anaphylaxis, as well as the role of ACE inhibitors in the differential diagnosis of angioedema were established. Our findings suggest that drug selection should follow an individualized approach, taking into account existing comorbidities and carefully balancing therapeutic risks and benefits in order to prevent future anaphylactic events. **Conclusion:** Chronic pharmacotherapy in patients with cardiovascular disease may influence both the course and survival of anaphylaxis, as well as the management of acute treatment and the need for its modification. A multidisciplinary approach - necessitating collaboration between cardiology, allergology, and family medicine is recommended to achieve favorable clinical outcomes, which reflects the complexity of these cases. Following any anaphylactic event, a comprehensive pharmacological review of the patient's current medication regimen is warranted.

**Keywords:** anaphylaxis, angioedema, cardiovascular pharmacotherapy, polypharmacy

## LONG-ACTING ANTIPSYCHOTIC FORMULATIONS AND RELAPSE PREVENTION IN SCHIZOPHRENIA: A CASE PRESENTATION

Antoniacopo Pepparelli<sup>1</sup>, Adriana Mihai<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Psychiatry, UMFST Tîrgu Mureş

**Background:** Schizophrenia is a psychiatric disease belonging to the spectrum of psychotic disease, characterized by alteration in cognitive, emotional, and behavioral processes that compromise the ability to interpret reality, maintaining adequate social relations and perform working or school activities. In Romania, the prevalence of the disease is the 1% with more than 200.000 people. The etiopathogenesis of the disease is complex and multifactorial, coming from the interaction of genetics and environmental, biologic and psychosocial factors; at the neurobiological level there are alterations in dopaminergic and glutamatergic. The clinical pictures manifest through positive symptoms, such as delusion and hallucinations, negative symptoms, such as abulia and anhedonia, and cognitive deficits that drastically affect prognosis and quality of life. Although clinical management relies primarily on first- and second-generation antipsychotic drugs, long-acting formulations (Long-Acting Injectables, LAIs) have proven essential for improving therapeutic adherence and continuity of care. **Case presentation:** We report the case of a 63-year-old female patient diagnosed with paranoid schizophrenia (ICD-10: F20.0) who was admitted to a psychiatric inpatient unit for psychotic decompensation, and poor adherence to previous treatment. During hospitalization, the patient was initiated on paliperidone palmitate long-acting injectable (Xeplion) 100mg. After resolution of the acute state was given haloperidol 5mg, associated with diazepam 5mg, and an antiparkinsonian agent (romparkin) for extrapyramidal symptoms management. Following discharge, the patient received seven consecutive LAI injections as part of the maintenance treatment plan. During the follow up period, the patient demonstrated improved adherence to treatment and partial clinical stabilization. Notably, no early relapse or rehospitalization was recorded within the first six months after discharge. A clinical relapse occurred approximately seven months after initiation of LAI therapy, suggesting a prolonged period of symptoms control compared with the patient previous treatment history. **Case particularities:** This case highlights the potential benefits of LAI antipsychotics in improving adherence and delayed relapse in patients with schizophrenia. LAI formulations reduce the risk of treatment discontinuation and allow clinicians to monitor adherence more effectively. The delayed relapse observed in this patient support evidence from the literature suggesting that LAIs may reduce early readmission rates and improve long term clinical stability. **Conclusion:** Long-acting injectable antipsychotics, like paliperidone palmitate, represent an important therapeutic strategy for relapse prevention in schizophrenia. This case supports the use of LAI as a maintenance treatment option, particularly in patients with a history of poor adherence to oral medication. Further observational data may help clarify the role of LAI in reducing six-month readmission in real world clinical setting.

**Keywords:** schizophrenia, long-acting injectable antipsychotics, paliperidone palmitate, relapse, LAI

---

## INCOMPLETE KAWASAKI DISEASE IN A FOUR-MONTH-OLD INFANT: A DIAGNOSTIC CHALLENGE

Isabelle Bartsch<sup>1</sup>, Hans-Jürgen Gausepohl<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Pediatrics, UMFST – Partner Hospital

**Background:** This case report focuses on a patient with an incomplete Kawasaki disease. Kawasaki disease is a differential diagnosis in children with prolonged fever not responsive to antibiotics. It can present at an unusual age as well as with incomplete clinical features which can make the diagnosis challenging. There is a risk of developing coronary artery abnormalities which increases the later the diagnosis is established and treatment is started. The etiology of this disease is not known yet. Several indications propose an infectious agent triggering an autoimmune response leading to a vasculitis. **Case presentation:** We present the case of a four-month-old female infant suffering from persisting high fever over nine days, a bilateral conjunctivitis, an erythematous pharynx and a truncal exanthema. Her laboratory results revealed an elevated CRP, a leucocytosis, a thrombocytosis and a hypoalbuminemia. Since the fever turned out unresponsive to antibiotics, the suspicion for Kawasaki disease was raised. The diagnosis could be made after a treatment with intravenous immunoglobulins and acetylsalicylic acid as well as corticosteroids started on the ninth day after the onset of fever successfully lowered her fever and alleviated the symptomatology. An echocardiography revealed a dilated right coronary artery with a Z score of 9.6, defining the presence of a medium sized coronary artery aneurysm. Further control echocardiographies showed a regression of the aneurysm after several weeks. A rotavirus infection can be suspected as the trigger of her disease development. **Case particularities:** The particularity of our case lies in the patient's unusually young age as well as in the presentation with incomplete clinical features which complicated the diagnosis. **Conclusion:** To conclude, it is important for clinicians to have a high index of suspicion for Kawasaki disease including patients deviating from the typical clinical picture. This can help to ensure an early diagnosis and a timely treatment reducing the risk for cardiovascular complications.

**Keywords:** (incomplete) Kawasaki disease, Prolonged fever, Coronary artery aneurysm

---

## BLINATUMOMAB IN PEDIATRIC ONCOLOGY: NAVIGATING THE CHALLENGE OF NEUROTOXICITY

Márton Kóbori<sup>1</sup>, Karl Tas Kovács<sup>1</sup>, Erika-Gyöngyi Bán<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Pharmacology, UMFST Tîrgu Mureş

**Background:** The advent of immunotherapies has opened new avenues in the treatment of pediatric oncology patients. While therapeutic outcomes are remarkable, these treatments may also be associated with severe adverse effects. Among the most significant are cytokine release syndrome (CRS) and associated neurotoxicity, which, although rare, can be potentially life-threatening. **Objectives:** The aim of this case report is to present a 17-year-old patient with precursor B-cell acute lymphoblastic lymphoma who developed CRS during blinatumomab therapy, accompanied by tremor and chills. Our goal is to highlight this rare adverse effect, emphasize its early recognition, and outline the management of CRS when it occurs. During the observation period, I was directly involved in the continuous clinical monitoring of the patient and observed therapeutic interventions in the hospital setting, which contributed to the documentation of complications and a detailed presentation of a real-life clinical scenario. **Methods:** A retrospective analysis was performed, taking into account the patient's clinical condition, laboratory findings, neurological status, and the course of CRS and neurotoxicity management. The case was compared with pediatric oncology cases available in PubMed and other scientific literature, with particular focus on the incidence, severity, and management of CRS. Special emphasis was placed on identifying factors that facilitate the early recognition of neurotoxicity and CRS, as well as timely targeted intervention. **Results:** On the third day following initiation of planned blinatumomab therapy, the patient developed symptoms consistent with grade 2 cytokine release syndrome, which improved with dexamethasone, nonsteroidal anti-inflammatory drugs (NSAIDs), and parenteral fluid replacement. Additionally, chills and hand tremor were observed. Following the reintroduction of blinatumomab, symptoms did not recur, and treatment was continued with gradually escalating doses. Neurotoxicity did not progress to a more severe form; no seizures or encephalopathy developed. **Conclusion:**

Blinatumomab-induced CRS and neurotoxicity are serious adverse effects requiring multidisciplinary attention. Our case demonstrates that with close monitoring and timely intervention, therapy can be safely continued while preserving its high efficacy in pediatric acute lymphoblastic lymphoma.

**Keywords:** Blinatumomab, CRS, Pediatric, Oncology

## SERONEGATIVE MYASTHENIA GRAVIS: A CASE REPORT

Ana Garafulla Cruz<sup>1</sup>, Laura Barcutean<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Neurology, UMFST Tîrgu Mureş

**Background:** Myasthenia Gravis (MG) is a rare autoimmune disease in which antibodies act against the components of the neuromuscular junction, such as the nicotinic acetylcholine receptor (AChR), muscle-specific tyrosine kinase (MuSK) or low density lipoprotein related to receptor 4 (LRP4). A minority of MG cases are seronegative. Clinically, MG is characterized by fluctuating muscle weakness and fatigue that worsens with physical exercise. According to the Myasthenia Gravis Foundation of America (MGFA), it is classified as Ocular MG with symptoms such as ptosis or diplopia (Class I), generalized MG (Class II-IV) if the weakness involves the bulbar respiratory or limb/axial muscles and severe (Class V) defined by the need for intubation. Additional classifications involve the serological phenotype evolution and response to therapy. MG diagnosis is suspected in patients who present with various degrees of muscle weakness. The gold standard electrophysiological test for diagnosis is represented by the single-fiber electromyography. The clinical suspected diagnosis needs to be confirmed by the previously mentioned antibodies, additional electrophysiological test and autoimmune screening. Abnormalities or tumors in the thymus are present in 15% of patients with MG. Management combines symptomatic therapy with pyridostigmine, - a reversible acetylcholinesterase inhibitor, and corticosteroids or other immunosuppressive agents that control autoimmune activity. Therapeutic plasma exchange or intravenous immunoglobulins provide a viable alternative for severe and refractory cases. Thymectomy is the indicated surgical treatment in patients with thymoma. **Case presentation:** A 67-year old male presents to the Emergency Department with a history of fluctuating bilateral ptosis more pronounced in the left eye, facial muscle fatigue, hypophonia, dysphagia, and upper limb muscle weakness. Upon neurological examination he exhibited horizontal diplopia, bilateral ptosis, weakness of the neck extensor muscles which worsened with repetitive movements and brachial diparesis (Medical Research Council grade 3). Muscle strength in the lower limbs was preserved. Serological testing for Ach-R and MuSK-R were negative. MG was diagnosed on the basis of increased jitter on single-fiber electromyography of spinal muscle. Upon admission, the patient was started on pyridostigmine. Due to the severity of the clinical presentation, the management was intravenous immunoglobulins and oral immunosuppressants with azathioprine. The patient presented with a favorable neurological clinical course in five days with the regression of the ptosis, bulbar syndrome and motor deficit. Testing for antibodies against low-density lipoproteins receptor-related protein 4 (LPR4) would be useful for diagnosis in this group of seronegative presentation. These specific tests were not available. **Case particularities:** This is a case of seronegative generalized MG that was managed with immunosuppressive therapy and intravenous immunoglobulins with a favorable outcome. **Conclusion:** Myasthenia Gravis is a rare autoimmune disease. This case highlights the importance of considering the neurological clinical features such as ptosis and fluctuating muscle weakness. The clinical evaluation and electrophysiological studies were essential for diagnosis. An early diagnosis and appropriate treatment are key to reduce mortality and improve the patient's quality of life.

**Keywords:** Myasthenia Gravis, anti-acetylcholine antibody, anti-Musk antibody, anti-LPR4 antibody, electrophysiological studies

## A 24-HOUR OBSERVATIONAL STUDY ON THE RISK FACTORS ASSOCIATED WITH POSTOPERATIVE NAUSEA AND VOMITING FOLLOWING CESAREAN SECTION

Zsanett Lili Varga<sup>1</sup>, Oana-Elena Branea<sup>2</sup>, Matild Keresztes<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Anesthesiology and Intensive Care Medicine I, UMFST Tîrgu Mureş

**Background:** Maternal nausea and vomiting occur frequently during pregnancy, most often in early gestation but sometimes extending to term. After cesarean section, postoperative nausea and vomiting (PONV) is a common

postoperative concern in obstetric patients, with a variability that reflects anesthetic technique and patient-related risk factors. Beyond pregnancy-related symptoms, cesarean section carries a substantial risk of PONV, driven by hormonal changes, neuraxial anesthesia, and perioperative factors. This overlap increases patient discomfort and clinical burden. **Objectives:** To identify key risk factors associated with PONV after cesarean delivery and evaluate their relevance in tailoring individualized prevention strategies. **Material and method:** This pilot observational study included 21 women undergoing cesarean section at the Obstetrics Department of the County Emergency Clinical Hospital of Târgu Mureș, Romania. Eligible participants were aged  $\geq 18$  years, received neuraxial or general anesthesia, and provided informed consent. Patients with pre-existing gastrointestinal disorder, inability to reliably report symptoms, or those who declined participation were excluded. Postoperative follow-up lasted 24 hours, during which the incidence, frequency, and severity of nausea and vomiting were recorded, along with any therapeutic interventions administered. **Results:** Of the 21 patients enrolled, 8 (38.1%) experienced PONV. Patients who experienced PONV were younger on average (mean age = 28.9 years, SD = 5.38) compared to those without PONV (mean age = 32.2 years, SD = 5.04), although this difference was not statistically significant ( $p = 0.364$ ). Body mass index (BMI) was broadly comparable between groups (PONV: mean = 28.6, SD = 5.24; no PONV: mean = 30.6, SD = 2.91), with no statistically significant difference ( $p = 0.246$ ). Patients who experienced PONV showed a greater mean drop in systolic blood pressure (mean = 41.9 mmHg, SD = 19.0) compared to those without PONV (mean = 33.7 mmHg, SD = 17.5), although this difference was not statistically significant ( $p = 0.167$ ). Of patients who experienced PONV, 87.5% received sympathomimetic vasopressor treatment, compared to 66.7% of patients without PONV ( $p = 0.603$ ). However, this difference was not statistically significant. **Conclusion:** In this small sample, patients with PONV tended to be younger and exhibited greater intraoperative blood pressure reductions; however, these differences were not statistically significant. Although vasopressor use was higher in PONV cases, the difference did not reach statistical significance. These results should therefore be interpreted cautiously and regarded as hypotheses-generating.

**Keywords:** PONV, risk factors, cesarean section

## INTEGRATION OF ALACTIC BASE EXCESS INTO ESTABLISHED TRAUMA SCORING SYSTEMS: IMPROVING EARLY RISK ASSESSMENT IN ICU PATIENTS

Felix Schöllhorn<sup>1</sup>, Oana-Elena Branea<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureș

<sup>2</sup>Department of Anesthesiology and Intensive Care Medicine I, UMFST Tîrgu Mureș

**Background:** Established trauma scoring systems like the Injury Severity Score (ISS), Revised Trauma Score (RTS), or Trauma and Injury Severity Score (TRISS) rely exclusively on anatomical and physiological vital sign data. All of them lack a metabolic or biochemical element. This represents a well-established gap in early risk assessment: Namely, patients with compensated haemodynamic presentation but significant underlying metabolic derangement could be systematically underscored. Alactic Base Excess (ABE), calculated as the sum of standard base excess (BE) and arterial lactate, is a point-of-care marker that is available from the first admission blood gas, doesn't require accurate anatomical scoring and has been shown to independently predict mortality in trauma ICU patients. **Objectives:** Evaluate whether ABE provides incremental prognostic value for in-hospital and 30-day mortality beyond an established clinical base model and beyond TRISS in severely injured trauma ICU patients. **Material and method:** This retrospective, observational cohort study used the MIMIC-IV v3.1 database to evaluate a high-acuity trauma population. Adult patients with ISS  $\geq 16$  and an arterial blood gas (ABG) measurement within two hours of hospital admission were included. Co-primary outcomes were in-hospital and 30-day mortality. Incremental predictive value of ABE was assessed by likelihood ratio test (LRT), net reclassification improvement (NRI), and integrated discrimination improvement (IDI) against (1) a clinical base model comprising age, NISS, and mechanism of injury, and (2) TRISS alone. Exploratory subgroup analyses were conducted by mechanism of injury, age group, and injury severity band. **Results:** Adding ABE to the clinical base model resulted in a better model fit (LRT  $p=0.002$  for both mortality endpoints). The Area Under Curve (AUC) increased from 0.799 to 0.826 for in-hospital mortality, however the DeLong comparison did not reach significance ( $p=0.360$ ). The NRI was 0.681 (95%; CI 0.330–1.032;  $p < 0.001$ ). This means that 33.3% of non-surviving patients were correctly reclassified into higher risk categories and 34.7% of survivors to lower risk groups. IDI was 0.057 ( $p=0.029$ ). Additionally, when ABE was added to TRISS, LRT again confirmed that the addition provided a significant increase in ( $p=0.029$  in-hospital;  $p=0.041$  30-day), with an IDI of 0.039 ( $p=0.041$ ) and an NRI of 0.200 ( $p=0.047$ ) for non-event patients. The DeLong AUC comparisons, however, did not show significance for either model ( $p=0.727$  and  $p=0.825$ ). Therefore, it appears that ABE mainly improves the risk calibration in the intermediate probability range, whereas it

does not modify the total ranking of patient risks. Subgroup analyses showed similar trends, although they were too small to provide conclusive evidence. **Conclusion:** ABE provides statistically significant incremental predictive value beyond both a standard clinical model and TRISS in severely injured trauma ICU patients, primarily through improved risk calibration. The consistent dissociation between LRT/IDI significance and non-significant DeLong AUC comparisons suggests that ABE refines probability estimates for patients in the intermediate mortality risk range, rather than altering which patients are classified as high or low risk overall. Given its immediate availability at admission and the recognised limitations of current scoring systems, ABE warrants consideration as an early adjunct to established trauma scoring frameworks.

**Keywords:** Alactic Base Excess, Trauma, Intensive Care, TRISS, MIMIC

## FEASIBILITY AND PRELIMINARY OUTCOMES OF A MULTIMODAL PHYSIOTHERAPEUTIC REHABILITATION PROGRAM FOR URINARY INCONTINENCE AFTER RADICAL PROSTATECTOMY: A RETROSPECTIVE PILOT STUDY

Kai-Uwe Poepsel<sup>1</sup>, Jan Hinnerk Stange<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Oncology, UMFST – Partner Hospital

**Background:** Prostate cancer is one of the most common malignancies in men worldwide, with approximately 1.5 million new cases annually. Urinary incontinence is a prevalent complication following radical prostatectomy and is associated with physical, psychological, and social repercussions that significantly impact quality of life. Pelvic floor muscle training is generally recommended as a first-line treatment. However, variability in therapeutic approaches and methodological limitations in existing studies have revealed gaps in current evidence and the need for further investigation. **Objectives:** The primary objective of this study was to evaluate the feasibility of conducting a large-scale, adequately powered trial investigating a multimodal physiotherapeutic rehabilitation program for urinary incontinence following radical prostatectomy. The secondary objective was to explore the preliminary short-term clinical impact of a multimodal rehabilitation program on urinary incontinence after a 3-week inpatient intervention. **Material and method:** This retrospective single-arm pre-post pilot study included patients treated at the oncological rehabilitation center Cecilien-Klinik, Bad Lippspringe, Germany between 01.01.2025 and 01.01.2026. A total of 117 patient files were screened, of which 23 participants met the eligibility criteria based on their ability to participate in all prescribed therapies and the absence of conditions impacting urinary continence outcomes. All eligible patients received a combination of pelvic floor muscle training, biofeedback, and pelvic trainer device therapy under physiotherapeutic supervision during a 3-week inpatient stay, with session frequency individualized according to clinical scheduling and patient participation. Feasibility was assessed through patient adherence, reasons for discontinuation, and data completeness. Urinary incontinence was evaluated at baseline and upon discharge using the 1-hour pad test and bladder capacity measurements. **Results:** The mean age and body mass index of participants were 65 years and 27 kg/m<sup>2</sup>, respectively, with an average interval of 24 days between surgery and the start of treatment. Adherence to the therapy program was 70%, indicating acceptable feasibility. A 63% reduction in urinary leakage was observed following the intervention. However, a 22% decrease in bladder capacity was also identified. Incomplete data collection was evident in 83% of participants, with at least one measurement missing. **Conclusion:** This retrospective pilot study demonstrated acceptable feasibility and preliminary improvements in urinary incontinence outcomes following the multimodal rehabilitation program after radical prostatectomy. However, limitations related to patient selection, data completeness, treatment variability, and short-term follow-up should be addressed in future prospective controlled studies. Larger trials are warranted to determine long-term clinical effectiveness.

**Keywords:** Prostate Cancer, Radical Prostatectomy, Urinary Incontinence, Pelvic Floor Rehabilitation, Urology

## PORTAL PNEUMATOSIS AS A RARE COMPLICATION AFTER HEPATIC RESECTION: A CASE REPORT

Lucas Lapuerta<sup>1</sup>, Orsolya Bauer<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Surgery, UMFST-UMCH Hamburg

**Background:** Hepatic portal venous gas (HPVG) is defined as gas inside the portal venous system, or any of its

hepatic branches. It is not considered a pathology itself, but a rare radiological finding, in most cases caused by intestinal ischemia or necrosis. While the pathogenesis is not fully understood, two main theories exist: The bacterial translocation theory (gas producing bacteria escape through damaged intestinal mucosa into the submucosa and the vascular system) and the mechanical theory (gas in the intestinal lumen is introduced into the vasculature of the submucosal layer through fissures in the mucosa). The progression of the gas in the portal system follows a typical order, appearing initially in the left hepatic lobe, followed by the anterior segment of the right lobe, and lastly, the posterior segment of the right lobe. **Case presentation:** We present a case of a 63-year-old man with an initial clinical picture of jaundice. Ultrasound, CT, and MRCP evidenced a solid nodule in the common hepatic duct, suggestive of a cholangiocarcinoma, causing dilatation of the proximal bile ducts and gallbladder. Cannulation with ERCP was unsuccessful. Afterwards, a percutaneous biliary drain was performed. Later, an elective surgery took place. The hepatic vasculature was very rudimentary, and due to the fragility of the hepatic artery, it was transected, requiring to be ligated. Another collateral left hepatic artery was found, branch of the right gastric artery. The tumor was resected and biopsies were taken, which later revealed a cholangiocarcinoma. A Roux-en-Y hepaticojejunostomy was completed and the patient was transferred into the ICU. No postoperative antibiotics were administered. Initially the patient was stable, later reporting right shoulder pain (then classified as secondary to surgical positioning). Afterwards, the clinical condition of the patient deteriorated. A CT revealed gas inside the portal system of the right hepatic lobe, with the left lobe mostly unaffected. Urgent surgery was performed. Hypotension and bradycardia progressed refractory to the treatment. The patient died during surgery. Samples of peritoneal fluid were taken for culture, later identifying *Clostridium perfringens*. **Case particularities:** HPVG after cholangitis is exceptionally rare and the pathogenic theories are incompatible. In this case, it seems evident that the origin of HPVG is the biliary system. The patient had a biliary obstruction, which also underwent repeated manipulation, leading to a cholangitic liver. In addition, due to the hepatic artery ligation, ischemia of the right biliary tree developed. The isolation of *Clostridium perfringens*, a gas producing anaerobic bacterium, along with the fact that HPVG was mainly in the right lobe, strongly suggest that the underlying pathogenic mechanism was acute cholangitis, with the translocation of gas producing germs into the portal system, at the level of the sinusoids of the right hepatic lobe. The absence of postoperative antibiotic treatment favored the process. **Conclusion:** This is one of the only reported HPVG cases related to cholangitis. An alternative pathogenic theory is postulated. This case also emphasizes the importance of post-surgical antibiotic administration.

**Keywords:** Hepatic portal venous gas, hepatic artery, cholangitis, postoperative

---

## THE USE OF INTRAOPERATIVE RADIOGRAPHY DURING A CLOSED REDUCTION PROCEDURE IN A PERTROCHANTERIC FRACTURE.

Virginia Trentin<sup>1</sup>, Flaviu Moldovan<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Orthopedics , UMFST Tîrgu Mureş

**Background:** Pertrochanteric fractures are the most common type of fragility fractures seen in older patients. These fractures are usually managed using a closed reduction method and internal fixation guided by fluoroscopy. The use of intraoperative imaging is essential for guaranteeing proper fracture reduction and implant positioning. Nonetheless, growing concern is being raised regarding the potential radiation exposure experienced by patients undergoing orthopedic surgeries as well as medical staff involved in the surgical process. For this reason, there is a need to strike a delicate balance between collecting adequate images for surgical success while limiting radiation exposure. **Case presentation:** This case report involves an elderly woman, aged 78 years, who suffered from a right-sided pertrochanteric fracture. She was successfully operated on using the closed reduction procedure with the use of fluoroscopy. Through the entire surgical procedure, 93 intraoperative radiographic images (RTG) were taken. Radiation parameters documented include total exposure, which was 8.11 mGy, and dose-area product, measuring 1.48 Gy·cm<sup>2</sup>. Overall duration of fluoroscopy was 0.6 minutes. The surgical procedure was performed without any intraoperative complications. **Case particularities:** A distinctive feature of this case is the large number of obtained fluoroscopic images in relation to fluoroscopy time and low overall radiation dose. Thus, the use of short, intermittent fluoroscopy should be assumed. This method is beneficial because it allows precise and deliberate manipulation of the process of reduction and implantation of the device. Therefore, surgical and radiographic approaches have the potential to impact radiation parameters independently, thus invalidating the idea that more images inevitably mean high radiation. **Conclusion:** The role of fluoroscopy in the treatment of pertrochanteric fractures cannot be overemphasized. The present study demonstrates that even when a large

number of fluoroscopic images are obtained, the total dose of radiation can be controlled to maintain a low and acceptable level, given that proper and effective management is carried out during the process. An optimized technique of fluoroscopy application might help increase procedure safety while preserving its quality.

**Keywords:** Pertrochanteric fracture, Fluoroscopy, Intraoperative X-Ray, Radiation dose, Closed reduction

## DIABETES MELLITUS AND ECG ACCURACY IN LOCALISING THE INFARCT-RELATED ARTERY

Duong Minh Duc Ngo<sup>1</sup>, Andreea Varga<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Internal Medicine III and Family Medicine, UMFST-UMCH Hamburg

**Background:** Myocardial infarction (MI) is a major cause of mortality and morbidity worldwide according to the World Health Organization (WHO). Electrocardiography (ECG) is the initial diagnosis tool for early MI detection and localization of the infarct-related artery (IRA). Among other comorbidities, diabetes mellitus can obscure classic ECG patterns due to the complex and multifaceted nature of the disease. **Objectives:** The purpose of this study is to evaluate the accuracy of ECG in identifying the IRA in MI and to assess the impact of DM on this accuracy.

**Material and method:** This retrospective cross-sectional analytical study was conducted at Martinusquelle Klinik, Bad Lippspringe, Germany. Among a total of 120 patients having myocardial infarction, 60 patients with diabetes as comorbidity and 60 patients without, over a three-year period (2023-2026). All presented patients experienced acute phase of the disease, were earliest detected by 12 leads electrocardiography (ECG) according to European Society of Cardiology guidelines (2023 ESC Guidelines) at admission and followed by confirmation with coronary angiography (CAG) as gold standard. Diagnostic was performed using sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) and overall diagnostic accuracy. Cohen's Kappa coefficient was used to evaluate the agreement between ECG and CAG, and logistic regression analysis was performed to identify cardiac factors altering ECG accuracy. **Results:** The overall accuracy of ECG compared to CAG in identifying the culprit coronary artery was 77.5%. The accuracy in patients with diabetes and non-diabetic patients was 68.3% and 86.7%, respectively, with a statistically significant difference ( $p = 0.016$ ). The performance in finding the culprit artery on LAD lesions was highest (93.9%), moderate for RCA (67.4%) but less sensitive for LCx lesions (40%). There was a substantial agreement between ECG and CAG ( $\kappa = 0.607$ ,  $p < 0.001$ ). Among the other comorbidities, multivariable logistic regression analysis shows patients with diabetes mellitus was independently associated with reduced odds of correct ECG localization (OR = 0.17, CI: 0.04 – 0.66,  $p = 0.011$ ). **Conclusion:** Patients with diabetes have a lower accuracy in localizing the infarct-related artery and culprit branches by ECG compared to non-diabetic patients due to the nature of the disease.

**Keywords:** Electrocardiography, Myocardial Infarction, Diabetes mellitus, Coronary Angiography, Infarct-Related Artery

## MANAGEMENT OF FISTULIZING CROHN'S DISEASE IN THE SETTING OF TUBERCULOSIS DURING ADALIMUMAB THERAPY: A CASE REPORT

Marta Mura<sup>1</sup>, Daniela Ecaterina Dobru<sup>2</sup>, Andrada Lavinia Caluser<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Gastroenterology, UMFST Tîrgu Mureş

**Background:** Crohn's disease is a chronic inflammatory bowel disorder for which no definitive cure is currently available, and its management remains challenging due to multiple therapeutic limitations **Case presentation:** We report the case of a 56-year-old woman diagnosed in 2009 with colonic Crohn's disease, classified according to the Montreal classification as A2L2B1. The disease onset occurred in 2009, when the patient presented with altered bowel habits and unintentional weight loss. Colonoscopic evaluation revealed a cobblestone mucosal appearance with ulcerative skip lesions, while histopathological examination confirmed the diagnosis of Crohn's disease by demonstrating granulomatous inflammation, a characteristic feature of the disease. Between 2009 and 2017, the patient received mesalazine (Salofalk), with a favorable clinical course. In February 2018, she was admitted with diffuse colicky abdominal pain, frequent watery diarrhea (8–10 stools/day), intermittent rectal bleeding, weight loss of 3–4 kg in one month, fever (38°C), asthenia, and fatigue. Laboratory investigations revealed mild normocytic anemia, thrombocytosis, neutrophilia, hypoalbuminemia, and elevated inflammatory markers, including CRP, ESR,

and fibrinogen. Stool testing was positive for *Clostridioides difficile* toxins A and B, indicating superimposed infectious colitis. Abdominal ultrasonography demonstrated bowel wall thickening consistent with active inflammatory disease. The patient received comprehensive treatment including corticosteroids, 5-ASA, metronidazole, vancomycin, albumin supplementation, diuretics, probiotics, thromboprophylaxis, and fluid–electrolyte replacement, with favorable clinical response. Subsequent abdominopelvic MRI revealed thickening of the rectal and anal canal walls, an anovaginal fistula, and reactive mesorectal lymphadenopathy, confirming fistulizing perianal involvement. New Montreal score: A2L2B3p. Accordingly, anti-TNF therapy with adalimumab was initiated, resulting in sustained clinical remission for approximately six years. In 2024, the patient presented for biologic therapy renewal and reported a persistent cough; further evaluation with chest radiography and interferon-gamma release assay (QuantiFERON-TB Gold) yielded a positive result **Case particularities:** Screening for tuberculosis using QuantiFERON-TB Gold testing was positive on July of 2024, leading to temporary discontinuation of biologic therapy and initiation of isoniazid prophylaxis for six months following pulmonology consultation. Biologic therapy was temporarily discontinued, as the immunosuppressive effects of anti TNF agents may impair the host defense mechanisms and increase the risk of infection progression or reactivation. Therefore, completion of the initial phase of antituberculosis therapy was prioritized, with biologic treatment scheduled to be resumed after tuberculosis treatment. This case report illustrates the long-term clinical course of a female patient with colonic Crohn's disease complicated by fistulizing disease and infectious comorbidity, emphasizing the diagnostic challenges and therapeutic adjustments required throughout disease evolution. It highlights the importance of individualized treatment strategies and careful reassessment of biologic therapy in the setting of intercurrent infection **Conclusion:** This case highlights the complex long-term management of Crohn's disease, it underscores the importance of multidisciplinary management, careful monitoring during biologic therapy, and regular imaging and endoscopic follow-up to optimize patient outcomes. This also highlights critical unanswered issues regarding the durability of anti-TNF- $\alpha$  response after a six-month treatment interruption, the risk of anti-drug antibody formation during therapy withdrawal, and the optimal strategy and timing for discontinuing biologic therapy once remission is achieved

**Keywords:** CROHN'S DISEASE, BIOLOGICAL THERAPY, ADALIMUMAB, INFLAMMATORY BOWEL DISEASE

## METABOLIC BARIATRIC SURGERY AND INCRETIN-BASED THERAPY: SYNERGISM OR COMPETITION? A CASE SERIES OF COMBINED TREATMENT RESPONSES

Bianca Brunelli<sup>1</sup>, Anna Nagy-DHO Eszter<sup>2</sup>, Gyöngyi Bán Erika<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Pharmacology, UMFST-UMCH Hamburg

**Background:** Obesity is a chronic relapsing disease, considered a major critical public health challenge and a worldwide epidemic. Its rising global prevalence and associated comorbidities contribute significantly to increase of mortality and morbidity and have been identified by the World Health Organization as the fifth leading cause of mortality. Despite major treatment advances, including metabolic bariatric surgery and incretin-based therapy such as Glucagon like peptide 1 receptor agonist and dual Glucagon like peptide 1 and Glucose dependent insulinotropic receptor agonist, achieving a sustained weight loss remains challenging. This is partially driven by adaptive physiological mechanisms of body weight regulation, counteracting weight loss. **Case presentation:** We present a series of four patients (n=4) with obesity and associated comorbidities undergoing different therapeutic strategies, including different incretin-based medications and metabolic bariatric surgery, with long-term follow-up ranging from 8 to 15 years. Patients demonstrated variable responses to different therapeutic approaches. Despite initial weight loss across interventions, most pronounced after bariatric surgery, varying degrees of weight regain were observed, requiring further therapeutic adjustment, including combined and/ or sequential approaches, reflecting the heterogeneous treatment response and the dynamic and individualized nature of obesity management. **Case particularities:** These cases illustrate the real-world complexity, individuality and multifactorial nature of obesity and its management. It emphasizes the importance of the interaction between pharmacological and surgical strategies, to achieve a sustained weight loss preventing regain. It reveals a persistent challenge of weight regain, driven partially by compensatory physiological mechanisms, despite targeted interventions. **Conclusion:** Effective long-term obesity management requires an individualized and adaptive strategy, integrating different treatment modalities. This may include incretin-based pharmacotherapy with metabolic bariatric interventions, in order to address both pathophysiological and behavioral determinants of body weight regulation. This approach reflects the chronic relapsing nature of obesity and the challenges of a definitive standardized therapeutic solution, emphasizing the need for flexible, multimodal, sequential and combined use of

pharmacological and surgical treatment strategies

**Keywords:** Obesity, Metabolic Bariatric Surgery, Incretin based pharmacological therapy, Weight regain, Multimodal long term therapy

## PREVALENCE AND SPECTRUM OF GASTROINTESTINAL ENDOSCOPIC FINDINGS IN PATIENTS WITH IRON DEFICIENCY ANEMIA: A RETROSPECTIVE STUDY

Johannes Haugg<sup>1</sup>, Ecaterina-Daniela Dobru<sup>2</sup>, Lavinia Andrada Călușer<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureș

<sup>2</sup>Department of Gastroenterology, UMFST Tîrgu Mureș

**Background:** Iron deficiency anemia is a common condition which frequently arises due to chronic blood loss or inadequate intake. Gastrointestinal pathology represents a major underlying cause, making endoscopic evaluation essential for identifying sources of bleeding and associated lesions. **Objectives:** The objective was to assess whether upper and/or lower gastrointestinal endoscopy identifies a gastrointestinal cause of iron deficiency anemia (IDA) in adult patients. **Material and method:** This retrospective study included adult patients diagnosed with IDA who had esophagogastroduodenoscopy (EGD), colonoscopy, or both between January 2023 and October 2025 at the Târgu Mureș County Hospital. Patients were excluded from this study if there was no laboratory confirmation of IDA, examinations could not be fully performed, patients underwent repeated procedures in this period or if patient records were incomplete. The endoscopic findings were categorized into inflammatory, bleeding-related, structural, malignant/potentially malignant, malabsorptive and normal findings for analysis. Descriptive statistics were performed and 95% confidence intervals (CI) for key prevalence estimates were calculated using the Wilson score method. **Results:** The cohort consisted of 74 patients (67.6% female, mean age of  $63.8 \pm 17.45$  years, mean Hb  $9.9$  g/dL). Pathological endoscopic findings were identified in 72 patients (97.3%; 95% CI 90.7% – 99.3%). Combined upper and lower gastrointestinal pathology was observed in 43.2% of cases, while isolated upper and lower tract findings were diagnosed in 28.4% and 25.7% respectively. On EGD, inflammatory conditions were most frequent (n=41), followed by bleeding related lesions (n=14) and malignant/potentially malignant lesions (n=12). Colonoscopy most often revealed bleeding-related lesions (n=47) consisting mainly of hemorrhoids (n=40), and neoplastic lesions (n=26) as well as polyps and colorectal tumors. Only very few patients did not present with abnormalities following endoscopic investigation (n=2). During EGD 54.5% of examined patients had more than 1 abnormality identified, while the rate for patients undergoing colonoscopy was even higher at 59.6%. **Conclusion:** Gastrointestinal abnormalities were identified in nearly all selected patients with IDA. Multiple pathologies per patient were common in both examination variants. Our findings align with established evidence that gastrointestinal tract lesions are among the most common causes of iron deficiency anemia.

**Keywords:** iron deficiency anemia, gastrointestinal bleeding, gastroscopy, colonoscopy

## IRVINE GASS SYNDROME: A NOTABLE CHALLENGE IN THE MANAGEMENT OF CATARACT SURGERY

Teodora Căciulă<sup>1</sup>, Florina Vultur<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureș

<sup>2</sup>Department of Ophthalmology, UMFST Tîrgu Mureș

**Background:** Cataract represents 50% of vision loss cases in countries with low and medium income. Nowadays, the current treatment is removing it through phacoemulsification with small incisions and inserting a synthetic intraocular lens. Pseudophakic cystoid macular edema, after the phacoemulsification surgery, known as Irvine-Gass syndrome, is one of the most frequent causes of vision loss after cataract surgery, resolving spontaneously in most people, but it can persist in other cases, resulting in permanent vision disturbances. Irvine Gass syndrome remains the most frequent cause of decreased visual acuity after a cataract procedure without any complications.

**Case presentation:** 46 year old female patient, without any significant ocular history, developed pseudophakic cystoid macular edema (PCME- Irvine-Gass syndrome) postoperatively after consecutive refractive interventions, clear lens exchange, on both eyes. CMD appeared in both eyes after 3 months from the surgical interventions. She was initially treated with topical corticosteroids and a nonsteroidal anti-inflammatory drugs for a month, without improvement of the symptoms. Local treatment of intravitreal injections with corticosteroids was initiated, being followed by anti- VEGF agents. Over the course of 9 months, a complete resolution of the edema was obtained in

both eyes, but with recurrence in the right eye after 1 year. The clinical evolution was documented with serial OCT studies. An intravitreal injection with anti-VEGF was performed, without complications. At 1 month was observed remission of the edema in the right eye. **Case particularities:** A case of recurrent cystoid macular edema at 1 month following an uneventful surgery procedure, experiencing a recurrence at the 1 year follow-up despite prior management with corticosteroids and anti-VEGF treatment. **Conclusion:** Cystoid Macular Edema is an important differential diagnostic in the evaluation of blurry vision after cataract surgery. Inflammation following surgery can appear after any intraocular intervention, even if the intervention did not present any intraocular complications. Treatment is essential, as untreated edema can lead to degenerative changes in the macula and to permanent vision loss.

**Keywords:** Cystoid Macular Edema, Cataract Surgery, Clear Lens Exchange, Optical Coherence Tomography (OCT)

## ADVANCED OSTEOPOROTIC SPINE DISEASE AS AN ORTHOPEDIC CHALLENGE: A CASE STARTING FROM AN ATRAUMATIC T12 FRACTURE TO PROGRESSIVE VERTEBRAL INSTABILITY.

Nele Spiller<sup>1</sup>, Ercan Kertmen<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Orthopedics, UMFST – Partner Hospital

**Background:** Osteoporosis is a leading cause of fragility fractures in older patients, characterized by decreased bone mineral density (BMD) and loss of bone microarchitecture. Vertebral compression fractures are frequent, often presenting with marked pain, functional deficit and diminished quality of life. Even though these fractures often occur as isolated events, repeated fractures at adjacent vertebral levels over a short period of time may reflect an underlying vertebral instability which is not captured by bone density test alone. **Case presentation:** A 69-year-old female presented with acute severe lower back pain without known high-energy trauma. The initial imaging (CT and X-ray) showed an unstable fracture of the 12<sup>th</sup> thoracic vertebral body (T12), which was treated with surgical fixation (T10/T11 to L1/L2 and kyphoplasty at the level of T12). Four weeks post-discharge she returned with diffuse lower back pain and a repeated X-ray revealed a new fracture of the second lumbar vertebral body (L2), which required further surgical therapy (shortening the internal fixation from T10/T11 to L1 together with kyphoplasty L2). Shortly after, she presented again with another sequential fracture at the level of L1 with kyphotic instability. This indicated the need for surgical intervention with dorsal spondylodesis from T10 to L4, demonstrating a rapidly progressive pattern of spinal instability. Due to these repeated vertebral fractures at adjacent levels and over a short period of time, a dual X-ray absorptiometry (DXA) scan was performed and it showed osteopenia (T-score: -1.8 left femoral neck; -2.0 right femoral neck) instead of osteoporosis. **Case particularities:** In this case, we observed the discrepancy between DXA scan results and the clinically manifest osteoporosis, with repeated vertebral fractures despite non-osteoporotic bone density. **Conclusion:** The presented case demonstrates that clinical assessment and fracture history, especially in our patient with multiple vertebral fractures, should guide the osteoporosis treatment, as the DXA alone may not reflect true fracture risk in patients with clinically typical osteoporotic fractures.

**Keywords:** BMD, DXA, osteopenia, osteoporosis, vertebral fracture

## LOCAL STAGING OF ANAL CANAL NEOPLASIA: MRI VERSUS ENDOSCOPIC ULTRASOUND

Linus Sawade<sup>1</sup>, Orsolya Bauer<sup>2</sup>, Frank Starp<sup>3</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Surgery, UMFST-UMCH Hamburg

<sup>3</sup>Department of Surgery, UMFST – Partner Hospital

**Background:** Adenomas are frequent neoplasms of the colon, but rarely occur in the anal canal, where these lesions are often misdiagnosed as malignant. Anatomical peculiarities of the anal canal region and potentially extensive therapeutic consequences make imaging modalities indispensable in defining the precise local extent of the neoplasm. This case report focuses on the advantages and disadvantages between magnetic resonance imaging and endoscopic ultrasound. **Case presentation:** A 78 year old woman presents with perianal mucoid

bloody stools as well as change in bowel habits. In the digital rectal examination and the colonoscopy, an anal canal neoplasm was confirmed. Histology showed a tubulovillous adenoma with high-grade dysplasia and magnetic resonance imaging classified the tumor as potentially invasive. Thus, initially, the radical surgical approach meaning the abdominoperineal excision of the rectum, would have been the therapy of choice. Although the current guidelines state that one image modality is sufficient the additional endoscopic ultrasound was performed that ruled out the infiltration of the muscularis propria. Based on this information a sphincter-preserving perianal full-thickness excision was performed with curative intent. The final histological report describes a tubulovillous adenoma with no signs of high-grade dysplasia or invasive growth as well as clear resection margins.

**Case particularities:** This case is characterized by the discrepancy in the assessment of local invasion of the tumor utilizing either magnetic resonance imaging or endoscopic ultrasound, resulting in different tumor staging and therefore dramatically different therapeutic approaches depending on the imaging modality. The additional use of endoluminal ultrasound prevented persurgical overstaging in this particular case. Therefore, having a major impact on the quality of life of the patient. **Conclusion:** A thorough clinical interpretation of examination results and the targeted use of appropriate imaging modalities, in particular endoscopic ultrasound for tumors with uncertain invasion depth of the anal canal, especially in borderline cases between T1 and T2 stages, is essential for therapeutic decision making and consequently can prevent the need for unnecessary radical treatment options.

**Keywords:** anal canal neoplasm, tubulovillous adenoma, endoscopic ultrasound, magnetic resonance imaging, overstaging

## METHAMPHETAMINE-INDUCED PSYCHOTIC DISORDER PRESENTING WITH OTHELLO SYNDROME: A CASE REPORT

Dominik Alexander Bender<sup>1</sup>, Erika-Gyöngyi Bán<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Pharmacology, UMFST Tîrgu Mureş

**Background:** Methamphetamine-induced psychotic disorder (MIPD) is a well-documented complication of stimulant use, frequently characterized by paranoid delusions, hallucinations, and behavioral disturbances. Among its less common manifestations, Othello syndrome (OS), or delusional jealousy, represents a rare but clinically significant subtype associated with an increased risk of interpersonal violence and severe relational dysfunction. While methamphetamine-associated psychosis is often transient, certain cases demonstrate persistence, relapse, and progression toward chronic psychopathology, particularly in the context of continued substance use and poor treatment adherence. **Case presentation:** We report the case of a 34-year-old male with no prior psychiatric history who developed psychotic symptoms following approximately six months of regular methamphetamine use. The clinical picture was dominated by fixed delusions of infidelity toward his spouse, accompanied by paranoid ideation, verbal and physical aggression, insomnia, and functional decline. Over time, the delusional system expanded to include suspicions involving his business partner. Multiple antipsychotic trials (risperidone, olanzapine, paliperidone) resulted in only partial and transient symptom improvement due to side effects and inconsistent adherence. The patient repeatedly refused psychosocial interventions, rehabilitation programs, and long-acting injectable treatment options. The clinical course was marked by recurrent relapses associated with methamphetamine reuse and medication nonadherence, ultimately leading to marital separation and persistent delusional ideation with residual homicidal thoughts. **Case particularities:** This case illustrates a rare and high-risk intersection between MIPD and Othello syndrome, highlighting the emergence of a content-specific, persistent delusional system centered on infidelity. Unlike typical transient stimulant-induced psychosis, this presentation followed a chronic, relapsing course despite periods of abstinence and pharmacological intervention. The case underscores significant diagnostic and therapeutic challenges, including differentiation from primary psychotic disorders, impaired insight, treatment resistance, and refusal of care. Furthermore, it emphasizes the substantial risk of interpersonal violence and the ethical complexities involved in managing patients with delusional jealousy directed toward intimate partners. **Conclusion:** Methamphetamine use can precipitate not only psychosis but also rare and dangerous delusional subtypes such as Othello syndrome. Early recognition, strict abstinence, and sustained adherence to antipsychotic treatment are essential to prevent chronicity and reduce the risk of violence. Integrated management strategies combining pharmacological and psychosocial interventions are critical, particularly in patients demonstrating poor insight and recurrent relapse. Increased clinical awareness of such presentations is necessary to improve outcomes and ensure patient and partner safety.

**Keywords:** Methamphetamine-induced psychosis, Othello syndrome, Delusional jealousy, Substance use disorder, Violence risk

---

## RITUXIMAB THERAPY IN A PLA2R-ASSOCIATED MEMBRANOUS NEPHROPATHY PRESENTING WITH NEPHROTIC SYNDROME: A CASE REPORT WITH REVIEWED LITERATURE

Evita Forster<sup>1</sup>, Veronika Vahlhaus-Rutayungwa<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Nephrology, UMFST – Partner Hospital

**Background:** Phospholipase-A2-Receptor (PLA2R) associated membranous nephropathy (MN) is an autoimmune glomerular disease and the most common cause of primary nephrotic syndrome in non-diabetic adults over the age of 40. It is characterized by the deposition of immune complexes along the glomerular basement membrane leading to proteinuria and progressive kidney dysfunction. **Case presentation:** In this case report I present a 70-year-old male patient who showed symptoms of a nephrotic syndrome including peripheral edema, marked proteinuria, hypoalbuminemia and hypercholesterolemia. He has no significant comorbidities or relevant family history. A kidney biopsy, as well as serological testing, confirmed primary membranous nephropathy. After 6 months of conservative treatment with angiotensin-converting-enzyme inhibitors (ACEIs), diuretics, statins and Sodium-Glucose cotransporter-2 inhibitors (SGLT2i), his general condition did not improve. Therefore, immunosuppressive therapy was indicated. **Case particularities:** The particularity of this case is that, besides the rarity of the disease, the treatment guidelines have changed over the past few years with a significant impact on the outcome in such patients. In one third of the cases patients experience spontaneous remission and in those, refractory to conservative treatment, an immunosuppressive treatment is indicated. The Ponticelli regimen, consisting of an alternating therapy between corticosteroids and alkylating agents, was replaced by newer targeted treatment options. An already known drug, called Rituximab (RTX), has become the first-line treatment. It is an anti-CD20 monoclonal antibody that leads to B-cell depletion. **Conclusion:** The objective is to analyze our patient's response to the RTX treatment and to compare it with other evidence-based studies which focus on the treatment of autoimmune diseases such as systemic lupus erythematosus. The diagnostic workup and decision-making process will be discussed in context of reviewed literature. Newer generations of anti-CD20 antibodies like, for example ofatumumab, ocrelizumab or obinutuzumab are under investigation as promising alternatives to RTX-refractory cases. My patient received 2g RTX within a 2-week interval, and after 11 months he achieved immunological and partial clinical remission. In conclusion, this case report further supports the safety and effectiveness of RTX in the management of PLA2R-associated MN.

**Keywords:** Phospholipase-A2-Receptor (PLA2R), Membranous nephropathy, nephrotic syndrome, Rituximab, immunosuppression

---

## THE SILENT KILLER BEHIND CLOSED DOORS: FORENSIC PATTERNS OF CARBON MONOXIDE INTOXICATION

Gaia Desiderio<sup>1</sup>, Cosmin Carașca<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureș

<sup>2</sup>Department of Forensic Medicine, UMFST Tîrgu Mureș

**Background:** Carbon monoxide is a toxic, colorless gas. Acute poisoning by its inhalation is a common cause of death, especially during the autumn and winter months, since several heat sources – some even improvised – are used. It is frequently classified as an accidental rather than a voluntary intoxication. **Objectives:** This retrospective study includes a group of 25 individuals whose cause of death was acute carbon monoxide poisoning. The autopsies were performed between the years 2021 and 2024 at the Institute of Forensic Medicine from Târgu Mureș. **Material and method:** The data were collected manually, excluding those cases in which the level was too low to be considered cause of death, or those in which, the cause of death was, for instance, an extensive burn rather than carbon monoxide poisoning, despite its presence in the blood. Demographic parameters, toxicological results, the influence of the exposure method to the causative factor, and the correlation between alcohol consumption and carboxyhemoglobin concentration were analyzed. **Results:** Statistical analysis showed that among 2.981 autopsies performed at the Institute of Forensic Medicine in Târgu Mureș, about 0.83% (25 cases)

had acute carbon monoxide intoxication. Among these, 68% of the subjects were males and 32% females, with 44% originating from urban areas and 56% from rural zone. 60% of the individuals included in the study had carboxyhemoglobin concentrations over 50% at the time of death. The mean carboxyhemoglobin concentration for individuals involved in fires was 39%, compared to 52.22% for those caught in gas leaks; this represents a statistically significant difference between two mechanisms ( $p = 0.0282$ ). The presence of ethanol in the blood was identified in 32% of the victims. **Conclusion:** Individuals involved in fires presented lower carboxyhemoglobin concentrations, suggesting the implication of other factors or substances in thanatogenesis. Similarly, patients with associated comorbidities had lower carboxyhemoglobin levels. Regarding the association with alcohol, the results suggest a possible potentiating effect of ethanol but this finding did not reach statistical significance. The present abstract is part of a manuscript accepted for publication by Acta Marisiensis – Seria Medica, for which I am the first author. It is submitted for presentation purposes only.

**Keywords:** Carbon Monoxide, Forensic Medicine, Intoxication

---

## PROLONGED INTRAVENOUS CALCIUM REQUIREMENT IN HUNGRY BONE SYNDROME FOLLOWING PARATHYROIDECTOMY FOR PARATHYROID ADENOMA: A CASE REPORT

Sabrina Merkle<sup>1</sup>, Orsolya Bauer<sup>2</sup>, Frank Starp<sup>3</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Surgery , UMFST-UMCH Hamburg

<sup>3</sup>Department of Surgery , UMFST – Partner Hospital

**Background:** Hungry bone syndrome is a rare postoperative complication of parathyroidectomy. The underlying cause of this condition is the accelerated absorption of calcium by the skeleton in previously high-turnover, demineralized bone, a process that is induced by excessive parathyroid hormone (PTH) stimulation. If symptomatic, the resulting hypocalcemia can lead to a variety of clinical manifestations such as paresthesia, muscle cramps, dysphagia, altered mental state, and syncope. If the condition progresses, life-threatening symptoms, such as seizures, laryngospasm, congestive heart failure, cardiomyopathy, and malignant cardiac arrhythmias, may develop. Hungry bone syndrome is treated with calcium and active vitamin D3 supplementation, guided by regular clinical and paraclinical reevaluation. **Case presentation:** A 47-year-old female initially presented to the orthopedic department with traumatic quadriceps and patellar tendon rupture. During the preoperative evaluation, imaging coincidentally revealed an osteolytic lesion of the proximal tibia, from which a biopsy was obtained for further analysis. This revealed a giant-cell-rich osteolytic process consistent with a brown tumor secondary to underlying hyperparathyroidism. Laboratory tests showed markedly elevated serum PTH levels and cervical imaging confirmed a solitary parathyroid adenoma. Following elective parathyroidectomy, the patient developed hungry bone syndrome, characterized by symptomatic hypocalcemia necessitating prolonged parenteral calcium and magnesium supplementation. Repeated attempts to transition to oral calcium and calcitriol were unsuccessful for six weeks. The postoperative course was further complicated by radiologic identification of widespread brown tumors and generalized osteopenia associated with pathologic fractures during hospitalization. **Case particularities:** This case highlights the difficulty of achieving postoperative calcium stabilization in severe hungry bone syndrome, particularly when oral supplementation is ineffective. Associated complications like fragility fractures, nephrolithiasis leading to acute kidney injury, and generalized widespread osteopenia underline the severity of this condition. **Conclusion:** Careful monitoring and prolonged intravenous electrolyte management are essential for achieving stable postoperative calcium levels and safe treatment of severe hungry bone syndrome. Early identification of risk factors before parathyroidectomy may inform future management guidelines and thus improve postoperative outcomes.

**Keywords:** calcium homeostasis, hungry bone syndrome, parathyroidectomy, postoperative hypocalcaemia, primary hyperparathyroidism

---

## EARLY HAEMODYNAMIC RESPONSE TO ADJUNCT ANGIOTENSIN II INCATECHOLAMINE-REFRACTORY SEPTIC SHOCK: A RETROSPECTIVE SINGLE-CENTRE CASE SERIES

David Schmidbauer<sup>1</sup>, Jose Valles Fons<sup>1</sup>, Erika-Gyöngyi Bán<sup>2</sup>, Michael Fries<sup>3</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Pharmacology, UMFST Tîrgu Mureş

<sup>3</sup>Anesthesia and Surgical Intensive Care, UMFST – Partner Hospital

**Background:** Septic shock is still associated with high mortality despite modern intensive care treatment. Some patients develop refractory vasodilatory shock with very high catecholamine requirements. In this situation, angiotensin II (AT-II) has emerged as a non-adrenergic adjunct vasopressor with a plausible physiological rationale and a reproducible short-term pressor effect in previous studies. However, real-world data remain limited regarding early norepinephrine-sparing and short-term haemodynamic response in routine ICU practice. We therefore aimed to describe the early clinical response to adjunct AT-II in a consecutive single-centre case series of patients with catecholamine-refractory septic shock. **Case presentation:** We performed a retrospective consecutive case series in the surgical ICU of St. Vincenz-Krankenhaus in Limburg an der Lahn, Germany. During the study period, six patients received AT-II, of whom four met the eligibility criteria and were included in the analysis. All were adult patients with septic shock and high-dose noradrenaline requirements at the time of AT-II initiation, which had been defined a priori as  $\geq 0.3$   $\mu\text{g}/\text{kg}/\text{min}$ . The median baseline noradrenaline dose was 1.30  $\mu\text{g}/\text{kg}/\text{min}$  (range 0.41–2.33). Vasopressin was co-administered in all four cases, and none of the patients was on renal replacement therapy at baseline. Noradrenaline requirements fell in all four patients within the first 6 hours. The median relative norepinephrine reduction from baseline was 62.9% at 6 hours and 88.6% at 24 hours. Mean arterial pressure remained stable during the first 24 hours in all cases and stayed at or above 65 mmHg despite marked vasopressor down-titration. Lactate decreased in three of four patients by 24 hours, whereas renal, safety, and mortality findings were more variable. ICU mortality was 1/4, and 28-day mortality was 2/4. **Case particularities:** What is notable in this series is not so much a rare individual case pattern, but rather the consistency of the early haemodynamic response in a small and clinically heterogeneous real-world ICU cohort. All four patients showed an early norepinephrine-sparing effect after AT-II initiation while maintaining adequate arterial pressure. This is in line with the most consistent signal reported in previous studies. At the same time, findings beyond vasopressor reduction, including lactate course, renal endpoints, and short-term mortality, were more variable and were likely influenced by co-interventions and the overall severity of shock. The series therefore highlights both the practical feasibility of AT-II use in routine ICU care and the difficulty of interpreting broader outcome signals in a small observational cohort. **Conclusion:** In this retrospective single-centre case series, adjunct AT-II was linked to rapid early norepinephrine-sparing and preserved mean arterial pressure in catecholamine-refractory septic shock. These findings suggest that the main immediate benefit of AT-II lies in haemodynamic stabilisation and vasopressor de-escalation rather than in a uniform downstream organ or survival effect. Although hypothesis-generating only, this series adds real-world support to the concept that AT-II may be most useful as a targeted adjunct in selected patients with severe vasodilatory septic shock.

**Keywords:** angiotensin II, septic shock, vasodilatory shock, norepinephrine-sparing, case series

---

## SPINAL CORD ISCHEMIA FOLLOWING TEVAR COMPLICATED BY FOURNIER GANGRENE. A CASE REPORT AND LITERATURE REVIEW EVALUATING PREVENTIVE AND MANAGEMENT PROTOCOLS.

Aaron Höhne<sup>1</sup>, Michael Klein<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Surgery, UMFST-UMCH Hamburg

**Background:** While preventive protocols exist, Spinal Cord Ischemia (SCI) after minimally invasive endovascular repair (TEVAR) of Thoracoabdominal aortic aneurysms (TAA) is rare yet potentially catastrophic. This case explores currently used perioperative protocols for SCI prevention, diagnostics, and treatment. Moreover, it sheds light on potential limitations of the available protocols. This complication rate is reduced in the more modern technique of TEVAR in comparison to the original open technique of repair. The exact physiology of SCI is still being investigated but the current consensus is that the Cerebrospinal fluid perfusion pressure plays a vital role as

well as the mechanical obstruction that is part of the protocol under the current guideline of how to perform the repair. There are certain protocols in place that are triggered when SCI symptoms appear known as the rescue protocol. It works as follows: Induce hypertension, keep Haemoglobin above 10g/dl, emergent CSF drainage/ increase the drainage, corticosteroid bolus + Naloxone infusion. This protocol in place has reduced the long term sequelae of SCI. However the late recognition and difficulty in diagnosing still remains a challenge and leads to too late intervention. There are new not yet widely implemented methods in such as the Acher, maier or LSA focused protocol where the Acher Protocol bears the most promising results with certain centres reaching a SCI rate of 0%. Further more a newly reported case study used recombinant tissue plasminogen factor (rt-PA) after a SCI occurred and an early diagnosis was made with promising results. **Case presentation:** The case at hand is as follows. A 70-year-old patient with multiple risk factors (arterial hypertension, type 2 diabetes mellitus, hypothyroidism, reduced systolic ejection fraction) underwent two-stage TEVAR for thoracoabdominal aortic aneurysm (84 mm). All operations were done under modern guidelines' recommendations, including ICU monitoring and mean arterial pressure above 90 mm Hg after surgery. Hours after the procedure, the patient experienced symptoms of paraparesis, which were confirmed by neurological examination and diagnosed as SCI in the T5-T6 segments. As per the rescue protocol, cerebrospinal fluid draining and additional treatment were started; however, neurological disorders continued, which led to irreversible paraplegia. The development of severe pressure ulcer of the sacrum, progressing into Fournier's gangrene, highly likely due to and neurogenic dysfunction. The patient underwent several surgeries to remove necrotic tissue and intensive care. After some stabilization, the patient died during the follow-up period. **Case particularities:** Why this case sparks debate, it presents a rare chain of complications associated with TEVAR, including SCI followed by Fournier's gangrene. The case underscores the need for critical evaluation of current SCI prevention and monitoring protocols, emphasizing the importance of early clinical recognition and optimized postoperative neurological surveillance to reduce debilitating sequelae. **Conclusion:** The Case at hand highlights the need for re-evaluation and investigations to optimize the postoperative management of patients that underwent TEVAR to repair TAA minimizing the risk of SCI. Research into the options to reverse SCI such as the use of rt-PA needs to be undertaken.

**Keywords:** TEVAR, Spinal Cord Ischemia, Management, Prevention

## ISOLATED AORTIC INVOLVEMENT IN GIANT CELL ARTERITIS WITHOUT CRANIAL SYMPTOMS: A CASE REPORT WITH LITERATURE REVIEW

Fausi Qazzaz<sup>1</sup>, Monica Chiş (Copotoiu)<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Rheumatology, UMFST-UMCH Hamburg

**Background:** Giant cell arteritis (GCA) is the most common form of systemic vasculitis in individuals over 50 years of age and primarily affects medium- and large-sized arteries. Although it is classically associated with cranial symptoms, there is increasing recognition of large-vessel involvement, which may present without typical clinical features and therefore complicate diagnosis. **Case presentation:** We report the case of a 76-year-old female who presented with elevated inflammatory markers and a general decline in condition. Notably, she did not report any of the classical symptoms associated with cranial GCA, including headache, scalp tenderness, jaw claudication, or visual disturbances. Initial investigations focused on identifying possible infectious or autoimmune causes of inflammation. Microbiological testing remained negative, and autoimmune serology, including antinuclear antibodies (ANA) and antineutrophil cytoplasmic antibodies (ANCA), did not indicate an alternative vasculitic or connective tissue disease. Due to persistent elevation of inflammatory parameters without a clear source, further diagnostic workup was performed. Computed tomography angiography demonstrated circumferential wall thickening of the thoracic and abdominal aorta, with extension into major arterial branches. These findings were consistent with large-vessel vasculitis. In addition, vascular abnormalities such as arterial stenosis and aortic ectasia were identified, suggesting that structural vessel changes had already developed at the time of diagnosis. Based on the imaging findings, laboratory results, and clinical presentation, a diagnosis of large-vessel giant cell arteritis was made. The patient was treated with systemic corticosteroids, which led to clinical stabilization. Follow-up imaging demonstrated a partial regression of the vascular wall thickening, supporting the inflammatory nature of the underlying process. **Case particularities:** This case is notable for isolated large-vessel involvement of the aorta in the absence of cranial manifestations, illustrating an atypical presentation of GCA. **Conclusion:** The case emphasizes the importance of considering large-vessel GCA in elderly patients with unexplained systemic inflammation. It also highlights the key role of vascular imaging in establishing the diagnosis and guiding management in cases where classical clinical features are absent.

**Keywords:** Giant Cell Arteritis, Aortitis, Diagnosis, Imaging

---

## POSTOPERATIVE COMPLICATIONS FOLLOWING HARTMANN II PROCEDURE: DIFFERENCES BETWEEN NEOPLASTIC AND NON-NEOPLASTIC ETIOLOGIES

Malena Isorna del Rio<sup>1</sup>, Șef lucr. dr. Petre Horea Vlah Botianu<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureș

<sup>2</sup>Department of Surgery , UMFST Tîrgu Mureș

**Background:** Hartmann II operation is a surgical procedure in which the intestinal continuity is restored after an initial temporary colostomy (Hartmann I). This approach is carried out in patients with intestinal obstruction due to neoplasm, acute complicated diverticulitis or other emergencies like perforated colon. The surgery is generally executed after 3 to 6 months of Hartmann I, for abdominal inflammation to be reduced. This represents the removal of a segment of the colon, so that the distal end is closed, and the proximal end is exteriorized in terminal colostomy, avoiding anastomosis with high risk of dehiscence and fistula. After this, Hartmann II involves detaching the stoma from the abdominal wall and reconnecting the proximal colon to the rectal stump (Hartmann's pouch), seeking normal bowel movements and continuity. **Objectives:** This study aims to identify the risk factors associated with anastomotic fistula after Hartmann II operation in neoplastic vs non-neoplastic patients. **Material and method:** The analysis included patients who underwent Hartmann II surgery at the Department of Surgery of Mureș County Clinical Hospital during the study period of 2004-2024. A retrospective review of the clinic's database, patient charts, surgical protocols, and histopathological reports of the patients was conducted. The following comorbidities were also investigated: anemia, pulmonary disease, cardiovascular disease, preoperative radiotherapy, diabetes mellitus and BMI. It was also taken into consideration age, sex, type of anastomosis and surgical technique (manual or mechanical). **Results:** Patients data demonstrated no significant association between fistula and the evaluated variables, including diagnosis (neoplasm vs diverticulitis), diabetes mellitus, cardiovascular disease, pulmonary disease, preoperative radiotherapy and type of anastomosis. However, associations were observed for advanced age, anemia and manual anastomosis. **Conclusion:** In this cohort, the presence of anastomotic fistula was not significantly associated with the underlying etiology or with several evaluated comorbidities and technical factors. However, advanced age, preoperative anemia, and the use of manual anastomosis were connected to a higher risk of leakage. This suggests that patient age and nutritional status, as well as attention to surgical techniques may be more relevant to fistula risk than neoplastic or non-neoplastic nature of the primary disease. Also important to mention, only patients with anastomotic leak were deceased, which highlights the importance of this complication and the key management of risk factors associated

before the restoration of the bowel continuity.

**Keywords:** Hartmann II, anastomosis, fistula, surgery, colon

## EXPLORING MOTIVATIONS AND PSYCHOSOCIAL IMPACT OF PREDICTIVE GENETIC TESTING FOR HUNTINGTON'S DISEASE

Sara Merschmann<sup>1</sup>, Smaranda Maier<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Neurology, UMFST Tîrgu Mureş

**Background:** Predictive genetic testing for Huntington's disease provides individuals at risk with the opportunity to learn their genetic status prior to symptom onset. While this knowledge may facilitate long-term planning, it also introduces substantial emotional, social, and ethical challenges. The decision whether to undergo testing is highly individual and shaped by a complex interplay of personal values, life circumstances, and external influences.

**Objectives:** This study seeks to examine the underlying motivations driving individuals to pursue predictive genetic testing for Huntington's disease and to analyse the associated psychosocial consequences within a broader ethical and legal context. **Methods:** A comprehensive literature-based analysis was performed using the PubMed database. The search approach integrated controlled vocabulary (Medical Subject Headings) with free-text keywords to capture a wide range of relevant publications. To complement the scientific literature, additional sources were incorporated, including legal frameworks such as the German Genetic Diagnostics Act (Gendiagnostik Gesetz, GenDG) and the Embryo Protection Act (Embryonenschutzgesetz, ESchG), as well as selected academic texts. In total, 58 sources were reviewed and subject to qualitative thematic analysis, focusing on patterns related to decision-making, psychological impact, and social context. **Results:** The analysis revealed that motivations for predictive testing are diverse and often multifaceted. Frequently reported reasons include the desire for certainty, reproductive planning, and the need to make informed personal or professional decisions. Psychosocial outcome varied considerably across individuals, encompassing both positive effects, such as relief and enhanced sense of control, and negative consequences, including anxiety, emotional burden, and decisional regret. The findings further highlight the influence of familial experience with the disease, individual coping capacities, and the availability of social and professional support systems. Legal and ethical considerations were identified as additional factors shaping access to testing and guiding clinical practice. **Conclusion:** Predictive genetic testing in Huntington's disease extends beyond a purely medical intervention and is deeply embedded in psychosocial, social, and ethical dimensions. These results emphasize the importance of individualized, multidisciplinary counselling strategies to support patients throughout the testing process and to address the diverse challenges associated with genetic risk awareness.

**Keywords:** Huntington's disease, Predictive genetic testing, Psychosocial impact, Motivation, Genetic counselling

## ANTICOAGULANT REVERSAL IN ACUTE BRAIN HAEMORRHAGE

Marco Gambera<sup>1</sup>, Andrei Modiga<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Anesthesiology and Intensive Care Medicine (II) and Emergency Medicine, UMFST Tîrgu Mureş

**Background:** Ondexxya (Andexanet alfa) is a modified recombinant protein that works as an antidote for certain classes of anticoagulants, such as Apixaban or Rivaroxaban. It acts as a fake target for those drugs, and instead of blocking the real factor Xa in the body, they bind to Andexanet alfa. The desired result is a rapid reduction in excessive bleeding and, finally, the restoration of effective hemostasis. This case report illustrates how important the use of an antidote is, in patients with bleeding caused by anticoagulants, highlighting the improvements in patient's condition and a good outcome. **Case presentation:** An 84-year-old male patient (C.V.) with a history of hypertension, diabetes, permanent atrial fibrillation and ischemic arterial disease presented to the neurology department with weakness on the left side of his body and speech difficulties. The patient was taking Apixaban (Eliquis 5mg) and his last dose was taken on the same day of the admission. A CT scan showed a small haemorrhage in the right capsulothalamic area, measuring 23x22x24 mm. The anticoagulant was immediately stopped and low-dose Andexanet Alfa (400mg I.V. in 15 minutes followed by a dose of 480mg/50ml over 2 hours) was given intravenously, for anticoagulation reversal. A second CT scan showed that the bleeding had slightly decreased in dimension (20/14/17mm). It showed surrounding edema and an evolution towards reabsorption.

Before discharge, the patient was started on a preventive dose of Enoxaparin (Clexane) and was advised to repeat CT scans during follow-up, according to clinical guidelines. **Case particularities:** This case describes an 84-years-old patient with several cardiovascular conditions who developed a deep intracerebral haemorrhage while taking Apixaban. The treatment was correctly administrated, highlighting the high bleeding risk in elderly patients. Another important point is the early use of the reversal agent, which helped to achieve a rapid effect on the coagulation. Managing this patient was challenging because of the need to balance both bleeding and thrombotic risk. **Conclusion:** In conclusion, Andexanet alfa represents an effective option to reverse the effect of factor Xa inhibitors, in cases of intracranial bleeding. In this case, its use helped control the bleeding, showing how important it is to act quickly when dealing with this type of haemorrhages. At the same time, it's necessary to understand that the outcome doesn't depend strictly on the reversal agent but also on factors such as the type and the size of the bleeding, the patient's general condition and the pre-existing comorbidities. For these reasons, results can vary a lot, from good recovery to more severe or even fatal outcomes.

**Keywords:** Anticoagulant reversal, Brain haemorrhage, Direct oral anticoagulants

## SUCCESSFUL SURGICAL MANAGEMENT OF A PERTHROCANTERIC FRACTURE IN AN 81-YEAR-OLD OBESE MALE PATIENT.

Carlo Rundine<sup>1</sup>, Flaviu Moldovan<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Orthopedics , UMFST Tîrgu Mureş

**Background:** Proximal femoral fractures in elderly patients with comorbidities such as obesity present significant surgical and anesthetic challenges. Standardized internal fixation remains the gold standard, though patient-specific factors often dictate the clinical course and perioperative management strategies. **Case presentation:** An 81-year-old male with a significant body mass index (BMI > 30 kg/m<sup>2</sup>) presented to the emergency department following a low-energy mechanical fall at home. Clinical and radiographic evaluation revealed an unstable intertrochanteric fracture of the right femur, classified as AO/OTA 31-A2. Following a 2-day preoperative optimization period to address comorbid conditions, the patient underwent internal fixation under spinal anesthesia. The surgical procedure lasted 40 minutes, utilizing a Stryker Gamma 3 cephalomedullary nail. A ø10.5x100 mm lag screw was placed centrally in the femoral head, supplemented by a ø5x40 mm distal locking screw in a static configuration (ASA physical status score 3). Preoperative laboratory values showed a hemoglobin (HB) level of 12.4 g/dL and a hematocrit (HCT) of 37.2%. The immediate post-operative plan focused on early mobilization, with the patient encouraged to perform toe-touch weight-bearing exercises starting on post-operative day one. Postoperatively, HB and HCT remained remarkably stable at 12.3 g/dL and 37.4%, respectively. The patient's total hospital stay spanned 16 days, culminating in a favorable clinical recovery and discharge to a rehabilitation facility.

**Case particularities:** The case is particularly notable due to the intersection of advanced age, high anesthetic risk (ASA 3), and class I obesity. Obesity significantly complicates surgical management by increasing the depth of the surgical field, which necessitates larger incisions and more forceful soft tissue retraction to achieve adequate visualization of the greater trochanteric entry point. Furthermore, obese patients are at a higher risk for wound healing complications and deep vein thrombosis during recovery. Despite these challenges, the use of static locking with the Stryker Gamma 3 system provided excellent primary stability, which was crucial for managing the mechanical stresses in this patient. The minimal blood loss observed—with almost no change in hemoglobin levels—is clinically significant as it reflects the efficiency of the intramedullary technique and reduced operative time, ultimately minimizing the need for blood transfusions and reducing the physiological burden on a high-risk geriatric patient. **Conclusion:** This case demonstrates that efficient surgical technique and appropriate implant selection can lead to stable outcomes in high-risk geriatric patients. Maintaining orthopedic stability through static locking may mitigate typical postoperative complications in obese elderly populations.

**Keywords:** Pertrochanteric fracture, Obesity, High anesthetic risk, Advanced age

---

## INVESTIGATION SCHEME AND THERAPEUTIC ASPECTS IN A COMPLICATED CASE OF DIABETIC ARTERIOPATHY

Veronica Galizia<sup>1</sup>, Enikő Nemes-Nagy<sup>2</sup>, Zoltán Preg<sup>3</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Biochemistry, UMFST Tîrgu Mureş

<sup>3</sup>Department of Internal Medicine III and Family Medicine, UMFST Tîrgu Mureş

**Background:** Peripheral arterial disease (PAD) represents a progressive atherosclerotic condition characterized by partial or complete obstruction of peripheral arteries, most commonly affecting the lower extremities. Its prevalence is increasing globally, largely driven by the rising incidence of diabetes mellitus and associated cardiovascular risk factors. In diabetic patients, PAD often presents with more severe and distal involvement, contributing to complications such as chronic limb-threatening ischemia, ulceration, and amputation. Additionally, PAD remains underdiagnosed in this population due to symptom overlap with diabetic neuropathy. Microembolization, although less frequently emphasized, may act as an aggravating mechanism, particularly in patients with inadequate anticoagulation. This case report highlights the importance of recognizing complex pathophysiological interactions and adopting a multidisciplinary approach in managing PAD with multiple comorbidities. **Case presentation:** We report the case of a male patient in his forties who presented with rest pain and progressive gangrene of the left forefoot. Clinical and instrumental evaluation revealed advanced PAD (Fontaine stage IV), with an ankle-brachial index of 0.52 on the affected side and imaging then confirmed occlusion of the left superficial femoral artery. The patient's medical history was significant for type 2 diabetes mellitus with poor glycaemic control, arterial hypertension, chronic heart failure with reduced ejection fraction, and prior cardiac surgery including coronary artery bypass grafting and mechanical aortic valve replacement. Laboratory findings demonstrated anaemia, dyslipidaemia, renal impairment, and inflammatory activation, reflecting a high cardiovascular risk profile. Urgent endovascular revascularization via balloon angioplasty was successfully performed, followed by optimization of pharmacological therapy and risk factor control. **Case particularities:** This case is distinguished by the coexistence of multiple high-risk conditions and the suspected contribution of microembolization, potentially related to suboptimal anticoagulation in the setting of a mechanical valve. The integration of interventional treatment with comprehensive medical management, for instance anticoagulation adjustment, lipid-lowering therapy, heart failure optimization, glycaemic control, and correction of anaemia was essential for clinical improvement. Equally important were non-pharmacological strategies such as structured exercise and patient education, which contributed to functional recovery and improved adherence. The patient demonstrated significant progress, with increased walking distance and regression to Fontaine stage IIA during follow-up. **Conclusion:** This case underscores the complexity of advanced PAD and the necessity of a prompt multidisciplinary approach tailored to individual patient profiles. Effective management requires not only revascularization but also rigorous control of comorbidities and risk factors. Inadequate anticoagulation may contribute to complications such as microembolization, further worsening disease progression. A coordinated strategy combining interventional, pharmacological, and lifestyle interventions—supported by active patient engagement—is crucial to improve outcomes, prevent recurrence, and enhance quality of life.

**Keywords:** Critical limb ischemia, Diabetes mellitus, microembolization, multidisciplinary approach, peripheral arterial disease

---

## INCIDENTAL DIAGNOSIS OF BREAST IMPLANT-ASSOCIATED ANAPLASTIC LARGE CELL LYMPHOMA FOLLOWING IMPLANT REMOVAL FOR SEROMA FORMATION AND BREAST IMPLANT ILLNESS SYMPTOMS: A CASE REPORT AND LITERATURE REVIEW.

Nora Andree<sup>1</sup>, Christian Trambitas<sup>2</sup>, Christoph Andree<sup>3</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Plastic and Reconstructive Surgery , UMFST Tîrgu Mureş

<sup>3</sup>Department of Plastic and Aesthetic Surgery , Heinrich-Heine Universität Düsseldorf

**Background:** Breast Implant-Associated Anaplastic Large Cell Lymphoma (BIA-ALCL) is a rare type of non-Hodgkin's T-cell lymphoma which arises in the periprosthetic tissue surrounding breast implants. The World Health Organization (WHO) classified BIA-ALCL as a distinct entity in 2016. Although the overall reported risk estimates

remain low, ranging from 1:300/400 cases to 1:100000/200000 cases in the literature, increasing awareness over recent years has led to a growing number of reported cases. Especially textured breast implants are associated with a higher risk of disease compared to smooth breast implants. Clinically, BIA-ALCL typically presents as a delayed periprosthetic seroma and breast asymmetry, usually occurring after more than one year with an average of seven to nine years after implantation. Rarely, BIA-ALCL manifests as a mass, with pain, regional lymphadenopathy, capsular contracture, or overlying skin rash. Clinical differentiation of BIA-ALCL suspicion from other benign causes such as implant rupture, trauma, hematoma, or subclinical infection, is challenging due to the similar appearance of a delayed seroma. Confirmation of diagnosis after clinical suspicion relies on cytological and histopathological analysis, with CD30 positivity and ALK negativity. Timely diagnosis is essential, as early-stage disease confined to the capsule is associated with a favorable prognosis when treated with implant removal and en-bloc capsulectomy. **Case presentation:** A 48-year-old women received bilateral breast augmentation with macro-textured silicone BIOCELL® implants from Allergan six years ago. She presented with right-sided peri-implant fluid collection and systemic symptoms attributed to Breast Implant Illness (BII). An implant rupture was suspected. A preoperative seroma aspiration with cytological analysis was not feasible, therefore implant removal with en-bloc capsulectomy was performed. Intraoperatively, a right-sided seroma was identified without evidence of a capsular mass. Additionally, both implants appeared macroscopically ruptured. Histopathological and immunohistochemical analysis revealed sparse CD30-positive, ALK-negative atypical lymphoid cells confined to fibrin deposits, consistent with early-stage BIA-ALCL. Disease stage was classified as T1-NX-MX using the Tumor, Lymph Node, Metastasis (TNM) system of the American Joint Committee on Cancer (AJCC). Interdisciplinary tumor board decided on MRI control after six months and no additional therapeutic intervention in accordance with international guidelines. **Case particularities:** The malignant occurrence of BIA-ALCL was made incidentally by histopathological workup of CD30 analysis of the excised capsule. The guidelines do not clearly specify the appropriate management strategies when preoperative aspiration of a delayed seroma is not feasible. Thus, in cases where clinical determinants such as delayed seroma, implantation of macro-textured implants, and infeasibility of preoperative fluid aspiration are present, a thorough histopathological examination of the capsular tissue should be advised. **Conclusion:** This case emphasizes the importance of considering BIA-ALCL in patients presenting with delayed seroma formation and highlights the role of thorough histopathological evaluation, particularly when preoperative diagnostic procedures are not feasible. Early-stage disease can be effectively managed with complete surgical excision and carries a favorable prognosis.

**Keywords:** BIA-ALCL, Breast Implant Illness, delayed seroma, CD30 positive, ALK negative

---

## INCIDENTAL FINDING OF INVASIVE MACROPROLACTINOMA IN A MALE PATIENT PRESENTING WITH ATYPICAL NASAL SYMPTOMS: A CASE REPORT

Elisabeth Messner<sup>1</sup>, Maximilian Gliga<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Endocrinology, UMFST-UMCH Hamburg

**Background:** Pituitary incidentalomas are frequent findings in radiologic studies and most commonly represent pituitary neuroendocrine tumors (PitNETs). Prolactinomas are the most common subtype of PitNETs. They are classified as microprolactinomas (< 10 mm), macroprolactinomas (>10 mm), or giant prolactinomas (>40 mm). Macroprolactinomas are most commonly found in men, often follow a more aggressive course, and are associated with a higher risk of dopamine agonist resistance. The typical clinical presentation of prolactinomas is caused either by the mass effect or by hyperprolactinemia, frequently leading to hypogonadism. **Case presentation:** This case report discusses a 57-year-old man who presented to his general practitioner with long-standing nasal complaints, including the sensation of retro-nasal movement and intermittent clicking sounds, without typical endocrine or neurologic symptoms. A computed tomography (CT) scan demonstrated a large space-occupying lesion involving the sellar region. Subsequent biochemical testing revealed highly elevated prolactin levels of >4700 ng/mL, along with biochemical hypogonadism. Magnetic resonance imaging (MRI) findings were consistent with an invasive macroprolactinoma measuring 39 x 35 x 26 mm, originating in the sella turcica, invading both cavernous sinuses, involving the intracranial segments of the internal carotid arteries, and in close contact with the temporal lobe meninges and the posterior wall of the sphenoid sinus. Treatment with the dopamine agonist cabergoline 0.5 mg twice weekly was started. Within one month of treatment, prolactin levels normalized and after four months, eugonadal hormone levels were confirmed. Throughout the disease process and the course of treatment, the patient remained completely asymptomatic regarding manifestations of hypogonadism, mass effect, or cabergoline side effects. **Case particularities:** This case demonstrates the unusual presentation of a large

invasive macroprolactinoma, detected in a patient presenting with atypical nasal complaints and clinically asymptomatic hypogonadism. **Conclusion:** The case highlights the importance of investigating patients with atypical symptoms, interpreting incidental findings on imaging, early initiation of treatment, and working in a multidisciplinary team.

**Keywords:** prolactinoma, invasive macroprolactinoma, pituitary neuroendocrine tumor, pituitary incidentaloma

---

## DIAGNOSTIC UNCERTAINTY AND LIMITATIONS OF INITIAL MANAGEMENT IN ADNEXAL MASSES: A CASE REPORT

Giulia Valentini<sup>1</sup>, Lucian Puscasiu<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Gynecology, UMFST-UMCH Hamburg

**Background:** Metastatic ovarian tumors continue to pose significant diagnostic challenges. Preoperatively, ovarian metastases are commonly mistaken for primary ovarian cancers or functional ovarian cysts due to overlapping morphological and clinical features. In many cases, the primary tumor is asymptomatic and is detected only after the diagnosis of ovarian metastasis. Colorectal cancer is one of the leading causes of cancer-related death worldwide. Ovarian metastases from colorectal cancer are a relatively uncommon manifestation of this frequent malignancy and carry a very poor prognosis. A multidisciplinary approach integrating imaging, serum markers and histopathology is necessary to reduce diagnostic uncertainty. The metastatic potential of a newly diagnosed adnexal mass should always be considered. **Case presentation:** A 45-year-old female, G4P3, with no chronic medication use and no relevant past medical or family history of gynecological malignancy, underwent gynecological evaluation two weeks prior to Emergency Department presentation. Routine transvaginal ultrasound showed enlargement of the right ovary due to a suspected uncomplicated hemorrhagic cyst and conservative management was advised. She subsequently presented to the Emergency Department with acute abdominal pain and a two-week history of progressive abdominal distension associated with nausea and two episodes of vomiting. On evaluation, transvaginal ultrasound demonstrated marked enlargement of the right adnexal mass. The lesion was unilocular with irregular margins and heterogeneous solid-cystic content. A large amount of free fluid was present in the abdomen and transabdominal ultrasound confirmed hemoperitoneum. The working diagnosis was a hemorrhagic ovarian cyst most likely representing a hemorrhagic corpus luteum. Diagnostic laparoscopy with right adnexectomy was performed. Histopathological examination revealed a poorly differentiated intestinal adenocarcinoma (G3). Immunohistochemical findings, including CK20 positivity, SATB2 positivity, CK7 negativity and PAX8 negativity, strongly supported the diagnosis of metastatic colorectal adenocarcinoma. Colonoscopy demonstrated an infiltrative lesion in the distal sigmoid colon. Further imaging showed pelvic progression and peritoneal involvement. Cytoreductive surgery achieved complete macroscopic cytoreduction (R0) and adjuvant systemic therapy with FOLFOX in combination with cetuximab was recommended. **Case particularities:** The secondary tumor of the ovary was repeatedly interpreted as a benign ovarian cyst. Suspicion of neoplastic disease was not raised despite multimodal evaluation. This case illustrates how malignant processes can closely mimic benign or functional ovarian lesions and how difficult accurate preoperative classification of adnexal masses can be. It also highlights the limitations and potential oncologic implications of initial laparoscopic management when malignancy has not been reliably excluded preoperatively. Furthermore, it underlines the importance of histopathology and immunohistochemistry in establishing the definitive diagnosis. **Conclusion:** Diagnostic misinterpretation in adnexal pathology can have serious adverse consequences for the patient. Ovarian metastases from colorectal cancer may mimic benign or functional adnexal lesions and remain unrecognized despite multimodal assessment. Clinical history, patient age, physical examination and imaging findings should be interpreted systematically and in combination. Timely histopathological diagnosis, complete staging and multidisciplinary oncologic management are essential in guiding appropriate treatment.

**Keywords:** adnexal mass, colorectal cancer, diagnostic uncertainty, laparoscopy

---

## MANAGEMENT AND OUTCOMES OF C1-C2 FRACTURES: A RETROSPECTIVE REVIEW OF 43 PATIENTS

Manar Al Falah<sup>1</sup>, Dr. Rares Chinezu<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Neurosurgery, UMFST Tîrgu Mureş

**Background:** Upper cervical spine fractures involving the atlas (C1) and axis (C2) are clinically significant injuries associated with substantial morbidity, particularly in elderly patients. Management remains controversial and depends on fracture type, degree of displacement, patient age, mechanism of injury, and associated instability. Understanding the demographic profile and treatment patterns of these injuries may help optimize therapeutic decision-making and improve outcomes. **Objectives:** To evaluate the demographic characteristics, injury mechanisms, fracture patterns, treatment strategies, and clinical outcomes of patients presenting with C1, C2, and combined C1-C2 fractures. **Methods:** A retrospective review was conducted on 43 patients diagnosed with upper cervical spine fractures. Data collected included age, sex, mechanism of injury, fracture level, fracture subtype, and treatment modality. Fractures were classified as isolated C1, isolated C2, or combined C1-C2 fractures. Odontoid fractures, particularly type II lesions, were further analyzed according to displacement and treatment. Patients were managed either conservatively or surgically depending on fracture stability and patient-related factors. **Results:** The study population had a mean age of  $59.3 \pm 20.7$  years (range: 16–87 years), with the highest frequency observed in the 66–76-year age group. Male patients represented 65.12% of the cohort, while females accounted for 34.88%. Falls were the leading mechanism of injury, followed by road traffic accidents, whereas violence and other causes were less frequent. Fractures occurred most commonly in patients aged 60–79 years. Isolated C2 fractures were the predominant injury pattern across all age groups, particularly among elderly patients, whereas isolated C1 and combined C1-C2 fractures were less common and showed a broader age distribution. Conservative treatment predominated in isolated C1 fractures (75%), while combined C1-C2 fractures were more frequently managed surgically (53.85%). C2 fractures demonstrated a mixed treatment pattern, with conservative management used in 59.09% of patients. Older patients sustaining high-energy trauma underwent surgical treatment more frequently than younger patients, whereas low-energy trauma was mainly managed conservatively. Displaced odontoid type II fractures were mainly treated surgically, while non-displaced lesions were generally managed conservatively. Combined odontoid type II and C1 fractures showed variable management strategies. **Conclusion:** C1-C2 fractures occur predominantly in older male patients, most commonly following falls. C2 fractures, particularly odontoid type II fractures, are the most frequent injury pattern. Management is strongly influenced by fracture morphology and displacement: isolated C1 fractures are usually treated conservatively, whereas combined and displaced injuries more often require surgical intervention. Individualized treatment based on fracture stability and patient characteristics remains essential to achieve favorable outcomes.

**Keywords:** C1 fracture, C2 fracture, odontoid fracture, upper cervical spine, fracture management

---

## MULTIPLE PERIODONTAL ABSCESSSES IN A PATIENT WITH GENERALIZED AGGRESSIVE PERIODONTITIS: A CASE PRESENTATION ON PERIODONTAL MANAGEMENT

Ali Abdulraoof Abdulla A A Alshayeb<sup>1</sup>, Ahmad Abdullatif Hassan<sup>1</sup>, Mohammad Kattan<sup>1</sup>, Farah Bechir<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Preventive, Community Dentistry and Oral Health, UMFST Tîrgu Mureş

**Background:** Generalized aggressive periodontitis is a form of periodontal disease characterized by rapid destruction of the periodontal ligament and surrounding alveolar bone even in systemically healthy individuals. This means that, non-responding periodontal sites may develop despite good oral hygiene. As a result of high bacteria presence sub-gingivally, periodontal abscesses formation is exacerbated. Abscesses are also characterised by periodontal ligament breakdown; therefore, combined with aggressive periodontitis can lead to tooth loss and poor prognosis, classing them as medical emergencies. **Case presentation:** A 33-year-old male patient complained of "pus and bad taste". He reported missing 3.1 and discoloration of 2.1 due to previous root canal treatment (RCT). Patient has good oral hygiene, brushing twice daily and using interdental brush (0.4mm), while also getting regular

hygienist appointments, because he was previously diagnosed with generalised aggressive periodontitis. The radiographic findings showed normal bony trabeculation. Periodontal disease was evident with the horizontal bone loss around 2.1 and 2.6 and vertical bone loss near 1.6 and 3.5. The previous RCT was also reviewed showing inadequate gutta-percha in the crown. The final diagnosis was generalised aggressive periodontitis with multiple periodontal abscesses (1.8, 1.7, 1.6, 2.1 and 3.5), missing 3.1 and internal discolouration of 2.1. A multidisciplinary treatment approach was required. Beginning with a stabilization phase that involved full-mouth debridement and guidance on using larger interdental brushes (0.6mm and 0.7mm). Selective root surface debridement (RSD) was performed for teeth with 4-5mm pockets. A Regenerative periodontal procedure was performed on 3.5 using a sulcular incision from 3.6 to 3.4 with modified papilla preservation, RSD along with removal of granulation tissue, filling the 3-wall intrabony defect with fortos® VITAL and securing the flap adaptation with 4/0 polysorb™ interrupted suture. A surgical flap was performed on 2.1 with a labial sulcular incision (2.2 to 2.1) with modified papilla preservation, RSD and root surface smoothing using a diamond bur. Flap was then repositioned and secured with 4/0 polysorb™ vertical mattress suture. Another regenerative surgical procedure was performed on 1.6 using an incision along 1.7 to 1.5, RSD and removal of granulation tissue and filling the intra bony defects. Flap was then secured with two 4/0 polysorb™; single interrupted suture. Patient was also given a resin-bonded bridge that cantilevered from 4.1 to replace the missing 3.1. A root canal retreatment and internal bleaching of 2.1 was performed. **Case particularities:** This case is notable due to the presence of generalized aggressive periodontitis with multiple concurrent periodontal abscess, accelerating tissue breakdown and bone loss. Non-responsive periodontal pockets limited conventional periodontal therapy techniques for treating the patient, highlighting the significance of a multidisciplinary approach. This allows the incorporation of the aesthetic rehabilitation of the dentition and surgical management of periodontal infection. **Conclusion:** In conclusion the case portrays how periodontal disease can affect patients who demonstrate good oral hygiene highlighting how early recognition is essential in order to manage and slow down its progression. Despite the management of the patients' main complaints and the stabilization of his periodontal health, close monitoring is essential knowing the aggressive nature of periodontitis.

**Keywords:** Generalized aggressive periodontitis, Periodontal abscess, Multidisciplinary approach, Regenerative periodontal surgery, Non-responsive periodontal pockets

## A SMALL PDA – THE CAUSE FOR SEVERE PULMONARY HYPERTENSION OR SOMETHING ELSE LYING UNDERGROUND?

Anda-Cristiana Şuteu<sup>1</sup>, Andreea Varga<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Internal Medicine III and Family Medicine, UMFST Tîrgu Mureş

**Background:** The ductus arteriosus is a fetal blood vessel that connects the aorta and the main lung artery, so that the blood can detour away from the lungs. Under normal circumstances, the ductus closes within the first days after birth. The patent ductus arteriosus (PDA) is a congenital cardiac malformation/defect in which this ductus does not close properly. It is usually diagnosed in childhood and rarely in adulthood. The later it is diagnosed, the more impact the persistent patency of the ductus arteriosus has over the cardiovascular and respiratory system.

**Case presentation:** We report a case of a 23 years-old female who presented accusing dyspnoea at moderate exertion, fatigability and dysphonia. Based on the symptoms, she was diagnosed with bronchial asthma in 2021. Patent ductus arteriosus was diagnosed at 19 years old. In April 2024, she is admitted for extensive tests to determine the feasibility of surgical/interventional closure of the PDA. Transthoracic echocardiography revealed a persistent PDA with left-to-right shunting, severe pulmonary regurgitation, and moderate tricuspid regurgitation. Right heart catheterization demonstrated severe precapillary pulmonary hypertension, with a 15.3% reduction in pulmonary pressures following nitric oxide administration. The PDA exhibited a bidirectional shunt that reverted to left-to-right during vasoreactivity testing. Temporary balloon occlusion of the ductus did not normalize pulmonary artery pressures, which remained suprasystemic. Based on these findings, a diagnosis of pulmonary arterial hypertension (PAH) was established, and the patient was enrolled in the National Health Program for Pulmonary Hypertension Treatment. Combined dual initial targeted therapy with ERA + PDE-5i was initiated. However, Bosentan was discontinued due to adverse effects, including abdominal pain and hepatocellular cytolysis. Therapy was subsequently continued with Sildenafil and Macitentan, with good tolerability. Due to persistent symptoms and intermediate-low risk, activin-signalling inhibitor was added in September 2024. Given the discordance between the relatively small PDA size and the severity of pulmonary hypertension, genetic testing was performed, revealing a heterozygous variant in ATP13A3 (c.2201T>A, p.Leu734His), classified as a variant of uncertain significance

(VUS). **Case particularities:** In this case, the severity of pulmonary arterial hypertension appears disproportionate to the anatomical size of the PDA, raising the possibility of an underlying genetic predisposition. The identified ATP13A3 variant, although of uncertain significance, may contribute to disease susceptibility and warrants further investigation. **Conclusion:** Pulmonary arterial hypertension requires a multidisciplinary approach and management in specialized centers. This case illustrates the rare diagnosis of PDA in a young adult complicated by severe pulmonary arterial hypertension and highlights the critical importance of early detection and timely management of congenital heart defects. Given the presence of suprasystemic pulmonary pressures, closure of the PDA is currently contraindicated; however, every three months, reassessment is essential to evaluate operability as pulmonary vascular resistance evolves under targeted therapy.

**Keywords:** patent ductus arteriosus, pulmonary arterial hypertension, congenital cardiac malformation

## MULTIPLE RECURRENCES OF ADULT GRANULOSA CELL TUMOR IN A LATE POST MENOPAUSAL WOMAN: A CASE REPORT AND LITERATURE REVIEW.

Sara Espiña Prieto<sup>1</sup>, Haytham Elmeligy<sup>2</sup>, Gustav Peters<sup>3</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>University of Alexandria, Egypt

<sup>3</sup>Department of Surgery, UMFST-UMCH Hamburg

**Background:** Granulosa cell tumour (GCT) is a rare sex cord-stromal tumour, accounting for 2-5% of all malignant ovarian neoplasm. GCTs are divided into two subtypes: adult granulosa cell tumour (AGCT) and juvenile granulosa cell tumour (JGCT). AGCT represents the 95% of all granulosa cell malignancies with a peak incidence in perimenopausal and early postmenopausal woman aged between 50 and 55 years. Approximately 80% of cases are usually diagnosed at stage I. AGCTs are characterized by a slow growth and proliferation with a favourable prognosis and a potential for late recurrence. However, there is a lack of evidence regarding recurrent diseases. The molecular hallmark used to differentiate between AGCTs and JGCTs is the somatic missense mutation in FOXL2 gene (c.402C>G; p.C134W). Immunohistochemical and serological test, such as inhibin A and B, estrogen and anti-Müllerian hormone are the standard for initial diagnosis. The management of multiple recurrent AGCT is based on complete macroscopic cytoreductive surgery and systemic therapy. **Case presentation:** We present a case of AGCT in a 67-year-old woman who had been postmenopausal for a decade prior to her initial diagnosis in 2020. The patient was admitted to the hospital presenting with a 14 cm mass in the mid-abdomen. Surgical staging confirmed AGCT classified as pT1C1 (FIGO: IC1), reflecting intraoperative capsular rupture. Immunohistochemical analysis of the primary tumour showed estrogen and progesterone receptors at 70% and 95% respectively and a Ki-67 proliferation index of 60%. The first-line treatment consisted of four cycles of platinum-based chemotherapy including cisplatin, etoposid and ifosfamide. The patient experience three successive relapses every two years. The first was in the pouch of Douglas and was treated with the aromatase inhibitor anastrozole. The second affected the anterior rectal wall and was managed with gonadotropin-releasing hormone agonist goserelin. The last relapse occurred at the vaginal end involving the presacral and the lymph nodes of the left internal iliac artery, treated on this occasion with examestane. **Case particularities:** This study reveals a consistent pattern of recurrences occurring approximately every two years and a high long term survival rate despite complete cytoreductive surgery on each occasion. The latency and periodic reactivation of the tumour highlight the relapsing phenotype in AGCT. Lymph node involvement in the latest recurrence is present usually in patients with relapses and is reported in 5% of the cases. Additionally, the patient's late postmenopausal stage at the initial diagnosis reveals an autonomous intratumoral estrogen synthesis. Another important feature is that negative serological tests do not exclude an active AGCT and imaging follow-up must remain independent of tumour marker results. **Conclusion:** This case illustrates the complex interaction between tumour biology and the limitations of current evidence in multiple recurrent AGCT. The regular biennial pattern and the progressive retroperitoneal lymph node dissemination demonstrates that tumour dormancy and periodic reactivation may constitute a recurrence phenotype in AGCT. This reinforces the need of a continuous gynaecological and oncological follow-up, as well as prospective, multicentre studies on this rare tumour.

**Keywords:** Adult granulosa cell tumour, Multiple granulosa cell tumour recurrences, Post-menopausal woman

---

## CEREBRAL VENOUS THROMBOSIS: CLASSIC RISK FACTORS AND CHARACTERISTIC IMAGING FINDINGS

Alexandre Ceban<sup>1</sup>, Laura Bărcuțean<sup>2</sup>, Rodica Bălașa<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureș

<sup>2</sup>Department of Neurology, UMFST Tîrgu Mureș

**Background:** Cerebral venous thrombosis is characterized by a thrombotic obstruction of the venous sinuses, leading to impaired venous drainage and potentially resulting in ischemic or hemorrhagic lesions in the brain. Common risk factors include oral contraceptives, pregnancy, the postpartum state, hypercoagulable disorders, trauma, malignancy, and infections. **Case presentation:** We present the case of a 25-year-old female, three months postpartum and currently taking oral contraceptives, who presents to the Emergency Department with a diffuse headache, nausea, vomiting, and retro-orbital pain. Neurological examination revealed a positive Babinski sign on the right, with no other focal deficits, and a Glasgow Coma Scale of 15 points. Non-contrast cerebral tomography (CT) showed a discrete heterogeneous hyperdensity in the left transverse sinus, prompting further investigation. CT venography and magnetic resonance imaging (MRI) concomitantly revealed a filling defect in the lateral portion of the left transverse sinus, as well as significant bilateral filling defects in the sigmoid sinuses, confirming a diagnosis of cerebral venous thrombosis. During hospitalization, the patient was treated with anticoagulation, analgesics, and antiemetics. Her clinical course was favorable, and she was discharged after 8 days with a normal neurological status. **Case particularities:** This case is highlighted by the presence of two major risk factors for cerebral venous thrombosis: the patient's postpartum state and the use of oral contraceptives. Non-specific symptoms, most commonly headache, may delay diagnosis, but the presence of focal neurological signs, such as a positive Babinski sign, may provide important diagnostic clues. Neuroimaging is essential for confirmation, and the characteristic findings on CT venography and MRI support a classic presentation of cerebral venous thrombosis. **Conclusion:** Cerebral venous thrombosis should particularly be suspected in young women with established risk factors who present with non-specific symptoms such as diffuse headache. While it may lead to poor outcomes if left untreated, early detection and management are associated with a favorable evolution.

**Keywords:** cerebral venous thrombosis, oral contraceptives, postpartum, hypercoagulability

---

## A DIAGNOSIS REVEALED THROUGH THE NEXT GENERATION: ADULT-ONSET MYOTONIC DYSTROPHY TYPE 1 FOLLOWING DIAGNOSTIC DELAY

Mireia Perez Vila<sup>1</sup>, Smaranda Maier<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Neurology, UMFST-UMCH Hamburg

**Background:** Myotonic Dystrophy Type 1 (DM1) is an autosomal dominant genetic disorder, caused by an unstable expansion of the CTG nucleotide sequence in the DMPK gene. The adult-onset form of this multisystemic disorder most frequently manifests through the appearance of progressive muscle weakness, generalized fatigue, myotonia, abnormalities in cardiac conduction and early development of cataracts. **Case presentation:** In 2021, a 47-year old woman was brought to the emergency department, due to an episode of severe dyspnea and other non-specific symptoms, which awoke her at night. Due to unremarkable clinical and laboratory findings, she was discharged with a presumed episode of psychological distress. However, no relevant psychiatric symptoms were noted, and the patient denied being under stressful conditions. Her past medical history was notable for early-onset bilateral cataracts at the age of 45, which had been managed as an isolated ophthalmological condition. Over the following years, she developed progressive muscular weakness, significant fatigue, and reduction in her functional capacity, which greatly impacted her quality of life and led her to seek medical attention in multiple occasions. Despite extensive investigations, including neuroimaging, electrophysiological studies and laboratory testing, no organic cause could be identified and her symptoms were mostly attributed to functional or psychological causes. In 2024, the patient had to be hospitalized for a neurological evaluation, following an episode of focal transient neurological symptoms; however, diagnostic workup remained inconclusive and the patient was discharged with a referral for a psychosomatic clinic. In 2025, the patient sought medical attention again, presenting for an external neurological consultation. During a detailed physical examination, she showed proximal muscle weakness, reduced endurance and subtle myotonic features. These symptoms raised the

neurologist's suspicion of a possible underlying muscular dystrophy disorder. However, it was during a thorough anamnesis that this suspicion was substantiated, as the patient revealed that her son had been previously diagnosed with a juvenile form of DM1. This information had not been identified in earlier evaluations, as the patient had been unaware of its clinical significance and had not been inquired about it. This prompted targeted genetic testing, which confirmed a pathogenic CTG repeat expansion (>50 repeats) in the DMPK gene.

**Case particularities:** This case is notable for a diagnostic delay, in which the patient's symptoms were repeatedly attributed to functional or psychological causes despite the presence of some specific clinical red-flags, such as the early-onset of bilateral cataracts and progressive muscle weakness. The diagnosis was essentially established after a thorough familial anamnesis revealed a previously unrecognised familial association, highlighting the importance of identifying subtle clues and performing a detailed anamnesis. **Conclusion:** Considering neuromuscular disorders such as DM1 in patients with unexplained, multisystem symptoms remains essential to avoid missed or delayed diagnosis. There is a risk of premature diagnosis closure when non-specific symptoms are associated to psychological causes. A systematic clinical approach that integrates detailed history-taking, together with physical examination, remains fundamental for identifying an underlying neuromuscular disorder.

**Keywords:** Myotonic Dystrophy Type 1, Diagnostic Delay, Psychogenic Misattribution

## DUAL-PLATE FIXATION WITH CERCLAGE AUGMENTATION FOR DISTAL PERIPROSTHETIC HUMERAL FRACTURE AFTER REVISION REVERSE SHOULDER ARTHROPLASTY: A CASE REPORT

Fernando Company Chulia<sup>1</sup>, Werry Christoph<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Orthopedics, UMFST – Partner Hospital

**Background:** Periprosthetic humeral fractures remain a difficult complication of shoulder arthroplasty, particularly after revision surgery. In most cases, classification-based algorithms provide sufficient guidance to decide between osteosynthesis and revision arthroplasty. When complete stem loosening, severe osteopenia, revision-related scar tissue, and disrupted soft-tissue planes converge, standard pathways offer no reliable answer, and each decision has to be reasoned from first principles. **Case presentation:** An 83-year-old woman sustained a displaced distal periprosthetic fracture of the right humerus in November 2023, eight months after revision to a long-stem cemented reverse shoulder arthroplasty (DePuy Delta XTEND, 12 × 190 mm). Her background included arterial hypertension, dyslipidaemia, and substituted hypothyroidism. Even before the fall, shoulder function was markedly restricted, with abduction and anteversion each below 10 degrees; apron and neck grip were both impossible. Preoperative CT confirmed a distal periprosthetic humeral shaft fracture with dorsomedial angulation, full-length humeral stem loosening with maximal involvement distally, and a separate non-acute, nondisplaced midshaft fracture, together establishing multilevel structural failure rather than an isolated acute injury. Inflammatory markers were within normal limits on admission, excluding a septic aetiology. Intramedullary fixation was anatomically blocked by the cemented long stem. Further revision arthroplasty was judged disproportionate given the extreme osteopenia, paper-thin cortex, dense revision-related scarring, and the patient's severely limited functional baseline. Surgery comprised a dorsal-ulnar dual plate construct with Synthes angular-stable locking plates, three circumferential cerclage cables for proximal control, selective screw placement through the cement mantle, and local demineralized bone matrix (DBM) at the fracture defect. The radial nerve could not be safely identified intraoperatively because of extensive fibrosis. To avoid iatrogenic injury, the team worked directly along the bone surface. The postoperative course was uncomplicated. The patient was discharged on day nine with intact distal neurovascular function and restored axial alignment confirmed radiographically. **Case particularities:** The convergence of Kirchhoff type III complete implant instability, a midshaft periprosthetic fracture, extreme cortical thinning, and a fibrotic revision field where normal tissue planes no longer existed placed this case outside the reach of any published treatment algorithm, requiring a surgical decision tailored to the patient's biology and functional capacity. **Conclusion:** Salvage dual-plate fixation with cerclage augmentation represents a viable operative option for distal periprosthetic humeral fracture when anatomy, bone quality, and the patient's functional limitations together make both standard fixation and revision arthroplasty disproportionate.

**Keywords:** Periprosthetic fracture, Dual-plate fixation, Osteopenia, Salvage osteosynthesis, Reverse shoulder arthropathy

---

## IMPACT OF RENAL DYSFUNCTION AND INFLAMMATORY ACTIVATION ON IN-HOSPITAL OUTCOMES IN ACUTE SEVERE HEART FAILURE

Erik Hartzo<sup>1</sup>, Tobias-Richard Meinel<sup>2</sup>, Bogdan Halațiu<sup>3</sup>, Ioan-Alexandru Balmos<sup>4</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Klinikum Werra-Meißner, Cardiology

<sup>3</sup>Department of Physiology, UMFST Tîrgu Mureș

<sup>4</sup>Department of Anatomy, UMFST Tîrgu Mureș

**Background:** Renal dysfunction and systemic inflammation are central components of the pathophysiology of acute heart failure, but their combined prognostic impact in patients presenting with advanced symptoms remains incompletely characterized. In patients with NYHA III–IV heart failure transported by emergency medical services, early laboratory risk stratification using simple markers such as estimated glomerular filtration rate (eGFR) and C-reactive protein (CRP) may be particularly valuable. **Objectives:** The aim of the present study was to determine whether impaired renal function and elevated inflammatory markers at admission are independently associated with adverse in-hospital outcomes in patients with acute severe heart failure. **Material and method:** This retrospective single-center cohort included consecutive adults admitted to a German regional hospital between January 1, 2024 and March 31, 2025 with a acute heart failure. Patients were eligible if they presented to the emergency department, and were admitted with a diagnosis of NYHA III or IV; 75 patients fulfilled these criteria. Demographic characteristics, comorbidities (including chronic kidney disease [CKD]), admission vital signs and ECG rhythm, echocardiographic parameters (including left ventricular ejection fraction [LVEF]), and laboratory variables were extracted from the electronic records. Renal function was assessed by eGFR and categorized as  $\geq 60$ , 30–59, and  $< 30$  mL/min/1.73 m<sup>2</sup>. Inflammatory markers comprised CRP, neutrophil, monocyte and lymphocyte counts, and platelets. Prespecified outcomes were in-hospital mortality, occurrence of pulmonary edema, any intermediate or intensive care unit (IMC/ICU) stay, and total length of hospitalization. Associations between eGFR/CRP and outcomes were evaluated using multivariable logistic and linear regression adjusted for age, LVEF, NT-proBNP, and CKD history. **Results:** The mean age of the patients was  $77 \pm 10$  years, 44% were female, and 41% had known CKD. Overall in-hospital mortality was 15%. Mortality increased across eGFR strata: 5% for eGFR  $\geq 60$ , 14% for eGFR 30–59, and 31% for eGFR  $< 30$  mL/min/1.73 m<sup>2</sup> ( $p$  for trend = 0.03). Patients with eGFR  $< 30$  had a longer median length of hospitalisation (11 days, IQR 8–15) compared with those with eGFR  $\geq 60$  (7 days, IQR 5–10;  $p = 0.01$ ). In adjusted models, eGFR  $< 30$  remained independently associated with in-hospital mortality (aOR 3.6; 95% CI 1.1–11.8;  $p = 0.04$ ) and longer hospitalization ( $\beta$  +3.1 days;  $p = 0.02$ ). Patients in the highest CRP tertile ( $>40$  mg/L) had higher rates of pulmonary edema (61% vs 29% in the lowest tertile;  $p = 0.01$ ) and IMC/ICU use (52% vs 24%;  $p = 0.02$ ). Elevated CRP was independently associated with pulmonary edema (aOR 2.5; 95% CI 1.0–6.1;  $p = 0.046$ ) after adjustment. Neutrophil count showed similar but weaker associations, whereas lymphocyte and platelet counts were not independently related to outcomes. **Conclusion:** In this cohort of patients with acute severe (NYHA III–IV) heart failure, impaired renal function and elevated inflammatory markers at admission were associated with higher in-hospital mortality, greater occurrence of pulmonary edema, and prolonged hospitalization. Stratification by simple, routinely available markers such as eGFR and CRP may enhance early prognostic assessment and help guide intensity of monitoring and treatment in advanced acute heart failure.

**Keywords:** renal dysfunction, c-reactive protein, in-hospital outcomes, acute heart failure

---

## A RETROSPECTIVE ANALYSIS ON CLINICOPATHOLOGICAL FEATURES AND PROGNOSTIC IMPLICATIONS IN GASTRIC CANCER

Elias Shohar<sup>1</sup>, Laura Baniás<sup>2</sup>, Simona Gurzu<sup>3</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Pathology, UMFST-UMCH Hamburg

<sup>3</sup>Department of Pathology, UMFST Tîrgu Mureș

**Background:** Gastric cancer (GC) remains one of the most prevalent causes for cancer-related mortality worldwide. Despite of a global decline in incidence, Eastern European countries report one of the highest regional burden, second only to Eastern Asia. Disease development and outcomes are significantly influenced by a range of clinicopathological features and tumor biology. **Objectives:** This study aims to investigate the distribution and

relationship between various clinicopathological parameters and their impact on overall survival (OS) in patients diagnosed with GC. **Material and method:** This retrospective study was conducted on patients diagnosed with GC between 2022-2023 in the Pathology Department, Emergency Clinical County Hospital, Târgu Mureș, Romania, using the archived histopathological reports. The included clinicopathological parameters were age, sex, pTNM staging, tumor localization, histological type, lymphovascular (LVI) and perineural (PNI) invasion, HER2 status, and microsatellite instability (MSI). Patients were divided into two groups based on their age (>65 and ≤65) and pT-stage (pT4 and non-pT4). While qualitative data significance was evaluated using Fisher's exact test and Chi-square test, their impact on survival was investigated with Kaplan-Meier analysis and log-rank test (GraphPad Prism software). **Results:** Within the cohort, 57 patients diagnosed with GC were included. There were 43 males and 14 females (M:F ratio = 3:1), with a mean age of  $64.72 \pm 11.81$  years. The proportion of tumors localized in the antropyloric region was significantly higher in patients aged >65 years ( $p= 0.0356$ ) than in patients aged ≤65, for which differences in tumor location were less marked. Patients with pT4-stage demonstrated significantly more aggressive tumor features, including higher prevalence of lymph node metastases ( $p= 0.0071$ ) and increased mortality ( $p= 0.0020$ ). MSI was demonstrated to have a reduced OS compared to MSS ( $p= 0.0426$ ). No significant associations were observed for sex, histologic type, LVI, PNI and HER2 status. **Conclusion:** Our results demonstrated that advanced pT-stage of GC was associated with increased likelihood of lymph node metastasis and higher mortality. In addition, the tumor location was found to be considerably influenced by the age group of the patients. Moreover, the microsatellite status showed significant association with OS outcomes. These present findings validate the routine assessment of various clinicopathological and molecular parameters, to optimize the understanding of disease progression and to improve prognostic accuracy in GC patients.

**Keywords:** clinicopathological features, gastric cancer, microsatellite instability, survival

## DISSEMINATED TUBERCULOSIS PRESENTING AS PROGRESSIVE BACK PAIN TO ACUTE PARAPLEGIA

Fernando Alexander Martinez De Paz<sup>1</sup>, Marouane Menchi<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Infectious Diseases, UMFST – Partner Hospital

**Background:** A widespread tuberculosis infection presents a challenge to medical services due to its nonspecific clinical signs and often slow onset, commonly delaying diagnosis until its complications bring the patient to the emergency department. Key in understanding this is the lymphohematogenous dissemination of Mycobacterium Tuberculosis to other organs, a form often called miliary tuberculosis, where it presents with a wide variety of symptoms depending on the location of the tuberculous foci and being usually lethal and as such, prompt recognition and treatment are crucial in these cases. Although not commonly associated with miliary tuberculosis in literature, cases of skeletal tuberculosis are another manifestation of extrapulmonary TB, and both are important in the context of this case as an emergency of Pott's disease in the form of spinal cord compression is what made brought the necessary imaging that identified the full clinical picture. **Case presentation:** C.M a patient with an immigration background who had been referring dorsolumbar pain for the last three months presents to the emergency department with paraplegia in the last 48 hours, with a complete loss of sensation, sphincter control and abolition of plantar reflexes. Additionally, it is important to note that on a physical examination the left lower lobe was hypoventilated. Suspected of an acute spinal cord compression, an urgent MRI was performed in which a mass compatible with an abscess of approximately 7,3x5 cm is seen at the levels of T4 to T12, with a pathological fracture on T8 and satellite lesions on C2-C3. After an urgent decompression PCR and histology confirmed a tuberculosis diagnosis and he was interned in the hospital, which after a lack of improvement in the following month and a febrile state further imagistic testing with CT and MRI demonstrated centrilobular opacities predominantly on the superior lobes of both lungs as well as the inferior lobe of the left lung and a microabscess on the occipital lobe respectively. **Case particularities:** As mentioned before, although both Pott's disease and miliary tuberculosis are complicated extrapulmonary manifestations of TB they are not commonly associated together in literature. So, in this case where there is a miliary pattern in the lungs with a suspected spread to the brain representing the more latent danger, we have to compare it to the still nonspecific but more acute form of the Pott's disease, which eventually progressed to the point of having a spinal cord compression. These two different processes of the overall TB infection, as well as the difficulty in communication from the immigration background are what make this case significant. **Conclusion:** From what we can see in this case we have to understand the many different forms that tuberculosis can take, and the fact that they can be present at the same time in a patient. Applying this understanding and knowing that TB is often insidious, we can see this case as an example of how

even in a nonspecific symptom like lower back pain there can be a chronic infection affecting the patient.

**Keywords:** Tuberculosis, Pott's disease, Spinal cord compression

---

## RAPID PROGRESSION OF A METACHRONOUS MICROSATELLITE-STABLE COLON ADENOCARCINOMA DESPITE REGULAR SURVEILLANCE: A CASE PRESENTATION

Franziska Nottbusch<sup>1</sup>, Gustav Peters<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Surgery , Teaching Hospital

**Background:** Colon cancer is one of the most common malignancies worldwide, with a 5-year survival rate of up to 91% in localized disease. This is largely due to advances in early detection and treatment, as well as the typically slow progression through the adenoma–carcinoma sequence. However, it remains a leading cause of cancer-related mortality, partly due to variants associated with more rapid tumour progression, such as hereditary syndromes as well as underlying genetic alterations. **Case presentation:** In 2025, a 74-year-old female presented to the emergency department with a 5-day history of fever and chills, accompanied by severe right lower quadrant abdominal pain for 2 days, radiating to the right flank. Her medical history was notable for colon cancer treated with surgery and adjuvant chemotherapy in September 2023. A strict surveillance protocol had been implemented, including abdominal ultrasound, CEA measurements, and chest X-ray every 6 months, as well as colonoscopies at regular intervals, from which the last one was performed about 6 months prior, all of which had shown no relevant abnormalities prior to presentation. On physical examination, the abdomen was soft without guarding or palpable masses, but moderate tenderness was present in the right lower quadrant. Ultrasound findings were unremarkable, and CT imaging revealed no evidence of metastatic disease, pathological lymphadenopathy, or local recurrence. Colonoscopy demonstrated edematous mucosa in the cecum and ileocecal valve; however, the terminal ileum could not be fully assessed due to luminal narrowing. The findings were initially interpreted as most consistent with infectious colitis, supported by low CEA levels, and the patient was discharged with antibiotic therapy, resulting in temporary clinical improvement. Following histopathological confirmation of a cecal adenocarcinoma, the patient was readmitted one week later for elective right hemicolectomy. The resected specimen revealed a moderately differentiated (G2) colon adenocarcinoma with pathological staging pT4b, pN2 (2/27), L1, V0, and R0 resection. Adjuvant chemotherapy was initiated. Immunohistochemical analysis showed intact expression of all mismatch repair (MMR) proteins (MLH1, PMS2, MSH2, MSH6), indicating a proficient MMR system (pMMR) and a microsatellite stable tumour (MSS). **Case particularities:** This case is notable due to the unusually rapid progression despite moderate histological differentiation. Surveillance had been rigorously implemented following the initial carcinoma, with no abnormalities detected prior to the development of the stenosing metachronic carcinoma. Although chromosomal instability was not directly assessed, the MSS and pMMR status suggest a sporadic tumorigenesis pathway, most consistent with chromosomal instability. Taken together, the aggressive clinical course is best understood as a reflection of the tumour's underlying biological behaviour, as evidenced by transmural invasion, lymphangiogenesis, and nodal involvement. **Conclusion:** This case highlights the limitations of current surveillance strategies in detecting rapidly evolving colon carcinomas, particularly those with predominant luminal growth. It underscores the importance of maintaining a high index of clinical suspicion in patients with a history of colorectal cancer. Furthermore, it demonstrates that even moderately differentiated tumour can exhibit aggressive behaviour that may not be reflected by tumour markers or initial imaging.

**Keywords:** Colon Adenocarcinoma, Microsatellite-Stable Tumor, Limitation in Surveillance Strategies

---

## CHRONIC DISPLACED FEMORAL NECK FRACTURE

Ali Nassar<sup>1</sup>, Michael Klein<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Orthopedics , UMFST-UMCH Hamburg

**Background:** Femoral neck fractures are typical fragility fractures, often occurring in older patients. They can happen in a much more hidden way, when complicated by chronic neurological diseases and long-term corticosteroids use. These patients show a pattern of gait difficulties, pain or functional disorders, which than can be misinterpreted as a disease course of such an underlying disorder. Subsequently this could have an impact on

the time of diagnosis and following management. **Case presentation:** A 64 year old female patient, previously diagnosed with primary progressive multiple sclerosis (MS), came to the neurology department for her regular intrathecal triamcinolone acetonide injection. In comparison to her usual appearance, she complaint about back and right groin pain and a progressively worsening gate. On physical examination, the patient was having a tendency to hold the leg in a flexed, protective position. The patient's medical history shows arterial hypertension, underweight, migraine, degenerative lumbar spine disease, neurogenic bladder dysfunction, cataract surgery of the left eye and a secondary osteoporosis already treated with denosumab, vitamin D and mineral supplementation. At her presentation, she was capable of walking short distances with her walker only and for daily activities she relied on her husband. The neurologic ward initially focused on a possible MS-deterioration or infection diagnosis and ordered Lumbar spine magnetic resonance imaging. This revealed a compression fracture at L5 with a thickened and edematous iliopsoas and iliacus muscle on the right side. Laboratory findings displayed increased inflammatory markers and thereby supported the idea of a spinal or infectious problem rather than an acute hip fracture. Another MRI of the hip and femur was ordered but not possible because of severe pain and positioning problems. On a later occasion, after reconciling with the orthopedic department, a Computer Tomography (CT) of the hip and the femur was performed that showed a highly neglected chronic right femoral neck fracture with a femoral head necrosis and a marked shortening of the relevant leg, as a reason for her pain. Considering the chronic course and lesion of the femoral head, osteosynthesis was no longer an option. A modular total hip arthroplasty without cement was indicated here. Postoperatively, it was uncomplicated and rehabilitation with early mobilization was initiated. **Case particularities:** This case is special because it represents a relatively young patient that not only has a long-standing MS, treated with long term intrathecal corticosteroid therapy and established secondary osteoporosis but also shows a chronically neglected, highly displaced femoral neck fracture without clear major trauma. Because of the combination it led to a diagnostic delay. **Conclusion:** This patient demonstrates the challenges of identifying fractures in patients with neurological disorders and underscores the importance of a concrete and interdisciplinary approach for this vulnerable group, as it includes reduction of delayed diagnosis, complex surgery and prolonged recovery.

**Keywords:** Femoral neck fracture, Multiple sclerosis, Chronic corticosteroid therapy, Total hip arthroplasty, Neurological comorbidities

## SINGLE-STAGE OPERATIVE MANAGEMENT OF A MULTISEGMENTAL HUMERUS FRACTURE WITH RADIAL NERVE PALSY: A CASE WITH A CLINICAL CRITICAL DILEMMA.

Milos Morarevic <sup>1</sup>, Flaviu Moldovan<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Orthopedics , UMFST-UMCH Hamburg

**Background:** Fracture of the proximal humerus are often treated conservatively, if there is no critical displacement. Treatment strategies become more complex when additional injuries compromise the functional integrity of the same limb. When multiple anatomical segments are affected, in addition neurological deficits, a clinical challenging scenario is created, with limited guidance in the current literature. In such cases, decision making should balance fracture healing, functional restoration and neurological recovery **Case presentation:** The patient presented with a proximal humerus fracture that was suitable for conservative treatment. After three months, the patient suffered an additional humerus shaft fracture on the same limb, associated with radial nerve palsy and a significant displacement of the proximal humerus. The patient presented The Patient demonstrated a function laesa of approximately 30 degrees in anteversion and abduction. Daily activities of eating or basic self-care were not possible to perform without assistance, because the affected limb had become functionally unusable. With this significant deterioration, the treatment strategy needed to be revised. A single-stage surgical approach was performed. The proximal humerus fracture was treated with a reverse shoulder arthroplasty, with the aim to restore the shoulder function. The humerus shaft was stabilized with double plate fixation technique, to ensure mechanical stability. To assess the nerve injury, an exploration of the radial nerve was performed. At the two months follow up, the patient presented with significant improved shoulder mobility. Assisted elevation up to 90 degrees of the affected arm was possible and the patient regained independence in activities of daily living. Neurologically, partial recovery of the radius nerve was observed. With improvement in finger extension and abduction but no improvement of the thumb extension. **Case particularities:** This case highlights a rare clinical dilemma. The initially uncomplicated conservatively treated proximal fracture, evolved into a complex multisegmented injury with profound functional impairment. The central issue was not the fracture alone, but the loss of upper limb function. The indications for surgery were therefore primary driven by functional considerations,

including the patient's ability to perform activities of daily living, the opportunity to evaluate the radial nerve and the need for prompt structural stability. This reflects the shift from a purely radiological decision-making process towards a patients-centered approach. **Conclusion:** A multisegmented humerus fracture can transform from a stable injury into a functional devastating condition. This case demonstrates that in the presence structural and neurological impairment. A single stage operative strategy can be justified to restore function and improve overall outcome.

**Keywords:** Proximal humerus fracture, Humeral shaft fracture, Radial nerve palsy, Multisegmental injury, Activity of daily living

## CLINICOPATHOLOGICAL CHARACTERISTICS AND THEIR PROGNOSTIC SIGNIFICANCE IN COLORECTAL CANCER: A RETROSPECTIVE STUDY

Carla Maria Spielhaupter<sup>1</sup>, Laura Baniias<sup>2</sup>, Simona Gurzu<sup>3</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Pathology, UMFST-UMCH Hamburg

<sup>3</sup>Department of Pathology, UMFST Tîrgu Mureş

**Background:** Colorectal cancer (CRC) further remains the second most leading cause for cancer-related mortality worldwide. Though representing the standard for diagnosis and risk assessment, Tumor-Node-Metastasis (TNM) classification alone cannot fully explain the heterogeneity of CRC. Several studies continue to investigate the potential role of other pathological and molecular features in providing improved prognostic information, such as tumor budding (TB), microsatellite instability (MSI) and KRAS/BRAF mutations. **Objectives:** The aim of this study was to evaluate the distribution of clinicopathological features in CRC patients and to analyze their association with tumor stage, budding and overall survival (OS). **Material and method:** This retrospective study included 198 patients diagnosed with colorectal adenocarcinoma between 2022 and 2023 in the Pathology Department of the Emergency Clinical County Hospital of Targu Mures, Romania. Patients who received preoperative oncological treatment were excluded. Clinicopathological variables investigated were age, gender, tumor location, pTNM stage, histological grade, lymphovascular and perineural invasion, MSI status, KRAS/BRAF status and TB. Presence of TB was assessed using H&E staining, and classified as low, intermediate and high grade. Statistical analysis was performed using GraphPad Prism 11.0 and OS was assessed using Kaplan-Meier curves. **Results:** The cohort comprised 198 cases, including 62.12% male and 37.88% female patients, with a mean age at diagnosis of 70 (range 29-97) years. The majority of tumors were left sided (63.64%) and predominantly (89.39%) diagnosed in advanced stages ( $\geq$  pT3), with lymph node metastasis in 47.48% of them and intermediate or high TB in 57.52% of the evaluated cases. Significant associations were observed between pT (pathologic T) stage and pN (pathologic N) stage ( $p < 0.0001$ ), tumor location ( $p = 0.0336$ ), and TB ( $p = 0.0064$ ). Moreover, TB revealed a significant association with pN stage ( $p = 0.0131$ ) and lymphatic invasion ( $p = 0.0005$ ), but no correlation with location, gender or vascular invasion was observed. Analysis of Kaplan-Meier curves revealed a significant correlation between poor survival and advanced pT stage ( $p = 0.0175$ ) and pN stage ( $p < 0.0001$ ). **Conclusion:** This study highlights the significant correlation between TB and aggressive clinicopathological features of CRC, reinforcing its role as a valuable prognostic marker, alongside well established, independent prognostic parameters such as pT and pN stage, and furthermore increasing awareness of tumor variability.

**Keywords:** colorectal cancer, clinicopathological features, survival, tumor budding

## A CASE REPORT OF ABO-INCOMPATIBILITY-RELATED HAEMOLYTIC DISEASE IN AN AFRICAN NEWBORN

Greta Fugazza<sup>1</sup>, Manuela Camelia Cucerea<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Neonatology, UMFST-UMCH Hamburg

**Background:** ABO-incompatibility related Haemolytic Disease of the Newborn (HDN) is a condition mostly occurring in blood group O mothers giving birth to blood group A or B newborns, in which the neonatal erythrocytes are targeted by maternal antibodies and destroyed. These mothers naturally present antibodies of IgM, IgA and IgG type against the A or B antigens located on the neonatal erythrocytes, whose destruction occurs due to maternal IgG antibodies being able to cross the placenta. This results in neonatal hyperbilirubinemia, which in

severe cases can lead to permanent consequences, as kernicterus. Despite being a common phenomenon occurring approximately in 1 out of 6 pregnancies, ABO incompatibility between mother and newborn usually does not cause significant haemolysis in the newborn, which makes it mostly go unnoticed as opposed to Rh incompatibility. Due to variable antigenic distribution and haemolytic potency of antibodies among diverse populations, incidence and severity may vary among different ethnicities, with HDN being more prevalent and severe in newborns of African origin. **Case presentation:** A 29-year-old healthy G2P1, blood group O+ African woman gave birth to a large for gestational age (LGA) newborn with birth weight of 4250g via vaginal delivery after induction of labour at 40+5 weeks of gestation. APGAR was 7-10-10. The neonate was transferred to the ordinary postnatal care unit, where at 40 hours of life, icteric sclerae were noted. Bilirubin measurements via blood gas analysis showed a bilirubinaemia of 33,2 mg/dL, which required transfer to NICU and initiation of intensive phototherapy. Complete blood count and peripheral blood smear showed marked haemolysis. Neonatal blood group determination revealed a blood group B+ newborn. Direct antibody test of the neonate demonstrated the presence of maternal antibodies bound to its red blood cells. Due to the evidence of maternofetal blood group incompatibility, the anti-B isoagglutinin titre was examined in maternal serum, resulting to be highly elevated at 2048. Due to lack of significant improvement following phototherapy alone, double volume exchange transfusion with packed O+ red blood cells was necessary. Following exchange transfusion, bilirubin levels started to decrease, and phototherapy was down tapered slowly to avoid a rebound effect. On the 3 months follow-up appointment, no neurological sequelae were noted. **Case particularities:** Despite ABO-incompatibility-related haemolysis being usually less severe, in this case hazardous hyperbilirubinemia was faced. Moreover, there are limitations in evaluation of neonatal jaundice in black newborns and guidelines lack precise instructions for this category of patients. **Conclusion:** In newborns of African ethnicity, a mild disease, such as ABO-incompatibility can lead to severe icterus. As such, it is recommended that especially these patients born from blood group O mothers are monitored closer throughout their stay for a possible increase in bilirubin levels.

**Keywords:** Neonatal Jaundice, Haemolytic disease of the newborn, ABO incompatibility

## GENERALIZED MYASTHENIA GRAVIS WITH THYMOMA COMPLICATED BY DISSEMINATED TUBERCULOSIS DURING IMMUNOSUPPRESSIVE THERAPY

Ana María Salas Gallego <sup>1</sup>, Smaranda Maier <sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Neurology, UMFST-UMCH Hamburg

**Background:** Myasthenia Gravis (MG) represents an antibody mediated disorder of the neuromuscular junction, characterised primarily by fluctuating skeletal muscle weakness. It can be classified non-generalised, which is limited to ocular manifestations and generalised, frequently involving bulbar and respiratory musculature. The involvement of these particularly sensitive groups can lead to a myasthenic crisis, where severe muscle weakness leads to respiratory failure. This life-threatening complication requires prompt recognition and treatment frequently involving intubation and immunotherapy. A significant portion of MG cases are associated with thymic abnormalities. If discovered, these significantly influence management strategies. **Case presentation:** A 51 year old male with no relevant neurological history had an initial presentation of progressive muscle weakness in August 2013. A neurological exam would reveal bilateral eyelid ptosis, dysphagia, dysphonia, reduced deep tendon reflexes and marked neck flexor weakness. This would be followed by repeated episodes of dyspnea suggesting significant bulbar and respiratory muscle involvement. Limb strength was largely preserved and a further sensory examination was unremarkable. Laboratory testing revealed markedly elevated anti-acetylcholine receptor antibodies (70.1 nmol/L) and a positive antinuclear antibody (ANA) profile. Repetitive nerve stimulation electromyography showed a pathological decremental response. Chest computed tomography identified an anterior mediastinal mass compatible with thymoma. Based on clinical presentation and complementary investigations, generalised MG presenting as a myasthenic crisis associated with thymoma was diagnosed. The patient was admitted and treated with 5 days of IVIG, pyridostigmine and pulses of methylprednisolone, resulting in significant clinical improvement and stabilisation. A total thymectomy would then be performed in October 2013, and histopathological analysis confirmed a type B1 thymoma. **Case particularities:** This case reveals a rapidly progressive and very strong initial presentation of Myasthenia Gravis. Positive ANA is not frequently encountered in MG patients and suggests a coexisting autoimmunity associated with thymic pathology. During treatment follow up, the patient developed pulmonary and intestinal tuberculosis as a consequence of immunosuppressive therapy. Gastrointestinal progression would lead to an intestinal perforation requiring surgical intervention and ileostomy. Infectious complications represented a significant challenge in management, requiring dose adjustment and anti-

tuberculosis therapy. Following treatment, the patient demonstrated a progressive recovery with substantial decrease in Anti-acetylcholine receptor antibody titers. The immunosuppressive therapy was further tapered down and ultimately discontinued. The patient remains asymptomatic since 2020 without any therapy, and has regained good functional capacity. **Conclusion:** This case highlights the clinical complexity of thymoma-associated MG, and the need for continuous screening and adaptive management during immunotherapy. Multidisciplinary management and early diagnosis allow for favourable neurological outcomes and fewer complications. Tuberculosis testing may be advisable for endemic regions, as well as patients with relevant travel history.

**Keywords:** Myasthenic Crisis, Immunotherapy, Myasthenia Gravis, Tuberculosis

## IMPACT OF AGING AND GENDER ON LEFT ATRIAL REMODELLING IN HEART FAILURE WITH PRESERVED EJECTION FRACTION

Jonas Einsiedler<sup>1</sup>, Ioan Tilea<sup>2</sup>, Diana Moldovan<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Internal Medicine III and Family Medicine, UMFST Tîrgu Mureş

**Background:** Left atrial volume index (LAVi) is a well-established parameter for the assessment of diastolic function and plays a central role in the diagnosis of heart failure with preserved ejection fraction (HFpEF). However, potential age- and gender-related differences in its clinical interpretation remain insufficiently defined, and no specific cut-off values have been established for different subgroups. **Objectives:** This study aimed to evaluate the impact of age on LAVi values in patients with HFpEF and to explore potential gender-related differences. **Material and method:** This retrospective study included 125 patients diagnosed with HFpEF, admitted to the Internal Medicine II Clinic – Emergency County Clinical Hospital of Tîrgu Mureş between 2022 and 2025. Echocardiographic and clinical data were analysed. Patients were stratified into three age groups: < 65 years, 65–80 years, and >80 years. LAVi values were compared across age groups and between genders. The Kruskal–Wallis test was used to compare LAVi across age groups. Associations between LAVi, age, and gender were further analysed using ANOVA, followed by Tukey's and Games–Howell post hoc tests. Statistical significance was set at  $p < 0.05$ . **Results:** The mean age of the cohort was  $72 \pm 8$  years, with 54.4% female patients. Functional class distribution was as follows: NYHA I: 5.6%, NYHA II: 60.8%, NYHA III: 31.2%, and NYHA IV: 0.8%. No statistically significant differences in LAVi were observed across age groups ( $p = 0.40$ ), nor between individual group comparisons ( $p = 0.367–0.973$ ). However, a weak but statistically significant trend of increasing LAVi with age was observed when analysing mean values ( $p = 0.048$ ). **Conclusion:** Left atrial volume index (LAVi) appears to be a robust and largely gender-independent parameter in the echocardiographic assessment of diastolic function, showing only a slight increase with advancing age. These findings support the use of uniform LAVi thresholds in routine clinical practice, thereby simplifying diagnostic algorithms for HFpEF. At the same time, subtle age-related variations should be acknowledged, and LAVi values interpreted within the broader clinical and echocardiographic context.

**Keywords:** heart failure with preserved ejection fraction, left atrial volume index, age, gender, diastolic dysfunction

## INTEGRATING PERIPHERAL ARTERY DISEASE SCREENING INTO FAMILY MEDICINE PRACTICE: INSIGHTS INTO CARDIOVASCULAR COMORBIDITIES

Oscar Coello Novoa<sup>1</sup>, Dr. Prof Paula-Anca Şulea<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Family medicine, UMFST Tîrgu Mureş

**Background:** Peripheral Artery Disease (PAD) is a chronic progressive atherosclerotic disorder that affects mostly the lower limb arteries. It is associated with increased cardiovascular risk. PAD remains underdiagnosed, especially in primary care, because of the nonspecific symptoms or asymptomatic patients. Ankle-brachial index (ABI) is a simple, non-invasive procedure to detect PAD. The early identification of PAD in family medicine can improve cardiovascular risk stratification and preventive management, as PAD is also a marker for atherosclerotic cardiovascular disease. **Objectives:** The aim of this study was to identify the need for implementing peripheral arterial disease screening in primary care settings, with an important insight in the arterial stiffness parameters, statin use, and associated comorbidities. **Material and method:** An observational study was conducted in a family

medicine clinic in Târgu Mureș, including a cohort of 30 patients evaluated during routine check-ups. The ankle–brachial index (ABI) was measured using the MESI mTablet automated oscillometric device for screening of peripheral arterial disease (PAD). ABI values  $\leq 0.90$  were considered indicative of PAD. In addition to ABI, demographic and clinical variables were collected, including age, sex, systolic and diastolic blood pressure, heart rate, and pulse wave velocity (PWV), both carotid–femoral and brachial–ankle (cfPWV, baPWV). Arterial age, statin therapy, and other cardiovascular comorbidities were also recorded. Due to the limited sample size, statistical analysis was restricted to descriptive methods, including means, standard deviations, and percentages. **Results:** The mean age of the study population was 67 years (median 61.5–71.75), and 53.33% were women. The mean systolic blood pressure was 140.5 mmHg (median 126.25–151.5) and the heart rate was  $71.1 \pm 16.6$  beats per minute. Mean cfPWV was 9.65 (median 55–73), reflecting that there is possibility of measurement of arterial stiffness in the pool of patients. Half of the patients (50.0%) were receiving already statin therapy. From the pool of patients, two of them were already known with PAD, and one of them had normal values of ABI, while two other patients presented with abnormal values with unknown PAD. This corresponds with a positivity rate of 10%. The detection of the extra patients with possible PAD suggests that the screening may aid to detect undetected patients. **Conclusion:** ABI screening appears potentially useful in family medicine practice, allowing earlier PAD detection and supporting a better assessment of cardiovascular risk in chronic patients.

**Keywords:** Peripheral artery disease, Ankle-brachial index, Family medicine, Cardiovascular risk

## EFFECTS OF GLUCOSE-LOWERING MEDICATIONS ON THE METABOLIC OUTCOMES AND DISEASE SEVERITY IN INDIVIDUALS WITH TYPE 2 DIABETES MELLITUS AND COMORBID METABOLIC DYSFUNCTION-ASSOCIATED STEATOTIC LIVER DISEASE

Davide Nettis<sup>1</sup>, Eszter-Anna Nagy-Dho<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Pharmacology, UMFST-UMCH Hamburg

**Background:** Metabolic Dysfunction-Associated Steatotic Liver Disease (MASLD) is a common metabolic condition causing excessive fat deposition in the liver. MASLD is closely associated with Type 2 Diabetes Mellitus (T2DM). Both conditions share underlying mechanisms, including insulin resistance, dyslipidemia and chronic inflammation. In the absence of an established treatment for MASLD, glucose-lowering medications may represent a promising therapeutic approach. Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) are incretin-based therapies used in T2DM that have shown beneficial effects on glycemic control and body weight. Emerging evidence suggests a potential role for GLP-1 RAs in MASLD-related parameters, including transaminase levels and lipid profile, although conclusive evidence in this regard by large-scale studies in a clinical setting is currently missing. **Case presentation:** This retrospective case series includes six adult patients with T2DM and comorbid MASLD treated with GLP-1 RAs as add-on therapy to metformin. The follow-up duration was 6 months. Among these patients, most of them presented with a modest reduction in body weight, whereas the metabolic parameters showed marked improvement. In more precise terms, reduction in glycated hemoglobin (HbA1c) and fasting plasma glucose were observed, together with some improvements in liver enzymes and lipid profile. These aspects might reflect that these glucose-lowering medications might lead to favorable metabolic effects and glycemic controls, despite modest body weight impacts. **Case particularities:** An important feature consists in metabolic and glycemic enhancements under the presence of these agents, despite the achievement of modest reduction in body weight. The use of these medications might be relatively consistent in a broader group of population and not limited to specific patient characteristics. These cases are reflecting observations in clinical practice, considering the extensive occurrence of these conditions. **Conclusion:** Overall, these observations support a potential beneficial role of GLP-1 RAs in the management of patients with T2DM and MASLD, particularly in improving metabolic and glycemic parameters. However, larger-scale and longer-term studies are required to confirm these findings and to better define the role of these agents in the treatment of MASLD, including their impact on disease progression and hepatic outcomes.

**Keywords:** GLP-1 receptor agonists, Metabolic dysfunction-associated steatotic liver d, Type 2 diabetes mellitus

## DIGITAL EVALUATION OF MINOR SALIVARY GLAND BIOPSIES IN PATIENTS WITH SUSPECTED SJÖGREN'S SYNDROME

Laura Openkowski<sup>1</sup>, Laura Banias<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Pathology, UMFST Tîrgu Mureş

**Background:** Sjögren's syndrome (SS) is an autoimmune disease characterized by lymphocytic infiltration and dysfunction of the exocrine glands. The minor salivary gland biopsy represents the gold standard for diagnosing focal lymphocytic sialadenitis and is particularly important in seronegative patients. The traditional microscopic method for identifying lymphocytic infiltrates is subject to interobserver variability. **Objectives:** This study aims to analyze clinicopathological parameters of patients with suspicion for SS and to evaluate the method agreement between the semi quantitative Chisholm and Mason (CM) grading and precise digital area analysis. **Material and method:** In this retrospective study, the histopathological reports of the minor salivary gland biopsies of 32 cases with suspected SS were evaluated. Clinicopathological parameters like age, gender, CM grades (0-4; 3 and 4 being compatible with SS), and focus score (FS) were taken into account (FS  $\geq 1$  per 4 mm<sup>2</sup> compatible with SS in the correct clinical context). Hybrid digital analysis of the cases was performed after scanning the H&E stained slides with the scanner PANNORAMIC 250 Flash III by 3DHISTECH. Using manual annotations and digital quantification of the total glandular area, the FS (a focus representing an accumulation of at least 50 lymphocytes) was calculated by using the standardized formula: FS=(number of foci/total salivary gland area in mm<sup>2</sup>)x4. **Results:** Among the included cases there were 25 females (84.38%) and 7 males, with ages between 7 and 75 years (mean age of 53.9  $\pm$  17.63), with a mean salivary gland area of 12.35  $\pm$  7.39. Overall, CM grades were correlated with the FS obtained after digital analysis (p=0.0002). Biopsies with CM grades 0-1 and 1-2 showed a FS < 1, and those with grade 3-4 a FS  $\geq 1$ . In borderline cases diagnosed as CM grade 2-3 (9.38%), the digital analysis allowed a more precise stratification (6.25% with FS < 1 and 3.13% with FS > 1). There was no statistically significant difference between FS and sex (p=1.0000) or age (p=0.3793). **Conclusion:** Most of the patients were females, and for the majority, the CM grading was correlated with the objectively obtained results. With digitally calculated salivary gland area and quantification of the FS, it is possible to minimize the variability and increase the diagnostic precision, an advantage over the conventional method relevant especially for borderline cases.

**Keywords:** Sjögren syndrome, Digital Pathology, Chisholm and Mason Grade, Focus Score

## THE IMPACT OF CHRONIC KIDNEY DISEASE ON LEFT VENTRICULAR HYPERTROPHY IN HEART FAILURE WITH PRESERVED EJECTION FRACTION

Annika Ulrike Pfeiffer<sup>1</sup>, Ioan Tilea<sup>2</sup>, Diana Andreea Moldovan<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Internal Medicine , UMFST Tîrgu Mureş

**Background:** Chronic kidney disease (CKD) is frequently associated with arterial hypertension due to mechanisms such as sodium and water retention and activation of the renin-angiotensin-aldosterone system (RAAS). These processes contribute to increased systemic blood pressure and may promote the development of left ventricular hypertrophy (LVH). **Objectives:** The aim of this paper is to evaluate the relationship between CKD and heart failure with preserved ejection fraction (HFpEF), and their combined impact on the left ventricular hypertrophy quantified by the left ventricular mass index (LVMI). **Material and method:** We conducted a retrospective analysis of 90 patients diagnosed with HFpEF according to the 2021 ESC Guidelines, admitted to the Internal Medicine II – Cardiology Department of the Emergency County Clinical Hospital of Târgu Mureş between 2022 and 2025. Patients were divided into two equal groups based on the presence or absence of CKD, defined according to KDIGO criteria. Correlation between echocardiography results and comorbidities was assessed through descriptive and statistical analysis. The LVMI was evaluated, using the Spearman's correlation, with considering the stage of CKD. The ordinal values were the stages of CKD 1-5, and the metric values were the LVMI in g/m<sup>2</sup>. The significance threshold for p was set to < 0.05. **Results:** The study population included 51 females (56.7%) and 39 males (43.3%). In the CKD group, females represented 60% (n = 27), while in the non-CKD group they accounted for 53% (n = 24). The patients of group 1 were slightly older, with a mean age of 75.75  $\pm$  8.65 years, while group 2 had a mean age of 69.3  $\pm$  9.21 years. To compare the central tendencies for the LVMI

between the two groups we applied the t-test, and the result did not reach the predefined statistical significance ( $p=0.055$ , CI 0.3-35), but a trend towards significance was observed. In sample group 1, the average LVMI for CKD stage 1 was  $129.40 \text{ g/m}^2$ , for CKD stage 2 it was  $126.22 \text{ g/m}^2$ , for CKD stage 3a it was  $110.53 \text{ g/m}^2$ , for CKD stage 3b it was  $106.82 \text{ g/m}^2$ , for CKD stage 4 it was  $120.22 \text{ g/m}^2$ , for CKD stage 5 it was  $212.10 \text{ g/m}^2$ . Spearman's correlation analysis demonstrated no significant association between CKD stage and LVMI ( $r = -0.073$ ,  $p = 0.634$ ). **Conclusion:** In this cohort of patients with HFpEF, CKD stage was not significantly associated with the degree of left ventricular hypertrophy as assessed by LVMI. Larger, multicentre studies are required to further explore this relationship and confirm these findings. From a clinical perspective, these findings suggest that factors other than CKD stage—such as blood pressure control, metabolic status, or myocardial remodelling pathways—may play a more prominent role in the development of LVH in HFpEF patients. Consequently, comprehensive cardiovascular risk management should remain a priority irrespective of CKD stage.

**Keywords:** chronic kidney disease, heart failure, heart failure with preserved ejection fraction, left ventricular mass index, left ventricular hypertrophy

## ISOLATED LYMPH NODE METASTASES OF AN OCCULT PANCREATIC NEUROENDOCRINE TUMOR IN A CONCOMITANT NON-INVASIVE INTRADUCTAL PAPILLARY MUCINOUS NEOPLASM: A CASE REPORT

Deniz-Danyel Togmat<sup>1</sup>, Dr. med. Frank Starp<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Surgery, UMFST – Partner Hospital

**Background:** Intraductal papillary mucinous neoplasms (IPMN) of the pancreas are one of the most common precancerous cystic lesions and are increasingly diagnosed as incidental findings. Besides their intrinsic malignancy, there is an increased risk for other simultaneous pancreatic neoplasia, among them are ductal adenocarcinoma and neuroendocrine tumors (NET). The simultaneous appearance of IPMN and pancreatic NET is rare and is in most cases described in the literature as an incidental finding in the pancreatic resection specimen. In comparison the manifestation of an occult pancreatic NET as an isolated lymph node metastasis in a concurrent non-invasive IPMN counts as an extraordinary diagnostic presentation. **Case presentation:** We report a case of an asymptomatic 75-year-old male patient, who presented after an incidental finding of a cystic pancreatic lesion in the computed tomography of the abdomen. The following contrast enhanced endosonographic ultrasound confirmed the 50-millimeter cystic lesion in the transition between corpus and caput pancreatis. The specimen from the endosonographic sampling of the lesion was non-diagnostic, but the marked increase of carcinoembryonic antigen concentration in the aspirate and a decreased glucose concentration of  $< 10 \text{ mg/dl}$  were compatible with a mucinous cystic lesion. Pylorus preserving pancreaticoduodenectomy (PPPD) was performed. Histopathological examination of the pancreatic specimen and the nine lymph nodes showed the confirmed IPMN of gastric type without invasion of surrounding tissue. Surprisingly, a metastasis of a well differentiated NET was detected in one of the nine resected lymph nodes specimen. The search for the primary tumor was successful after a gallium-68 DOTATATE positron emission tomography (68Ga-DOTATATE-PET/CT), which showed a nine-millimeter, somatostatin receptor (SSTR) positive lesion in the cauda pancreatis. After the recommendation for a completion pancreatectomy, the patient refused the operation and the alternative therapy with somatostatin analogues was initiated. **Case particularities:** A notable feature of this case is the combination of a non-invasive IPMN with evidence of an isolated lymphogenous metastasis of an occult pancreatic NET less than one centimeter in size. In contrast to most published cases of concomitant IPMN-NET-Associations the NET in this case was not an incidental diagnosis in the pathologic specimen of the pancreas but primary via a discrepant histopathological lymph node finding which was then diagnosed postoperatively. This case highlights that a non-invasive IPMN can not explain a nodal invasion and that in case of a discrepant histological finding another type of neoplasia must be discussed. **Conclusion:** This case illustrates the diagnostic complexity of concomitant pancreatic neoplasia and the high clinical relevance of the histopathological workup of resected lymph nodes. The 68Ga-DOTATATE-PET/CT plays a key role in identification of the primary tumor localization. In addition, one significant point is that even small, low proliferative and non-functional NETs have a metastatic risk. The treatment decision in case of NET G1 with lymph node metastases should be individualized with consideration of tumor biology, patients' preference and potential influence on the patients' quality of life.

**Keywords:** Intraductal papillary mucinous neoplasm, Pancreatic neuroendocrine tumor, Lymph node metastasis, Occult primary tumor

## PRIMARY EPSTEIN-BARR VIRUS INFECTION IN A YOUNG FEMALE UNDER AZATHIOPRINE TREATMENT RESULTING IN SECONDARY HEMOPHAGOCYTIC LYMPHOHISTIOCYTOSIS

Philip Braun<sup>1</sup>, Thomas Uhlig<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Anesthesiology and Intensive Care Medicine I, UMFST-UMCH Hamburg

**Background:** Immunosuppression in case of rheumatic diseases provides a viable option to increase quality of life in affected patients. Azathioprine (AZA) is frequently used for inflammatory bowel disease, with off label usage for other autoimmune conditions such as rheumatoid arthritis or autoimmune myositis. Side effects include cytopenia, specifically of the white cell lineages. Management of side effects especially in case of infectious or immunologic complications remains difficult for treating physicians. In rare instances autoinflammation together with infectious or malignant trigger mechanisms may result in a secondary hemophagocytic lymphohistiocytosis (HLH). This dangerous complication with a heterogenous clinical picture most similarly to that of sepsis, is a result of a dysfunctional immune response resulting in a "cytokine storm" with potentially lethal progression in patients.

**Case presentation:** This case report explores a 17-year-old female under azathioprine treatment, due to an autoimmune myositis with myalgias and limited mobility, suffering from a primary Epstein-Barr virus (EBV) infection, which resulted in a secondary hemophagocytic syndrome with near fatal evolution. Diagnosis was based on the Hscore and etiologic treatment with corticosteroids, etoposide, rituximab, and plasmapheresis was aimed to interrupt the vicious inflammatory cascade. Involvement of multiple medical specialties has led to the favorable clinical outcome for the patient and was the foundation on which the diagnosis was built **Case particularities:** While EBV represents the most common cause for secondary HLH the unique risk factor profile of this patient consisting of immunosuppressive treatment with AZA, an immunosuppressant with specificity for natural killer (NK) Cell sets allowed for the significant dissemination of the EBV-infection, ultimately resulting in a secondary HLH. As latency of EBV is common, reactivation and thus relapse of secondary HLH remains a possibility for this patient. In Patients with a high-risk profile for secondary HLH, a high index of suspicion should be maintained. Early involvement of multiple departments, namely intensive care, rheumatology, nephrology, and oncology and early initiation of diagnostics and treatment are life saving measures that favor positive clinical outcomes. Monitoring of serologic HLH-markers should be considered together with a possibility for allogenic stem cell transplantation (ASCT), especially in refractive cases. **Conclusion:** In Patients with a high-risk profile for secondary HLH, a high index of suspicion should be maintained. Early involvement of multiple departments, namely intensive care, rheumatology, nephrology, and oncology and early initiation of diagnostics and treatment are life saving measures that favor positive clinical outcomes. Monitoring of serologic HLH-markers should be considered together with a possibility for allogenic stem cell transplantation (ASCT), especially in refractive cases.

**Keywords:** Epstein-Barr Virus, Azathioprine, secondary hemophagocytic lymphohistiocytosis

## CASE REPORT OF PARACETAMOL OVERDOSE: CLINICAL COURSE, INTERVENTION, AND PHARMACOLOGICAL INSIGHTS

Jose Valles Fons<sup>1</sup>, David Schmidbauer<sup>1</sup>, Yasmin Schäffter<sup>1</sup>, Erica Ban<sup>2</sup>, Oriol Roca<sup>3</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Pharmacology, UMFST-UMCH Hamburg

<sup>3</sup>Department of Intensive Care, Bellvitge University Hospital

**Background:** Pharmacological substances individually can present with side effects. Paracetamol is a potent CYP inducer and also a producer of hepatotoxic substances, NAPQI. NAPQI, under normal circumstances, is detoxified via its conjugation with glutathione. Cocaine, being a substance that lowers glutathione levels, has a negative effect on paracetamol overdose patients due to its inability to detoxify NAPQI. Each substance has individual hepatotoxic effects and can be synergistic when combined. **Case presentation:** This is the clinical presentation of a 51-year-old with a medical history of anxiety attacks and a casual cocaine user and smoker. The patient is admitted to the ICU with acute hepatic failure due to 40 grams of paracetamol ingestion and acute ischemic

hepatitis due to 2 grams of cocaine ingestion. Post ingestion, the patient becomes unconscious before calling emergency services. Upon arrival and admission to the ICU, the patient is oriented to person and space but not to time. The first plasma paracetamol concentration was measured 20 hours post-ingestion at 145mg/ml, when N-acetylcysteine perfusion began. High levels persist for 48 hours post-ingestion, so N-acetylcysteine perfusion is continued until PT normalizes. The patient also presented with an acute renal failure of suspected multifactorial origin due to the presence of rhabdomyolysis on arrival with a creatine kinase (CK) of 265 U/L, and in the coming days, massive total bilirubin peaking at 443. Anemia and moderate thrombocytopenia was present. Throughout the days the patient was in ICU the Kings College criteria for liver transplant was controlled of which no days the criteria was met for transplant. **Case particularities:** A particularly rare case of a double massive ingestion of 40 grams of paracetamol and 2 grams of cocaine. An Open Evidence and PubMed Central search was done, where no case report or article was found of an overdose patient consuming both substances. Multiple organ failure, being present with acute ischemic hepatitis, acute hepatic failure, acute renal failure, rhabdomyolysis, and brain impairment with confabulations, all in an acute setting; is rare in itself, with the causation agents giving it singularity. This demonstrates the rarity and importance of discussing such a case, given the multisystemic effects of the enormous doses of both substances consumed. **Conclusion:** N-acetylcysteine can aid in reversing the toxicity levels of paracetamol in order to prevent further irreversible hepatotoxicity, especially in the setting of a cocaine induced ischemic hepatitis. Early intervention is preferable but can only be done in the setting of the patient being in contact with any kind of emergency service. Such massive intake doses have irreversible effects with chronic multisystemic impairment and inability to normalize hepatic enzymes, products and parameters of functionality.

**Keywords:** Paracetamol Overdose, Cocaine intoxication, Acute ischemic hepatic failure, Acute renal failure

## PROTECTIVE ILEOSTOMY IN HIGH-RISK COLORECTAL RESECTION FOR DEEP INFILTRATING ENDOMETRIOSIS: A CASE REPORT

Reimy Matias Moya Guerra <sup>1</sup>, Mathis Wüster<sup>1</sup>, Gustav Peters <sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Surgery , UMFST – Partner Hospital

**Background:** Deep infiltrating endometriosis (DIE) represents a severe form of endometriosis and may involve the gastrointestinal tract, leading to complex clinical presentations and challenging management decisions. Endometriosis is frequently associated with a significant diagnostic delay, often ranging between 5 and 10 years, contributing to prolonged patient suffering and increased healthcare burden. Treatment adherence may be influenced by comorbid conditions, including psychological factors. **Case presentation:** We report the case of a 40-year-old nulligravid woman presenting with severe dysmenorrhea, dyschezia, dyspareunia, and atypical cyclic right-sided shoulder pain. Clinical examination and transvaginal ultrasound were highly suggestive of advanced deep infiltrating endometriosis with rectovaginal and bowel involvement. Refusal of the patient to contraceptives due to background depressive episodes and advanced stage of the disease required surgical approach with extensive resection. The patient underwent laparoscopic resection of endometriotic lesions, including segmental rectal resection and partial vaginal resection, followed by primary anastomosis. To ensure appropriate healing and avoid the risk of rectovaginal fistula, a temporary protective ileostomy was placed. The postoperative course was overall favorable, ileostomy reversal took place successfully after 6 weeks without any recorded long-term sequelae. At follow-up, the patient reported complete resolution of symptoms, with no evidence of disease recurrence. **Case particularities:** This case is of particular interest due to the combination of advanced deep infiltrating endometriosis with significant bowel involvement and an atypical clinical presentation, including cyclic shoulder pain without confirmed diaphragmatic lesions. Although conservative hormonal therapy is considered first-line in many cases of endometriosis, it may not be suitable for all patients. In this case, combined hormonal therapy was discontinued due to worsening depressive symptoms, highlighting the impact of comorbid psychological conditions on treatment adherence and potentially contributing to ongoing disease activity. As a result, surgical management became the preferred therapeutic option. In addition, it highlights the complexity of surgical management in extensive disease and supports the role of protective ileostomy as a preventive strategy in high-risk colorectal resection. The favorable outcome observed, despite the occurrence of a manageable postoperative complication, supports the effectiveness of this approach in reducing severe complications such as rectovaginal fistula formation. **Conclusion:** This case highlights the complexity and variability of deep infiltrating endometriosis and emphasizes the importance of individualized surgical management. The use of a protective ileostomy may represent a burden both physically and psychologically for the patient but in high-risk colorectal

resections is an effective strategy to reduce severe postoperative complications and ensure safe anastomotic healing.

**Keywords:** Deep infiltrating endometriosis, Protective ileostomy, Rectovaginal fistula, Bowel resection, Atypical presentation

## UNCONTROLLED DIABETES TYPE 1 IN A CHILD: NAVIGATING CLINICAL CHALLENGES AND LESSONS FROM LITERATURE

Sapana Pritam Mattu Niamat<sup>1</sup>, Cristina Roxana Mares<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Pediatrics , UMFST Tîrgu Mureş

**Background:** Diabetes type 1 is a chronic autoimmune disease that is caused by the destruction of the beta pancreatic cells which leads to insufficient insulin production and resulting in hyperglycemia. The incidence of diabetes type 1 in children has been steadily increasing globally, especially within the age bracket of 5 to 8 years old or during puberty. Nowadays, DM1 is treatable by adhering to lifelong insulin therapy to avoid any complication associated with such risk of diabetic ketoacidosis, vascular complications or recurrent hospitalization.

**Case presentation:** We present a general overview of the medical history and clinical evolution through the years of V.Mihai a male patient born in 2011. The patient has been diagnosed with diabetes mellitus type 1 in December 2019 ever since then he has been coming for reevaluation and regular check ups. At the first reevaluation on the 2nd of August, since the definitive diagnosis the patient seemed to be in good health even if his BMI increased. During the June-August 2023 period, the child's conditions started to get worse with a 10% increase of HbA1C and despite giving him and the family the tools to continuously monitor the glycemia levels, it didn't help. Unfortunately over the course of the years the patient's glycemic control has been irregular and worsened due to the non-adherence to the therapy, no lifestyle changes and due to external factors such as the mother's passing, living environment and the insurgence of an anxious syndrome diagnosed in 2023. From May-August 2025 there has been an improvement on the patient's side by adhering to the diet but the glycemic control remained higher, with post prandial values between 250-350 mg/dL and TIR below 70%. The situation got worse in October 2025, where he was hospitalised in emergency department due to moderate diabetic ketoacidosis and electrolyte imbalances. The medical event was triggered by a post extraction dental abscess. He was admitted with vomiting, abdominal pain and somnolence. The blood glucose level 432 mg/dL and pH 7.132. He was treated with IV insulin and hydration.

**Case particularities:** The case highlight is that despite the patient's effort to improve their medical condition, the psychological factors and non-cooperative parent failed him. **Conclusion:** Even if the patient has tools to improve their medical condition, a child diagnosed with DM type 1 needs supportive parents to help figure out the best way to manage it and to live with it as its chronic disease.

**Keywords:** Type 1 Diabetes mellitus, Pediatric, Diabetic ketoacidosis, Social determinants of health, Glycemic control

## USING MINISCREWS TO IMPROVE ORTHODONTIC TREATMENT

Stefania-Ana Parlea<sup>1</sup>, Mahmoud Elsaafin<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Pediatric Dentistry and Orthodontics, UMFST Tîrgu Mureş

**Background:** Orthodontic mini-implants have significantly expanded treatment possibilities in complex malocclusions by providing reliable skeletal anchorage. Their placement in extra-alveolar regions improves stability and reduces complications compared to conventional techniques. Skeletal class II malocclusions with hyperdivergent patterns present major challenges due to aesthetic, functional and vertical control issues. While orthognathic surgery has traditionally been indicated, the combination of mini-screws and intermaxillary elastics offers a less invasive alternative. Although Class II elastics are widely used, their effects are predominantly dentoalveolar, highlighting the importance of skeletal anchorage for enhanced biomechanical control.

**Case presentation:** A 17-year-old male presented with a convex profile, Class I molar and Class II canine relationship, maxillary constriction, spacing and a hyperdivergent skeletal pattern. Cephalometric analysis revealed mild mandibular incisor proclination and increased vertical dimensions. Treatment involved fixed

appliances (MBT system, 0.022-inch slot) combined with two infrazygomatic mini-screws to reinforce anchorage. Sequential archwire progression, power chains and intermaxillary elastics were used to control space closure, correct Curve of Spee, and improve transverse discrepancies. Treatment was completed with establishment of proper occlusion and retention using removable retainers. **Case particularities:** Case particularity: This case is notable for the management of a complex combination of skeletal Class II pattern, vertical growth tendency, incisor proclination, and maxillary spacing. The use of mini-screws provided absolute anchorage, minimizing unwanted tooth movement and reducing dependence on patient compliance. Biomechanical control was enhanced, allowing effective anterior retraction and vertical management without exacerbating mandibular divergence. The adjunctive use of elastics was carefully controlled to limit their known vertical side effects, particularly in a hyperdivergent patient. **Conclusion:** Conclusion: Mini-screw orthodontic treatment represents an effective and minimally invasive approach for managing complex malocclusions. In this case, skeletal anchorage enabled precise force application, improved vertical control, and successful correction of sagittal and transversal discrepancies. The results support the use of mini-screws as a reliable alternative to conventional anchorage methods, particularly in patients where compliance or biomechanical limitations may compromise treatment outcomes.

**Keywords:** Miniscrews, Anchorage, Hyperdivergent

---

## COMPLETE ENDOSCOPIC RESOLUTION OF SUSPECTED DUODENAL BULB STENOSIS IN A HIGH-RISK GERIATRIC PATIENT: A CASE REPORT

Sadà Pritam Mattu Niamat<sup>1</sup>, Daniela Dobru<sup>2</sup>, Andrada Lavinia Caluser<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Gastroenterology, UMFST Tîrgu Mureş

**Background:** This case report is part of the clinical study conducted for the assessment of the diagnostic and evaluation of gastric ulcers within a selected patient cohort, for the author's graduation thesis. Peptic ulcer disease (PUD) is a common disorder of the upper gastro-intestinal tract. They are often found in the stomach or duodenum's mucosa, reaching the muscularis mucosae. Typically, the ulcers appear most commonly because of an *Helicobacter pylori* (*H.pylori*) colonization of the gastric lining, or the prolonged use of non-steroidal anti-inflammatory drugs (NSAIDs). The management of the lesion follows a standard protocol that includes a proton pump inhibitor (PPI) associated with other drugs depending on the etiology. Careful follow-up through endoscopic and histopathological evaluation is essential to confirm ulcer healing and to exclude malignancy or persistent complications. This clinical case focuses on the precise follow-up to evaluate the efficacy of the therapy and monitoring the lesion, especially in a geriatric patient presenting with multiple comorbidities. **Case presentation:** We present the case of an 83-year-old male with a history of recurrent upper gastrointestinal bleeding, manifested by episodes of melena in 2004, 2014, and September 2024. In February 2025, the patient presented with epigastric pain radiating to the back, pyrosis, and an unintentional weight loss of 10 kg. Esophagogastroduodenoscopy (EGD) revealed a bulbar ulcer classified as Forrest IIc, associated with atrophic antral gastritis and bulbar deformity suggestive of duodenal bulb stenosis. No *Helicobacter pylori* infection was detected. The patient's medical history was also significant for grade II hypertension, chronic hepatitis B, and vitamin B12 deficiency. Standard treatment with pantoprazole and dietary modifications was initiated. At follow-up endoscopic evaluation in April 2025, both the stomach and duodenum showed normal endoscopic appearance, confirming complete mucosal healing. The previously observed stenosis was no longer evident, supporting an inflammatory rather than structural etiology. **Case particularities:** The particularity of this case lies in the favorable therapeutic outcome despite the presence of several negative prognostic factors. Advanced age, previous hemorrhagic episodes, significant weight loss, and atrophic gastritis placed the patient at increased risk for delayed healing, treatment failure, and possible malignant pathology. However, follow-up endoscopy performed after eight weeks of therapy demonstrated complete mucosal healing. This case highlights that strict adherence to treatment can result in successful ulcer healing even in elderly patients with multiple comorbidities. **Conclusion:** This case demonstrates that targeted therapy guided by endoscopic findings can achieve complete mucosal healing in a high-risk geriatric patient. The favorable outcome emphasizes the importance of treatment adherence and patient compliance in the successful management of peptic ulcer disease.

**Keywords:** Peptic ulcer disease, Stenosis, Inflammatory

## COEXISTING PARKINSON'S DISEASE AND AMYOTROPHIC LATERAL SCLEROSIS WITH PROGRESSIVE BULBAR DYSFUNCTION

Sarah Rasuli<sup>1</sup>, Smaranda Maier<sup>2</sup>, Jan Hinnerk Stange<sup>3</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Neurology, UMFST Tîrgu Mureş

<sup>3</sup>Palliative Medicine, UMFST – Partner Hospital

**Background:** Parkinson's disease and amyotrophic lateral sclerosis are distinct neurodegenerative disorders that affect the extrapyramidal and motor neuron systems, respectively. Although their coexistence is rare, it is clinically relevant because overlapping features may complicate the diagnosis and management. In particular, bulbar dysfunction can stem from a combination of underlying pathological mechanisms. **Case presentation:** Reported is the case of a 56-year-old female patient with a history of Parkinson's disease diagnosed in 2017. Initial presentation included tremor, bradykinesia, rigidity, and hypomimia with a positive response to dopaminergic therapy at first. Gradually, she developed progressive bulbar symptoms, including hypophonia and dysphagia. In 2024, after the initial onset of left arm paresis leading to tetraparesis, as well as progressive muscle atrophy, amyotrophic lateral sclerosis was diagnosed based on electrophysiological findings that were consistent with widespread motor neuron involvement. The patient experienced rapid functional decline, progressing from prior assisted mobility to a permanent bed-bound state. Moreover, the clinical course was further complicated by several hospitalizations, including influenza-associated exacerbations, as well as a central and peripheral pulmonary embolism, which was likely related to prolonged immobility. Neurological examinations have repeatedly shown combined features of extrapyramidal, as well as upper and lower motor neuron signs, including spastic tetraparesis, symmetrical hyperreflexia, fasciculations, and muscle atrophy. Dysphagia had remained one of the most prominent symptoms and showed a fluctuating, but overall progressive course. Fiberoptic endoscopic evaluation of swallowing revealed only mild impairment with no evidence of aspiration. The patient required repeated admissions to palliative care due to disease progression and increased care demands. **Case particularities:** The coexistence of Parkinson's disease and amyotrophic lateral sclerosis is a rare overlap leading to a complex combination of motor and bulbar dysfunction. It can be presumed that the patient's dysphagia in this case is likely multifactorial, which indicates both extrapyramidal and motor neuron pathology. Furthermore, the case highlights the challenges of advanced neurodegenerative disease management, including the careful balance of symptomatic treatment, possible psychiatric complications, and palliative care needs. **Conclusion:** The overlap of neurodegenerative disorders can significantly complicate clinical evaluation and case management. Additionally, clinical courses such as dysphagia, exacerbations, and even psychological and social burden have been underestimated and may complicate disease evolution. Long-term and interdisciplinary care is essential to guide and improve patient care and management in advanced disease.

**Keywords:** Parkinson's Disease, Amyotrophic Lateral Sclerosis, Bulbar Dysfunction, Dysphagia, Palliative Care

## COMPLICATIONS OF LOCAL ANESTHETICS: A CASE PRESENTATION

Ahmad Abdullatif Hassan<sup>1</sup>, Ali Abdulraoof Abdulla A A Alshayeb<sup>1</sup>, Muhamad Abdullatif Hassan<sup>1</sup>, Alina Iacob<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Oral and Maxillofacial Surgery, UMFST Tîrgu Mureş

**Background:** There are many different complications that can occur because of local anaesthetics in the clinic. Blanching is an example where the accidental intra arterial injection or high-pressure application of local aesthetics can lead to vasospasm and ischemia, this presents as whitening of the facial skin generally in the areas of the cheek or mucosa. This is because of the presence of vasoconstrictors within local anaesthetics for example epinephrine; levonordefin and felypressin. Despite their benefits of increasing the duration of aesthetic and reducing systemic toxicity, incorrect application can cause the undesirable effect of blanching. In addition, palatal necrosis which requires conservative long-term care can be caused by severe tissue ischemia also due to vasoconstrictor presence and high pressure injection of the local anaesthetic at the level of the hard palate. This area is susceptible to the necrosis as blood supply is already limited to the palate therefore excessive vasoconstriction can lead to lack of oxygen supply to the soft tissue resulting in its death. Palatal necrosis presents as a painful, deep and self-limiting ulcer. **Case presentation:** A 26-year-old male patient needed an extraction of

erupted 2.8. Infiltration anaesthesia on the buccal side at the level of the upper molars was given in addition to the palatal side. A few seconds after the application of the local aesthetic a sudden blanching of the skin occurred in the left half of the face at the level of the cheek. The blanching lasted 5- 10 minutes, and patient presented symptoms of coldness within that area. A 37 years old female patient came for consultation in dental office complaining a mucosal defect developed after local anesthesia on the hard palate. The history of the patient revealed chronic abuse, related to addiction, of illicit substances (cocaine) that has a prolonged vasoconstriction effect. In this case local anesthetic solution can have an undesirable effects - prolonged ischemia that will lead to necrosis of the mucosa. **Case particularities:** These complications relating to local aesthetics are both rare one case being blanching and the other necrosis of the palatal mucosa as a result of constant use of narcotic drug. The extraoral facial blanching having an immediate response after administration of the anesthetic. Patient also felt coldness which directly links to the lack of blood supply to the cheek area due to the vasoconstriction of the vessels within the face. Due to the substance abuse of the second patient with cocaine, patient already presents with prolonged vasoconstriction making them high risk to tissue necrosis. Therefore, application of local anaesthetic can exacerbate the vasoconstriction of the palate leading to rapid soft tissue death. **Conclusion:** Despite the rarity of both cases early recognition of risks and the vascular complications as a result of local anaesthetics is crucial within the clinic. This is because it allows early intervention and treatment of the complications and provides the dentist with the knowledge on how to approach each situation based on the patient history.

**Keywords:** Blanching, Vasoconstriction, Local anesthetics, Ischemia, Palatal necrosis

## MYOCARDITIS AND AUTOIMMUNITY

Salmo Osman Noor<sup>1</sup>, Claudia-Floriana Suci<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Internal Medicine III and Family Medicine, UMFST Tîrgu Mureş

**Background:** Dermatomyositis is an idiopathic inflammatory myopathy (IIM) characterized by, musculoskeletal, skin and systemic involvement. Inflammatory myocarditis may occur in dermatomyositis, ranging from subclinical limited forms in most cases to chronic disease or dilated cardiomyopathy in rare situations. **Case presentation:** In 2018, A 71 year female with worsening of dyspnoea for a period longer than six months, persistent inflammatory syndrome for over 5 years, xerophthalmia, xerostomia, erythema of the V-neck and the upper chest, inflammatory arthralgia of the hands and ankles, bilateral hip pain, presents for a rheumatology ambulatory evaluation. Laboratory evaluation revealed presence of Anti-MI-2B, borderline for anti-Ku, PM -Scl100, increased ESR and ANA on multiple evaluation, positive PL-7 and T h/To on one evaluation, supporting an autoimmune disease diagnosis. A pulmonary CT scan showed interstitial lung disease with non-specific interstitial pneumonia (NSIP) pattern, joint ultrasound showed small joint synovitis, electromyography and electroneurography was negative for myopathy. Cardiac magnetic resonance (CMR) showed a nonischemic cardiomyopathy (CMP), linear mid-wall septal late gadolinium enhancement and left ventricular ejection fraction of 26%. Considering the patient had no family history of inflammatory myopericardial syndrome, inherited cardiomyopathy, or recurrent pericarditis unresponsive to treatment, a diagnosis of cardiomyopathy due to myocarditis in the setting of systemic autoimmune disease was considered. The shortcomings secondary to late classic CMR evaluation may lead to undetected processes of lower intensity. However, because associated clinical, serological, and imaging findings supported the diagnosis of IIM, Interstitial lung disease with a NSIP pattern, the cardiac involvement was appreciated as a consequence of a systemic inflammatory disease. **Case particularities:** A key feature in this case is the diagnosis of cardiomyopathy secondary to myocarditis, most likely due to an autoimmune inflammatory disease. Coexistence of anti-PL- and Anti-MI-2 $\beta$ , can suggest an overlap syndrome of anti synthetase syndrome and dermatomyositis, however the persistence of anti PL-7 antibodies was not present. **Conclusion:** This case illustrates a rare cardiac complication of an IIM. Early recognition of IIM is essential for detection of important organ involvement. Furthermore, the 2025 ESC Guidelines for the management of myocarditis and pericarditis provide new information regarding a better understanding of specific types of myocarditis including inflammatory cardiomyopathy and inflammatory myopericardial syndrome in systemic disorders including IIM. These aspects are important regarding cardiac evaluations particularly CMR, and treatment options

**Keywords:** Myocarditis, Autoimmunity, Dermatomyositis

---

## DISSEMINATED CUTANEOUS AND INTRAMUSCULAR ASPERGILLOSIS DUE TO ASPERGILLUS LENTULUS WITH PROGRESSION TO SEPSIS IN AN IMMUNOCOMPROMISED PATIENT

Eva Oberhofer<sup>1</sup>, Nina Ioana Bodnar<sup>2</sup>, Christine Kirchlechner<sup>3</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Infectious Diseases, UMFST-UMCH Hamburg

<sup>3</sup>Geriatrics, UMFST – Partner Hospital

**Background:** Invasive Aspergillosis is a life-threatening fungal infection caused by *Aspergillus* species, predominantly affecting immunocompromised patients and associated with high mortality. Cryptic species, such as *Aspergillus lentulus*, are clinically relevant due to their reduced susceptibility to azole antifungals. Extrapulmonary manifestations are uncommon, and involvement of soft tissue is rarely described. Cutaneous lesions may represent early signs of infection but are frequently misinterpreted, leading to delayed diagnosis and treatment.

**Case presentation:** An 87-year-old immunocompromised man presented with a 10-day history of progressive right thigh pain, functional impairment, and low-grade fever. His medical history included autoimmune hemolytic anemia treated with chronic corticosteroids and recent rituximab therapy, contributing to significant immunosuppression. Four weeks before admission, a livid, indurated skin lesion appeared on the left thigh and was biopsied later under suspicion of angiosarcoma. On admission, the patient was febrile (38°), tachycardic, and mildly hypotensive. Examination revealed a tender, swollen right thigh without overlying skin changes. An ulcerated violaceous lesion was present on the dorsum of the left hand. Laboratory findings showed leukocytosis, anemia, thrombocytopenia, and elevated inflammatory markers. Initial management targeted a bacterial infection, supported by positive urine cultures, but clinical deterioration persisted despite intravenous amoxicillin/clavulanic acid therapy. Imaging revealed extensive multiloculated intramuscular abscess formation in the right quadriceps muscle. Given the lack of response to antibiotics and progressive disease, invasive fungal infection was suspected, and empirical antifungal therapy with anidulafungin was initiated. Microbiological analysis of skin lesions and muscle biopsy subsequently identified *Aspergillus lentulus*. Serum fungal markers ( $\beta$ -D-glucan and galactomannan) were markedly elevated, supporting the diagnosis of invasive aspergillosis. Antifungal therapy was escalated with the addition of isavuconazole. Despite therapy, the patient's condition continued to deteriorate, with increasing oxygen requirements, hypotension, renal failure, and new cutaneous lesions, consistent with disseminated infection and sepsis. Due to frailty and overall clinical decline, surgical source control was not feasible. After shared decision-making, treatment was transitioned to palliative care, and the patient died shortly after. **Case particularities:** This case is notable for an atypical presentation of invasive aspergillosis with early cutaneous lesions and deep intramuscular involvement of the thigh preceding systemic disease, in the absence of pulmonary involvement. The infection demonstrated an unusual pattern of dissemination with both ulcerative skin lesions and extensive intramuscular abscess formation. The rare cryptic species *Aspergillus lentulus*, known for reduced antifungal susceptibility, caused a rapidly progressive infection in a severely immunocompromised host, ultimately leading to sepsis despite antifungal therapy. **Conclusion:** Invasive aspergillosis due to *Aspergillus lentulus* should be considered in immunocompromised patients with atypical skin lesions and deep soft tissue infection with elevated inflammatory markers unresponsive to antibiotics. Tissue sampling in combination with serum fungal biomarkers and imaging is essential for diagnosis and therapeutic decision-making. Despite appropriate therapy, the prognosis remains poor in disseminated disease.

**Keywords:** cutaneous aspergillosis, *Aspergillus lentulus*, invasive fungal infection, sepsis

---

## RIGHT-SIDED PAPPILARY FIBROELASTOMA OF THE TRICUSPID VALVE WITH CONCOMITANT PFO - A CASE REPORT

Paula Bredeck<sup>1</sup>, Christina Karamarkou<sup>2</sup>, Oliver Bruder<sup>3</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>UMCH Teaching Hospital - Elisabeth Hospital Essen

<sup>3</sup>Cardiology, Ruhr-Universität Bochum

**Background:** Primary cardiac tumours are a rare entity, with papillary fibroelastomas representing the most common benign neoplasm. They predominantly affect the left-sided valves, the aortic valve being the most

frequently involved site. Involvement of the tricuspid valve remains uncommon. Although they are histologically benign, PFEs represent a clinically important entity, due to their embolic potential, being able to result in stroke, myocardial infarction, or pulmonary embolism. Currently, there are no clear guidelines on the management strategies, especially for asymptomatic right-sided lesions. Multimodal imaging plays a crucial role in the diagnostic pathway and therapeutic decision-making of these lesions. **Case presentation:** A 62-year-old female patient was referred for further evaluation of an unclear detected right atrial lesion during echocardiography. Her medical history included two prior cryptogenic strokes and her identified cardiac risk factors were arterial hypertension, hypercholesterolemia and mild mitral valve insufficiency. Cardiac magnetic resonance imaging revealed a 12 x 7,5mm mobile accessory structure on the atrial side of the septal leaflet of the tricuspid valve. Initially, no relevant valvular dysfunction or shunt defects could be identified. In view of the dimension of the mass, the patient was advised to undergo surgical resection, or alternatively, proceed with follow-up imaging in 6-12 months alongside with further evaluation of a PFO, given the patient's medical history and the embolic potential of the lesion. The patient underwent successful video-assisted resection of the lesion during which a concomitant PFO was detected and subsequently closed. The post-operative course was uneventful and the patient recovered without complications. Histopathological examination confirmed a papillary fibroelastoma. **Case particularities:** This case represents a rare localization of a PFE of the tricuspid valve in combination with a previously undiagnosed patent foramen ovale, demonstrating a potential mechanism for paradoxical embolism and recurrent cryptogenic strokes. This underlines the clinical relevance of right-sided papillary fibroelastomas, particularly in the presence of an intracardiac shunt. Furthermore, it highlights the importance of multimodal imaging techniques in the identification and differentiation of intracardiac masses and guiding management decisions. **Conclusion:** Even though tricuspid PFEs are rare tumours, they should be considered in the differential diagnosis of intracardiac masses, especially in patients with history of unexplained embolic events or cryptogenic strokes. This case underlines the clinically relevant association between right-sided cardiac masses and paradoxical embolisms in the presence of a concomitant patent foramen ovale. Additionally, it highlights the importance of a comprehensive multimodal imaging approach for accurate identification and differentiation of the lesion, as well as risk stratification and therapeutic decision-making. Early recognition and a risk-adapted approach are essential, surgical excision representing a definitive treatment option in selected cases with mobile lesions and additional embolic risk factors.

**Keywords:** Tricuspid valve, Papillary fibroelastoma, Patent foramen ovale, Cardiac MRI

## A COMPARATIVE PILOT STUDY OF THE CLASSIC LARYNGEAL MASK AIRWAY AND THE I-GEL DEVICE IN ELECTIVE SURGICAL ANESTHESIA

Aliz Kind<sup>1</sup>, Emőke Almásy<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Anesthesiology and Intensive Care Medicine I, UMFST Tîrgu Mureş

**Background:** In order to minimize airway trauma, supraglottic airway devices (SAD) are widely used in modern anesthesia practice, especially for procedures that do not require muscle relaxants. While the classic LMA is a long-standing standard, the newer i-gel features a non-inflatable, gel-like cuff. **Objectives:** Our study compared the clinical performance of the classic LMA and the i-gel device, with primary focus on fiberoptic positioning. Secondary outcomes included insertion success, ventilatory parameters, hemodynamic changes and complication rates. **Material and method:** This prospective observational pilot study was conducted at the Emergency Clinical County Hospital of Târgu Mureş. Nineteen patients undergoing elective surgery under general anesthesia were included and divided into two groups: LMA (n = 9) and i-gel (n = 10). Patients with contraindications to SAD use were excluded. Primary assessment involved fiberoptic evaluation using the Brimacombe score. Insertion time, first attempt success, ventilatory parameters [end-tidal CO<sub>2</sub> (EtCO<sub>2</sub>), peak inspiratory pressure (PIP)] were recorded. Hemodynamic parameters [heart rate (HR), systolic blood pressure (SBP)] were measured according to standard intraoperative monitoring intervals. Complications were recorded and analyzed as a composite variable. Data were analyzed using Mann-Whitney U, Fisher's exact, and Spearman's tests (p < 0.05). **Results:** Baseline characteristics were comparable between the groups (mean age: 60.0 years in the LMA group vs 51.4 years in the i-gel group). The i-gel group demonstrated significantly better fiberoptic positioning compared to the LMA group (median Brimacombe score 4 vs. 2; p = 0.0022). While not statistically significant, the i-gel showed a trend toward faster insertion (median 6 vs. 10 seconds; p = 0.2804) and higher first-attempt success (100% vs. 77.8%; p = 0.2105), with multiple attempts occurring only in the LMA group. Ventilatory parameters (EtCO<sub>2</sub> p = 0.4088; PIP p = 0.0776) and hemodynamic changes ( $\Delta$ HR p = 0.9187;  $\Delta$ SBP p = 0.6187) were similar. Complication rates were lower for i-gel (20% vs. 33.3%; p = 0.6285), though not statistically significant. No significant correlations were

identified. **Conclusion:** The i-gel may represent a safe and effective alternative to the classic LMA. Our results suggest improved airway positioning and consistent insertion performance while maintaining comparable hemodynamic and ventilatory stability.

**Keywords:** supraglottic airway devices, i-gel, laryngeal mask airway, Brimacombe score, airway management

## HEMIEPIPHYSIODESIS FOR GENU VALGUM AFTER THE AGE OF 12: DOES AGE INFLUENCE CORRECTION DYNAMICS?

Kilian Tim Steiner<sup>1</sup>, Zoltán Derzsi<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Pediatric Orthopedics and Surgery, UMFST Tîrgu Mureş

**Background:** Genu valgum is a coronal plane deformity of the lower extremity, characterized by lateral deviation of the mechanical axis of the tibia relative to the femur. In early childhood, it is considered physiological with peak values occurring between 6-7 years of age; however, it may lead to problems if the valgus alignment persists. A rise in the incidence of idiopathic genu valgum among children and adolescents is noted, which is mainly associated with a global increased number of obesity. If left untreated, next to cosmetic reasons, it can result in long-term complications, including lateral compartment cartilage degeneration, such as knee osteoarthritis, cartilage degeneration, chronic pain and functional disability in adulthood. Since the growth plates close at the end of puberty and treatment with hemiepiphyodesis is inherently time-dependent, it requires sufficient remaining growth potential to achieve adequate angular correction. The question arises whether surgical treatment with a temporary hemiepiphyodesis using tension band plates remains effective from age 12 onward. In this context, the duration of implant placement is also taken into consideration. **Objectives:** This study aimed to evaluate whether hemiepiphyodesis remains effective in patients aged  $\geq 12$  years and to analyze implant duration as an indirect marker of correction dynamics. **Material and method:** A retrospective study was conducted, including 33 pediatric patients with bilateral genu valgum treated between 2022 and 2025. All patients underwent temporary hemiepiphyodesis of the distal femur using tension-band plates. Patients were divided into two age groups ( $< 12$  years and  $\geq 12$  years) and analyzed by sex. The primary outcome was implant duration. Statistical analysis included the Mann–Whitney U test and Spearman correlation. **Results:** The mean age was 11.88 years (range 8–15). The overall mean implant duration was 430 days. No significant difference in implant duration was found between patients  $< 12$  years (441.3 days) and  $\geq 12$  years (425.1 days) ( $p = 0.445$ ). No significant correlation between age and implant duration was observed ( $p = 0.783$ ). Females showed longer implant duration (563.1 days) compared to males (387.4 days), without statistical significance ( $p = 0.074$ ). **Conclusion:** Surgical intervention using hemiepiphyodesis with the 8-plate remains a viable option even after the age of 12. Age alone cannot be considered a decisive factor; rather, it is more important to take the individual stage of growth and skeletal maturation into account.

**Keywords:** Genu Valgum, Hemiepiphyodesis, Age

## RECURRENT HYPOGLYCEMIA AS INITIAL PRESENTATION OF A NEUROENDOCRINE TUMOR OF UNKNOWN PRIMARY ORIGIN: A CASE REPORT

Pauline Anna Marie Tress<sup>1</sup>, Juri Mattern<sup>1</sup>, Sorana Truta<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Anesthesiology and Intensive Care Medicine (II) and Emergency Medicine, UMFST-UMCH Hamburg

**Background:** Hypoglycemia is often a consequence of diabetes management, but in some cases, it may be the first indicator of an underlying neuroendocrine tumor. These insulin-secreting tumors usually originate in the pancreas (insulinomas), although rare ectopic cases have been reported. When metastatic lesions are present without an identifiable primary tumor, the condition is referred to as a cancer of unknown primary (CUP).

**Case presentation:** A 70-year-old female presented with unexplained symptomatic hypoglycemia, glucose 39 mg/dL, over the last several months. She reported symptoms including fatigue, intense hunger and near-syncope. Clinical presentation fulfilled Whipple's triad with documented hypoglycemia, corresponding symptoms and resolution after glucose administration. The patient had no history of diabetes mellitus or use of insulin or oral hypoglycemic agents. Laboratory findings showed an inappropriately elevated insulin, C-peptide and proinsulin; these findings were consistent with endogenous hyperinsulinism. <sup>68</sup>Ga-DOTATATE-PET/CT demonstrated

multiple somatostatin receptor-positive hepatic lesions, but no primary tumor could be identified. These findings were confirmed by contrast-enhanced CT and MRI, which showed bilobar hepatic metastases. Histopathological examination of a liver biopsy revealed a well-differentiated neuroendocrine tumor (Ki-67 14%, WHO Grade 2). Immunohistochemistry was positive for synaptophysin, chromogranin A, CDX2 and negative for PAX8, suggesting gastrointestinal origin rather than pancreatic origin. Despite extensive diagnostic workup including upper and lower gastrointestinal endoscopy, a primary tumor remained unidentified, which was consistent with a cancer of unknown primary (CUP). Initial treatment with the somatostatin analogue octreotide was started but later changed to diazoxide due to side effects. At five-month follow-up, therapy was changed to lanreotide and peptide receptor radionuclide therapy (PRRT) with Lu-177-DOTATATE. This resulted in significant improvement. Diazoxide was discontinued after resolution of hypoglycemia. **Case particularities:** This case is notable for severe hypoglycemia as the initial manifestation of a metastatic insulin-secreting neuroendocrine tumor with unknown primary origin.

**Conclusion:** This case shows that functional neuroendocrine tumors should be considered in patients with recurrent unexplained hypoglycemia, even in the absence of an identifiable primary lesion. In this case, the combination of functional imaging and immunohistochemistry was essential for accurate tumor characterization. Targeted therapies such as PRRT can achieve meaningful symptom control.

**Keywords:** cancer of unknown primary, endogenous hyperinsulinemism, hypoglycemia, neuroendocrine tumor, peptide receptor radionuclide therapy

## DIEULAFOY'S LESION - AN UNCOMMON CASE OF UPPER AND LOWER GASTROINTESTINAL BLEEDING.

Dilyana Ilieva<sup>1</sup>, Simona Muresan<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Internal Medicine , UMFST-UMCH Hamburg

**Background:** Dieulafoy's lesion (DL), also called exulceratio simplex, is a less common etiology for acute gastrointestinal bleeding of mucosal type, accounting for less than 5% of cases. Its clinical significance lies in its difficulty of diagnosing, its life-threatening potential for bleeding, and its recurrence. The lesser curvature of the stomach or the gastroesophageal junction are the most frequent locations for DL, followed by the duodenum and the colon, which account for less than 33% of cases. Pathologically, DL represents an enlarged submucosal blood vessel as the source of bleeding, in the absence of visible abnormality - ulcers or erosion on the surface of the mucosa. Further differences to other types of bleeding are the lack of inflammatory cell infiltrate, lack of aneurysms, arteriosclerosis, or vasculitis-like changes. Clinically, DL is accompanied by the signs and symptoms of blood loss, if severe, also a hemorrhagic shock. Reducing the complications of this condition relies on emergency diagnosis and treatment, the most accurate tool for both being digestive endoscopy. **Case**

**presentation:** We report the case of a 79-year-old male patient with cardiopulmonary comorbidities, recent NSAIDs use, and a prior jejunal resection, admitted to the emergency department for melena and signs of hemorrhagic shock (Hb:71 g/L, BP: 90/60 mm/Hg, HR: 76/bpm). After initial volume resuscitation, an upper gastrointestinal endoscopy (UGE) was performed for diagnostic workup. This investigation revealed a non-pathological esophagus, a stomach with an atrophic mucosa and blood clots without signs of acute bleeding, and at the area of papilla of Vater it revealed low-grade arterial bleeding with a normal mucosa, with endoscopic criteria for a Dieulafoy's lesion. During the procedure, the haemostasis was achieved using a polypectomy snare soft coagulation, followed by the placement of a 22 mm Locado haemostatic clip. The procedure was successful, and no rebleeding was documented. After one year, the patient returned with abundant rectorrhagia and a low haemoglobin level (Hb: 82g/L). After UGE and colonoscopy, rebleeding from the previous duodenum lesion was ruled out. The only notable finding was a 3 mm polyp in the transverse colon and internal haemorrhoids, both without signs of recent bleeding. A biopsy-polypectomy was performed, without complication. **Case particularities:** The evolution of this case raises the suspicion of a concomitant Dieulafoy's lesion at the level of both colon and duodenum. This very rare situation is described in the literature in less than 1% of cases. Given the risk of severe complications, a concrete follow-up plan for this patient should be planned, with consequent adjustments in his chronic treatment for cardio-pulmonary comorbidities. **Conclusion:** This case underscores the importance of awareness for rare causes of gastrointestinal bleeding, such as atypically located Dieulafoy's lesions. Increasing clinicians' vigilance toward uncommon sources of gastrointestinal hemorrhage can significantly prevent life-threatening complications and improve patient outcomes.

**Keywords:** Dieulafoy lesion, Gastrointestinal hemorrhage, digestive endoscopy

---

## CHRONIC KIDNEY DISEASE – A CONDITION THAT INFLUENCES PERIOPERATIVE OUTCOMES FOLLOWING REVASCULARIZATION OF THE LOWER LIMB

Erik Hartzo<sup>1</sup>, Frank Reitmeier<sup>2</sup>, Ioan-Alexandru Balmos<sup>3</sup>, Bogdan Halatiu<sup>4</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Klinikum Werra-Meißner

<sup>3</sup>Department of Anatomy, UMFST Tîrgu Mureş

<sup>4</sup>Department of Physiology, UMFST Tîrgu Mureş

**Background:** Peripheral artery disease (PAD) is a condition that affects older people due to the progression of atherosclerotic lesions in the arterial walls. Multi-level arterial stenosis in the lower limbs enables the vascular surgeon to choose between open surgery and a hybrid revascularization procedure, depending on the stage of the disease. **Objectives:** The study aims to identify perioperative outcomes for both surgical techniques in patients with the same stage of PAD, and to determine the causes of immediate complications from these procedures. **Material and method:** This retrospective study includes all patients who underwent open surgery or hybrid procedures for lower-limb revascularization at the regional German hospital Klinikum Werra-Meißner between 2019 and 2025. All data, including demographic, paraclinical, and clinical parameters, were collected from clinical records. Revascularization procedures and perioperative outcomes were also collected to assess results for each technique. **Results:** A total of 79 patients were included in the study, with a median age of 70.64 years and an overwhelmingly male patient population (67.09%). The most common comorbidities were dyslipidemia (93.76%), hypertension (77.22%), and ischemic heart disease (46.84%). Regarding risk factors for atherosclerotic disease, smoking was present in 41.77% of patients, diabetes in 35.44%, and chronic kidney disease in 5.06%. According to the PAD stage, most patients were in stage IIB (58.23%), followed by stages III (22.78%) and IV (18.99%) according to the Leriche-Fontaine classification. Patients were divided into two groups based on the lower-limb revascularization procedure performed: one group comprised 55 patients who benefited from a hybrid procedure, and the second comprised 24 patients who benefited from an endarterectomy. Revascularization outcomes were monitored until patient discharge, including laboratory parameters. The most frequent post-procedural complications were bleeding (n=10), local hematoma (n=7), and ischemia of the lower limb (n=5), with a predominance in the hybrid procedure group. A total of 11 patients required reoperation due to complications following revascularization but achieved favorable outcomes at discharge. Statistical analysis revealed that chronic kidney disease is the only comorbidity that increases the occurrence of postoperative complications ( $p = 0.0005$ ) and postoperative bleeding, which decreases the hematocrit value by more than 8 units ( $p = 0.04$ ) or hemoglobin by more than 2.5 mg/dL ( $p < 0.0001$ ), thereby increasing the risk of postprocedural complications. **Conclusion:** Whether a hybrid technique or open surgery is used, revascularization of the lower limb is a safe procedure. It improves the quality of life and prevents amputation. Although some complications may arise after the procedure, these are resolved before discharge. These complications tend to occur in cases involving multi-level arterial stenosis or occlusions. Chronic kidney disease is the only condition that can increase the likelihood of them occurring.

**Keywords:** peripheral artery disease, chronic kidney disease, hybrid procedure, endarterectomy, revascularization

---

## AORTIC COARCTATION – CTA ESSENTIALS FOR DIAGNOSIS AND PLANNING: A CASE STUDY

Florian Matuschowitz<sup>1</sup>, Marian Pop<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Radiology, UMFST Tîrgu Mureş

**Background:** Coarctation of the aorta in neonates may be challenging to characterize accurately by echocardiography alone, particularly in the presence of complex congenital heart disease and suspected arch hypoplasia. This case report aimed to illustrate the complementary role of computed tomography angiography (CTA) in confirming the diagnosis, defining extracardiac vascular anatomy, and supporting preoperative decision-making in a hemodynamically complex infant. **Case presentation:** A one-month-old male neonate with complex congenital heart disease was transferred for worsening cardiorespiratory symptoms and suspected aortic

coarctation to the hospital Tîrgu Mureş. The known cardiac abnormalities included double outlet right ventricle, a large ventricular septal defect, a small secundum atrial septal defect, mitral valve malformation with subvalvular anomaly and mild-to-moderate mitral stenosis, as well as pulmonary hypertension and Ross IV heart failure. Additional extracardiac findings included right-sided Morgagni hernia, spina bifida occulta, microcephaly, hypotonia and suspected syndromic features. Clinically, the infant showed tachypnea, respiratory distress, marbled skin, feeding difficulties, diminished lower-extremity pulses, prolonged capillary refill, and a 20 mmHg upper-to-lower extremity blood pressure gradient. Transthoracic echocardiography raised suspicion of distal aortic arch hypoplasia and isthmic coarctation, showing turbulent systolic-diastolic flow acceleration across the distal isthmus and reduced abdominal aortic flow. Because echocardiographic assessment of the distal arch and surgical anatomy was limited by the complex malformations, low-dose thin-slice CTA was performed. CTA confirmed tubular hypoplasia of the distal aortic arch (4 mm) and narrowing of the aortic isthmus (2.6/2.8 mm; 0.28/0.23 cm). At the same time it delineated the extracardiac vascular anatomy and associated cardiac abnormalities that are relevant for operative planning. After the ligation of the ductus arteriosus, no significant residual intraoperative gradient persisted. Therefore, direct coarctation repair was not performed, and staged surgical management was done. **Case particularities:** This case is particular because the suspected aortic coarctation occurred in the setting of a complex congenital heart disease, with extracardiac malformations and suspected syndromic features, in which CTA provided the anatomical diagnosis and surgical strategy, while the final management was ultimately guided by intraoperative hemodynamic findings. **Conclusion:** In infants with suspected coarctation and complex associated malformations, CTA is a valuable adjunct to echocardiography for comprehensive anatomical assessment and treatment planning, while definite management must remain integrated with intraoperative functional evaluation.

**Keywords:** Aortic coarctation, CTA, Congenital heart disease, Double outlet right ventricle

## BDMARDS/TDMARDS RISK FACTORS FOR LIVER FIBROSIS IN RHEUMATOID ARTHRITIS' PATIENTS

Giuseppe Biagio Robillotta<sup>1</sup>, Monica Chis<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Rheumatology, UMFST Tîrgu Mureş

**Background:** Rheumatoid arthritis management relies on conventional DMARDs, specifically methotrexate, and biological DMARDs to restrain joint damage. While MTX is the "anchor" treatment, long-term use predisposes patients to liver fibrosis and cirrhosis. Biological agents, including TNF- $\alpha$  and IL-6 inhibitors, present distinct hepatotoxic profiles. Infliximab is linked to drug-induced liver injury spanning from asymptomatic transaminase elevation to severe hepatic failure, also via autoimmune-mediated damage. IL-6 inhibitors also cause transient transaminase elevations, especially when co-administered with MTX. Additionally, the inflammatory background of RA characterized by TNF- $\alpha$ , IL-6, and IL-1 $\beta$  overlaps with the pathways found in obesity and diabetes, causing an overexpression that facilitates the progression from non-alcoholic fatty liver disease to steatohepatitis and cirrhosis, accumulating the risk of hepatic injury during long-term DMARD therapy. **Objectives:** The objective of this retrospective research aims to investigate the possibility of bDMARDs/cDMARDs as possible risk factors for the development of liver fibrosis in rheumatoid arthritis patients. **Material and method:** The retrospective research was conducted analyzing 50 patients suffering from Rheumatoid Arthritis older than 18 years old, 40 of them were females and 10 were males, under treatment with both cDMARDs and/or bDMARDs. Using common laboratory biochemical test as ALT, AST; PLT we calculated the FIB-4 score for each patients' checks-up that led us to assess and categorize the liver fibrosis risk based on the individualized patients' regimen. **Results:** Compared to combination therapy, more patients under bDMARD monotherapy fell in the high-risk fibrosis category (12.2%) with respective values of 57.7% and 30.1% for low and intermediate risk; regarding the combination therapy the calculated risk values showed us that the majority of the patients fell in the low (59.1%) and intermediate (37%) risk with only a group of 3.9% included in the high risk possessing the highest proportion of low-risk patients and the lowest high-risk proportion. The cDMARD-only group showed a balanced distribution between low and intermediate risk but due to the restricted pool it could not be taken into account. **Conclusion:** In conclusion, the performed study illustrates that the DMARDs use possesses a small but relevant correlated risk contributing to hepatic fibrosis development. The results showed that bDMARDs could potentially have a hepatotoxic effect but the overall results have been influenced by several multifactorial variables such as the use of concomitant comorbidity's medications and underlying metabolic factors such as obesity, insulin resistance, or dyslipidemia. Conversely, combination therapy may provide a stabilizing or even protective effect on liver health. This

advantageous effect is plausibly achieved through a better systemic inflammatory control, known to be a contributor in the pathophysiology of liver fibrogenesis. Therefore, besides vigilance and regular monitoring of liver function when taking DMARDs, especially bDMARDs, it is also of significant importance to include in the picture of hepatotoxicity and hepatic fibrosis the clinical context and the patients' risks profile.

**Keywords:** DMARDs, RA, LIVER FIBROSIS, FIB-4 SCORE

## WHAT WENT WRONG? THE COST OF A MISSED THERAPEUTIC WINDOW IN A YOUNG PATIENT

Frank Enrique Ayala Alamo<sup>1</sup>, Daniela Dobru<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Gastroenterology, UMFST Tîrgu Mureş

**Background:** Crohn's Disease is a chronic, immune-mediated Inflammatory Bowel Disease (IBD) that can affect any part of the gastrointestinal tract, transmural inflammation and skip lesions. As there is currently no definitive medical cure, the disease follows a relapsing and remitting course. Early therapeutic intervention represents a critical window of opportunity to prevent irreversible intestinal damage, which was missed in this young patient. **Case presentation:** A 21-year-old male diagnosed with the ileocolonic form of Crohn's disease in January 2020, at the age of 15. Initial biologic therapy was initiated vedolizumab. The patient experienced a loss of response after approximately six months, leading to chronic corticosteroid dependence to manage persistent disease activity. The prolonged use of corticosteroids causes severe iatrogenic complications such as, weight loss, secondary osteoporosis, weight loss, aseptic necrosis of the left femoral head in 2022. His history also includes acute necrotizing pancreatitis and a past clostridium difficile infection. In 2025 they started a new therapies like upadacitinib and ustekinumab. Despite this, he suffered a severe flare in the same year with a Crohn's Disease Activity Index (CDAI) score of 342 together with rectorrhagia. In the current admission, the patient presented refractory disease, with 6-7 bloody stools daily despite the prior therapy. The laboratory investigation suggested massive intestinal inflammation, with fecal calprotectin of 2,390 µg/g, C-reactive protein of 18.80 and thrombocytosis 768,000/µL, and the chronic blood loss cause microcytic iron deficiency anemia (serum iron 19 µg/dL, Hb 11.5 g/dL) requiring intravenous iron sucrose. A colonoscopy was performed to determine if the active inflammation was localized solely to the right colon and ileocecal valve. However, surgical resection was impossible. Due to the contraindication of the surgery, the patient was initiated with infliximab, with this anti-TNF drug, the patient showed a rapid response and symptomatic improvement, and subsequently, discharged. **Case particularities:** This case illustrates the clinical consequences of missing the early therapeutic window in adolescence and young adult with Crohn's disease. It was missed in this patient because the initial biologic therapy (Vedolizumab) failed to achieve early, deep mucosal healing, this initial approach may have been insufficiently aggressive for a severe paediatric phenotype. Failing to utilize a highly effective "top-down" approach (anti-TNF therapy) allowed the disease to progress, ultimately resulting in severe complications and prolonged systemic corticosteroids exposure. **Conclusion:** Early intensive therapy is essential in young patients with Crohn's disease to prevent disease progression and long-term consequences. This case illustrates the consequences of missing the therapeutic window of opportunity, which may lead to steroid dependence, irreversible damage, and refractoriness to multiple treatment mechanisms.

**Keywords:** Crohn's Disease, Refractory Disease, Window of opportunity, Iatrogenic complication, Early Intensive Therapy

## ACUTE ISCHEMIC STROKE IN TWO YOUNG ADULTS WITH UNDIAGNOSED CARDIOMYOPATHIES AND DIFFERENT LIFESTYLES

Frank Enrique Ayala Alamo<sup>1</sup>, Laura Barcutean<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Neurology, UMFST Tîrgu Mureş

**Background:** Acute ischemic stroke(AIS) in young adults is frequently caused by silent cardioembolic conditions. We present two young men with different risk profiles: one with no known risk factors and the other with chronic toxic exposures. Despite these differences, both suffered (AIS) as the first sign of severe undiagnosed

cardiomyopathies. These cases show that severe structural heart disease can remain completely asymptomatic, highlighting the need of full cardiovascular workup in all young stroke patients, regardless of their lifestyle.

**Case presentation:** Case 1: A 42-year-old male with a healthy lifestyle and no prior medical history presented with acute visual field defect. The neurological examination revealed an acute left homonymous hemianopsia. Brain Magnetic Resonance Imaging (MRI) showed an acute ischemic stroke in the right posterior cerebral artery territory, with restricted diffusion and a small hemorrhagic microspot visible on the SWAN sequence. Echocardiography found a severe dilated cardiomyopathy of unknown etiology. His left ventricular ejection fraction (LVEF) was 25-30%, with a dilated left ventricle of 65 mm and global hypokinesia. The ECG showed frequent atrial and ventricular extrasystoles. The carotid doppler ultrasound was unremarkable. The bloodwork, including full infectious and autoimmune panels were negative. He was diagnosed with a cardioembolic stroke and started on direct oral anticoagulation (apixaban 5mg twice daily) alongside guideline-directed heart failure therapy. Case 2: A 48-year-old male with a history of chronic alcohol use, smoke, and a prior undocumented transient cerebrovascular event presented with abrupt onset of left limb motor deficit. The neurological examination revealed a left central facial palsy and mild left hemiparesis, left sided hyperreflexia, a positive left Babinski sign. Brain MRI showed an AIS in the right capsulo-lenticular region. Echocardiography showed a severe toxic dilated cardiomyopathy with an LVEF of 30-35%. Carotid Doppler showed only mild bilateral internal carotid artery stenosis. Additional genetic testing found a homozygous PAI-1 mutation and a heterozygous MTHFR A1298C mutation, alongside a newly diagnosed Hepatitis B infection. Because no arrhythmias were documented during admission to definitively confirm a cardioembolic source, he was discharged on single antiplatelet therapy (clopidogrel 75 mg) pending a cardiac MRI and 24-hour Holter monitor, along with heart failure management. **Case particularities:** The interest of this report is how two contrasting life paths culminated in the same severe outcome: an AIS revealing a silent, advanced cardiomyopathy. The first case demonstrates that a healthy, risk-free lifestyle does not exclude the presence of idiopathic heart failure. In contrast, the second patient's history of chronic alcohol use that likely contributed to toxic heart damage, but this lifestyle masked deeper suspected structural damage and genetic vulnerabilities. **Conclusion:** AIS in young adults mandates a rigorous cardiovascular evaluation, as severe cardiomyopathies can remain clinically silent. These cases emphasize that a patient's baseline lifestyle must not determine the search for occult cardiac etiologies.

**Keywords:** Acute Ischemic Stroke, Young Adult, Dilated Cardiomyopathy, Behavioural Risk Factors

## CLOSTRIDIUM PERFRINGENS INFECTIONS: A FORGOTTEN CAUSE OF DEATH.

Sumaya Hassan<sup>1</sup>, Teodora Sorana Truta<sup>2</sup>, Cristian Boeriu<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Anesthesiology and Intensive Care Medicine (II) and Emergency Medicine, UMFST Tîrgu Mureş

**Background:** Clostridium perfringens is a Gram-positive, anaerobic bacterium that proliferates rapidly, with a doubling time of approximately 7 minutes. Its virulence is mostly mediated by the production of exotoxins which can rapidly lead to death if not diagnosed and treated early. **Case presentation:** A 50-year-old male with a history of gastric ulcer, presented to the emergency department (ED) of a small hospital, with severe epigastric pain irradiating to the back and nausea. Vital signs showed a slightly elevated blood pressure (BP), mild tachycardia, tachypnoea, and no fever. ECG showed no signs of ischemia. Laboratory tests were normal, except for glucose which was 208 mg/dl. Patient received intravenous Pantoprazole, Nospa, Algocalmin, and finally Fentanyl as the pain was not controlled, and he was referred to the ED of Targu- Mures Emergency County Clinical Hospital for further investigations. Upon arrival, he had a BP of 180/100 mmHg, HR 89/min, RR 19/min and a temperature of 38,4 C. Physical exam revealed tenderness of the upper abdomen. A thoraco-abdominal-pelvic CT scan revealed to be normal except for a slight distention of the gallbladder. The patient's symptoms persisted despite repeated doses of fentanyl and antiemetics as well as intravenous fluids. Secondary labs were taken 3 hours later that showed leukocytosis with neutrophilia, slightly increased levels of CRP (6.1 mg/dl), LDH (254UI/L) and glucose (128 mg/dl). The suspicion of a recurrent gastroduodenal ulcer was raised, and an endoscopy was performed, which revealed an acute esophageal lesion (0,5x0,5 cm), possibly due to nasogastric tube placement, an erythematous gastric mucosa, duodenal mucosa covered by blood with no identifiable source of bleeding. A abdominal CT with iv contrast done 10 hours after initial admission revealed small fluid collection adjacent to the inferior hepatic lobe and the gallbladder, along with two new air inclusions, adjacent to the gallbladder. A new set of labs revealed further increase in leucocytes and marked elevation of direct and total bilirubin, LDH and increased fever. Hemocultures were taken and antibiotics were given (Meropenem, Metronidazole). The patient was examined repeatedly by a surgeon and a gastroenterologist during his stay in the ED, but no precise diagnosis

was made nor was a decision taken. The patient became drowsy, exhibited shallow breathing, epistaxis, bleeding from the venipuncture sites, petechiae on his arms and abdomen and quickly, went into cardio-respiratory arrest, unresponsive to resuscitation maneuvers, dying 27 hours after initial presentation to the hospital. The performed autopsy revealed severe pulmonary atelectasis and concentric left ventricular hypertrophy. The result of the hemoculture were available 48 hours later which were positive for *Clostridium perfringens*. **Case particularities:** 50-year-old male, with atypical *Clostridium perfringens* infection, with rapidly progressive manifestations including sepsis, acute haemolysis and DIC with death within 27 hours of initial admission. **Conclusion:** *Clostridium perfringens* is a rare but rapidly progressive infection that can initially present with no specific clinical manifestations. Early recognition, although difficult, and early treatment are crucial for patient survival.

**Keywords:** *Clostridium perfringens*, Acute haemolysis, Disseminated intravascular coagulation, Sepsis

## GLP-1 RECEPTOR AGONISTS: IMPACT ON CNS AND POSSIBLE CLINICAL RELEVANCE IN ADDICTION TREATMENT — A NARRATIVE REVIEW

Daniela Aalto<sup>1</sup>, Erika Bán<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Pharmacology, UMFST-UMCH Hamburg

**Background:** GLP-1 receptor agonists are primarily associated with weight loss and glycemic control, but there is limited research on the impact on the CNS regarding reward pathways and addiction. GLP-1 receptor agonists work in the hypothalamus and brainstem increasing satiety signals and decreasing hunger (De Giorgi et al., 2025). GLP-1 receptor agonists also work on the dopamine pathways and reduce reward-driven behavior in the mesolimbic area of the brain by activating GABA interneurons (De Giorgi et al., 2025). Treating addiction is a major global challenge and the question remains if GLP-1 receptor agonists, as an already approved drug, could have a pleiotropic effect treating addiction. **Objectives:** This narrative review examines the impacts on the dopamine pathways that are relevant in the discussion of decreasing addiction. **Methods:** Articles were selected from PubMed using GLP-1 receptor agonist, reward pathway, dopamine, semaglutide and addiction as search words. Three articles were included in this narrative review: De Giorgi et al. (Nature Mental Health, 2025) - preclinical and clinical evidence, Hendershot et al. (JAMA Psychiatry, 2025) - randomized controlled trial, Wang et al. (Nature Communications, 2024) - large real-world cohort study. Articles were selected because the research is published in 2024-2025 in high-impact peer-reviewed journals and cover the mechanism of GLP-1 receptor agonists and have clinical evidence of the impact on CNS. **Results:** GLP-1 receptor agonists are not only found in the GI tract but also in the brain, involving areas involved in mood, memory and reward. GLP-1 receptors are expressed in the VTA (Ventral Tegmental Area), where the dopamine producing neurons are located, when receptors are activated GABA-interneurons will inhibit the dopamine neurons (De Giorgi et al., 2025). Less dopamine firing will decrease cravings and motivation, as a clinical target this is useful for decreasing food seeking and drug addiction. GLP-1 receptors are also found in nucleus accumbens and when they are activated it will reduce phasic dopamine release which will lead to less motivation to seek reward (De Giorgi et al., 2025). De Giorgi et al. (Nature Mental Health, 2025), in an analysis of 278 preclinical and 96 clinical studies, demonstrate reduction in drug and reward-driven behavior. In a small and short duration study (Hendershot et al., JAMA Psychiatry, 2025) where participants received low-dose semaglutide and placebo it was shown that the participants receiving semaglutide drank fewer drinks but number of drinking days did not decrease. Another study showed that semaglutide reduced the risk of new or recurring alcohol use disorders by 50-56% (Wang et al., Nature Communications, 2024). The evidence is promising but further research is still needed to draw general conclusions of the benefits. **Conclusion:** There is strong evidence of the presence and mechanism of GLP-1 receptors in the brain and how they impact on the CNS. Clinically there have been studies showing potential relevance for treatment of addiction, the strongest clinical evidence currently relates to reduction in alcohol addiction. The findings of a pleiotropic addition to an already approved drug are clinically relevant. Currently available evidence is limited due to small sample sizes, short follow-up and debate around blood-brain-barrier. There is a need of larger research with broader populations, comparing the mechanism of different GLP-1 receptor agonists in the future.

**Keywords:** glp-1 receptor agonists, mesolimbic pathway, dopamine, addiction, reward pathway

---

## SURGICAL VERSUS ENDOVASCULAR TREATMENT OF ARTERIOVENOUS MALFORMATIONS

Dennis George<sup>1</sup>, Adrian Bălaşa<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Neurosurgery, UMFST Tîrgu Mureş

**Background:** Cerebral Arteriovenous malformations (AVM) are high-flow vascular lesions which is characterized by a direct arteriovenous shunting that normally bypasses the normal capillary bed, and it carries a lifetime risk of intracranial haemorrhage, seizures and progressive neurological deficit. The optimal management strategy is microsurgical resection, endovascular embolization or a combined approach debated and guided by lesion grade, the angioarchitecture and clinical presentation. The risk stratification relies primarily on the Spetzler- Martin (SM) grading system, which correlates with surgical morbidity and it informs the choice of intervention. **Objectives:** The study aims to characterize the demographic and clinical profiles of AVM patients managed in Emergency Clinical County Hospital of Targu Mures, the baseline characteristics are compared and Spetzler – Martin grade distribution across treatment modalities, and to evaluate the short term clinical outcomes across the Endovascular, microsurgical and combined treatment groups. **Material and method:** A retrospective single clinic analysis was conducted on 81 consecutive patients diagnosed with Vascular malformations between 2020- 2026. The patients were classified into three primary treatment groups: Endovascular treatment (n=47), Microsurgical resection (n=16) and combined endovascular and microsurgical treatment (n=13). The demographic variables included age and sex. The clinical variables included initial Glasgow Coma Scale (GCS) Score, the presentation type (ruptured vs Unruptured) and Spetzler- Martin grade. The statistical comparisons were performed using the one- way ANOVA for normally distributed continuous variables, the Kruskal Wallis test for non-parametric data and the Pearson Chi- square test for categorical variables. **Results:** The cohort comprised of 44 females (54.3%) and 37 males (45.7%), with a mean age of  $41.9 \pm 17.4$  years across all groups. The age did not differ significantly between groups (endovascular:  $43.0 \pm 17.7$  years; microsurgery  $41.4 \pm 20.6$  years; combined  $35.6 \pm 11.1$  years;  $p=0.766$ ). The sex distribution was comparable across groups ( $p=0.561$ ). The initial GCS was the only variable that reached statistical significance across the treatment groups ( $p=0.017$ ), driven by uniformly normal GCS scores in the combined group (mean  $15.0 \pm 0.0$ ), compared to endovascular ( $14.7 \pm 1.6$ ) and microsurgical ( $13.3 \pm 3.5$ ) groups, reflecting the case-selection done. SM grade distribution showed a trend toward lower grades in the microsurgery group (mean  $2.5 \pm 1.7$ ) compared to endovascular (mean  $3.1 \pm 1.6$ ) and combined (mean  $3.0 \pm 1.6$ ) groups, though this did not reach significance (Kruskal-Wallis test,  $p=0.259$ ). **Conclusion:** This retrospective series demonstrates that microsurgical and endovascular approaches to cerebral AVMs can achieve high rates of clinical stability across a wide spectrum of lesion grades and presentations. The trend toward lower SM grades in microsurgically treated patients is consistent and established guidelines favouring surgery for grades I-III.

**Keywords:** arteriovenous malformation, microsurgery, endovascular embolization, Spetzler Martin grade, cerebrovascular neurosurgery

---

## VERTEBRAL BODY ABSCESS SECONDARY TO OVARIAN CANCER: MRI AND CT ASSESSMENT

Khac-Hien Steven Nguyen<sup>1</sup>, Marian Pop<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Radiology, UMFST Tîrgu Mureş

**Background:** Vertebral body abscesses are rare but clinically significant manifestations of spinal infection and may present with radiological features similar to metastatic spinal lesions. In oncological patients, especially those with a history of ovarian cancer, differentiating between infectious and malignant vertebral lesions represents a major diagnostic challenge. Accurate interpretation of MRI and CT findings is essential for establishing the correct diagnosis and guiding treatment. **Case presentation:** A 61-year-old female patient with a history of ovarian cancer diagnosed in 2020 presented with progressive severe lumbar pain and paresthesia in the L4 dermatomal distribution. Due to her oncological history, metastatic spinal involvement was initially suspected. Imaging studies revealed an osteolytic lesion involving the L4 vertebral body, raising concern for either metastatic disease or an infectious process. MRI and CT demonstrated destructive vertebral changes with features suggestive of an

inflammatory lesion. Because of the severity of symptoms and radiological findings, the patient underwent neurosurgical intervention consisting of posterior spinal stabilization from L2 to S1, L4 laminectomy, decompression, and tissue sampling. **Case particularities:** The particularity of this case lies in the significant radiological overlap between metastatic spinal disease and vertebral infection in a patient with a known history of ovarian cancer. The presence of an osteolytic lesion involving the L4 vertebral body, combined with the patient's oncological background, initially strongly suggested metastatic spinal involvement, which represented the most likely diagnosis from both a clinical and radiological perspective. However, further imaging evaluation using MRI and CT, together with neurosurgical intervention and intraoperative findings, demonstrated that the lesion was caused by a vertebral body abscess rather than metastatic disease. This distinction was particularly important because the therapeutic approach differed fundamentally, requiring surgical stabilization and infection management instead of oncological treatment. This case highlights the importance of maintaining a broad differential diagnosis in oncological patients presenting with spinal lesions and emphasizes the need to avoid diagnostic bias based solely on previous malignancy. Careful interpretation of imaging findings and multidisciplinary clinical assessment remain essential for establishing the correct diagnosis and ensuring appropriate treatment. **Conclusion:** This case highlights the importance of considering spinal infection in the differential diagnosis of vertebral lesions in oncological patients. MRI and CT should be regarded as complementary diagnostic tools, particularly when differentiating vertebral abscesses from metastatic disease. Early recognition is crucial to avoid delayed treatment and unnecessary oncological management.

**Keywords:** vertebral body abscess, ovarian cancer, spinal infection, MRI/CT, neurosurgery

## WHEN GENETICS MEETS THE GUT: SEVERE GASTRIC DYSMOTILITY IN GABRIELE-DE VRIES SYNDROME

Roxana Pântea<sup>1</sup>, Ema Burlacu<sup>1</sup>, Oana Cristina Mărginean<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Pediatrics, UMFST Tîrgu Mureş

**Background:** Gabrielle-de Vries syndrome is a rare autosomal dominant neurodevelopmental condition caused by a heterozygous pathogenic variant in the YY1 (Yin Yang 1) gene or by a microdeletion at 14q32.2, most commonly due to a de novo mutation. Global developmental delay, hypotonia, feeding difficulties, and impaired growth characterize the syndrome. **Case presentation:** We present the case of a 3-year and 8-month-old female diagnosed with Gabrielle-de Vries syndrome, with a complex medical history including severe global neurodevelopmental delay, congenital hypotonia, stage III hydronephrosis, marked growth failure, and persistent feeding difficulties, which required multiple hospitalizations since infancy. The patient was admitted for fever, repeated vomiting, severe anorexia, and dehydration. On physical examination, she appeared severely undernourished, with facial dysmorphism, generalized hypotonia, dry mucous membranes, and reduced subcutaneous tissue. Body weight at admission was 5.1 kg, consistent with severe protein-energy malnutrition. Laboratory investigations revealed elevated inflammatory markers (C-reactive protein 15.1 mg/L, neutrophilia 70%), mild elevation of liver enzymes (AST 68 U/L, LDH 362 U/L), and slightly increased fecal calprotectin (59 µg/g). Arterial blood gas analysis showed metabolic acidosis with respiratory compensation (HCO<sub>3</sub> 15.4 mmol/L, base excess -9.1 mmol/L, pCO<sub>2</sub> 22.8 mmHg), associated with isonatremic dehydration. Stool antigen testing confirmed acute rotavirus gastroenteritis. Due to persistent vomiting and poor feeding tolerance, additional investigations were performed. These revealed significant gastric distension and delayed gastric emptying, without evidence of mechanical obstruction. Genetic testing identified a predisposition to lactose intolerance. Based on these findings, supportive management with intravenous rehydration and antiemetic therapy was continued and adjusted, with dietary modification and enzyme supplementation. During hospitalization, intermittent hypoglycemic episodes associated with limb spasms were observed and managed with glucose supplementation. Neurological evaluation was performed, and brain MRI showed no pathological findings. Under multidisciplinary care, the patient gradually improved, with stabilization of metabolic parameters, better feeding tolerance, and progressive weight gain. **Case particularities:** The particularity of the case is severe protein-energy malnutrition in a child with a rare genetic syndrome, aggravated by underlying gastrointestinal dysmotility. Acute rotavirus infection acted as a trigger for rapid clinical decompensation in an already vulnerable patient, leading to worsening feeding intolerance and metabolic imbalance. Prompt supportive treatment, including sustained rehydration, prokinetic therapy, and dietary adjustment with enzymatic supplementation, resulted in gradual clinical improvement. The favorable response to treatment suggests that gastric dysmotility has an important functional component and that early therapeutic intervention can positively influence recovery. **Conclusion:** This case shows the clinical challenges of caring for children with Gabrielle-de

Vries syndrome, particularly during acute illness. Acute infections may worsen chronic feeding problems and delay recovery. An individualized multidisciplinary approach is important for achieving clinical stability.

**Keywords:** Gabriele-de Vries syndrome, acute gastroenteritis, lactose intolerance, gastric dysmotility

## MONITORING THE RISK OF LIVER AND LUNG FIBROSIS IN RHEUMATOID ARTHRITIS PATIENTS

Kinga Veber<sup>1</sup>, Monica Chiş<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Rheumatology, UMFST Tîrgu Mureş

**Background:** Rheumatoid Arthritis (RA) is a systemic, inflammatory disease, that if left untreated doesn't only lead to joint damage but also to other clinical manifestations like lung and liver involvement. It was already established that even treatment such as Methotrexate, which is the gold standard, can be an independent risk factor for lung and liver fibrosis. **Objectives:** With this study we aim to outline the role of monitoring the liver fibrosis score (FIB-4), and ultrasound scanning for lung fibrosis corroborated with the hemoleukogram-derived ratios in rheumatoid arthritis patients. **Material and method:** A prospective study was performed between October 2025 and April 2026 in the Rheumatology clinic of the County Emergency Hospital of Tîrgu Mureş. 30 patients (18 diagnosed with Rheumatoid Arthritis based on the ACR/EULAR criteria and 12 patients diagnosed with other autoimmune rheumatological disorders) were randomized. Lung ultrasounds were performed on these patients in order to assess the pleural thickness and presence of B lines and consolidations. The FIB-4 score was also calculated to assess the liver fibrosis. The immune response was monitored using the hemoleukogram-derived ratios (Neutrophil-to-Lymphocyte Ratio, Derived Neutrophil-to-Lymphocyte Ratio, Platelet-to-Lymphocyte Ratio, Lymphocyte-to-Monocyte Ratio, Eosinophil-to-Lymphocyte Ratio, Basophil-to-Lymphocyte Ratio, Red Cell Distribution Width (RDW-CV)-to-Platelet Ratio, Systemic Immune-Inflammatory Index). The patients were stratified according to the stage of their disease and the followed treatment (cDMARD (10) vs bDMARD (8), and control group (12)). The statistical analysis was done using Julius AI Pro. **Results:** The study showed no statistically significant difference in the risk of liver fibrosis between RA patients and those from the control group, and no significant evidence that links lung fibrosis markers to liver fibrosis risk. In RA patients there was a higher frequency of B-lines on ultrasound (61.1% vs 41.7%), the strongest descriptive signal in the dataset, although it did not reach statistical significance. Exploratory screening of inflammatory ratios, medication, obesity, smoking, and autoantibodies showed no significant associations after correcting for multiple comparisons. The borderline positive correlation between B-lines and elevated FIB-4 within the RA group represents the most promising exploratory sign and may warrant investigation in a larger cohort. **Conclusion:** Patients with RA do not have a higher risk for liver and lung fibrosis than patients diagnosed with other autoimmune rheumatological disorders. RA patients with a higher liver fibrosis risk (high FIB-4) may also have a higher risk for the presence of B-lines on the lung ultrasound.

**Keywords:** Rheumatoid Arthritis, Lung Fibrosis, Liver Fibrosis, Monitoring, Risk

## ASSESSMENT OF TRIGLYCERIDE GLUCOSE INDEX (TYG) AS A MARKER OF ATHEROSCLEROSIS IN PERIPHERAL ARTERY DISEASE

Alicia Krause<sup>1</sup>, Emma-Eugenia Murariu-Gligor<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Internal Medicine, UMFST Tîrgu Mureş

**Background:** Metabolic diseases are a frequent cause of morbidity, reflecting modern lifestyle with alarmingly increasing rates of obesity and diabetes. The Triglyceride-Glucose index (TyG-index) is a reliable, accessible, and inexpensive marker for insulin resistance, requiring only fasting glucose and triglyceride levels for its calculation. A cut-off value of > 8.31 has been proposed in current literature to identify associated insulin resistance. **Objectives:** This study aims to determine whether Triglyceride-Glucose Index is a comparable assessment tool for atherosclerosis burden, as well as peripheral artery disease (PAD) severity compared to conventional lipid profile markers. **Material and method:** Medical records of patients hospitalized between January 2024 and October 2025 with a diagnosis of Peripheral Artery Disease (ICD-10: I70.2) were analyzed. Inclusion criteria required an established prior PAD diagnosis; exclusion criteria comprised acute inflammatory status related to infection and incomplete data. Assessed parameters included lipid profile parameters such as LDL Cholesterol, non-HDL

Cholesterol, Atherogenic Index of Plasma (AIP), Triglyceride/HDL-Cholesterol Ratio, as well as inflammatory markers: C-reactive protein (CRP), Neutrophil-to-Lymphocyte Ratio (NLR), Platelet-to-Lymphocyte Ratio (PLR), and Systemic Immune-Inflammation Index (SII). Data were compiled using Microsoft Excel and analyzed with MedCalc® Statistical Software v23.5.2. **Results:** From an initial cohort of 50 PAD patients, 5 were excluded due to elevated inflammatory markers, resulting in a final study group of n=45. The most prevalent comorbidity was arterial hypertension (73%), followed by heart failure and dyslipidemia (both 44%), ischemic heart disease (31%), diabetes mellitus (27%), obesity (22%), and chronic kidney disease (13%). Of the 45 patients, 31 (69%) presented with a TyG index above the proposed cut-off of 8.31. Patients with elevated TyG tended toward more advanced Fontaine stages. Statistical analysis revealed significantly higher atherogenicity markers in the elevated TyG group, compared to those with a TyG Index < 8.31, in regards to AIP (p=0.008), TG/HDL ratio (p=0.008), and non-HDL cholesterol (p=0.035), while LDL-cholesterol and inflammatory markers (NLR, PLR, SII) did not differ significantly between groups (p> 0.05). **Conclusion:** Our study showed that elevated TyG index exceeding 8.31 is highly common among PAD patients, associating significantly higher atherogenic indices, reflected in more advanced Fontaine stages. Given its straightforward calculation from routinely available laboratory parameters, the TyG index represents a cost-effective and valuable addition to standard lipid profiling for clinical risk stratification in peripheral artery disease.

**Keywords:** peripheral artery disease, TyG Index, atherosclerosis, inflammation, lipid profile

---

## FEMORAL ANTEVERSION IN ADOLESCENCE: A CASE STUDY ON CLINICAL RECOGNITION AND MANAGEMENT

Nadine Stefanie Paulina Krause<sup>1</sup>, Flaviu Moldovan<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Orthopedics, UMFST-UMCH Hamburg

**Background:** Femoral anteversion, a rotational deformity characterised by an increased anterior twist of the femoral neck relative to the femoral condyles, was formerly known to correct spontaneously without extensive intervention around the age of 12. It is now increasingly gaining awareness to persist in adolescence, where it frequently presents as a functional limitation that can only be corrected surgically by a femoral derotational osteotomy. **Case presentation:** The following case study displays a 17-year-old female who presented to an orthopaedic practice with persistent retro-patellar pain as well as pain in the upper margin of the patella with passive flexion. The symptoms gradually evolved without a mechanism of injury and presented with pain-induced instability and the characteristic in-toeing gate. It persisted throughout multiple conservative treatment trials in previous attempts. In the initial physical examination, a forced varus stress test of the knee joint was performed to assess the integrity of the stabilising ligaments, thereby evaluating associated or alternative causes of the presented symptoms. The lateral shift was significant, showing an extensive lateral dislocation of the femoral condyle from the tibial articulation. Based on the thorough anamnesis and inconclusive recent MRI findings, a computer tomography (CT)-based rotational assessment was performed to confirm the clinical suspicion of a femoral anteversion. Using the CT-scan the femoral anteversion (AT), and the tibial tuberosity (TT) angles were measured. Solely, the AT angles were in the pathological range, being 20° at the right and 29° at the left, with 25° in a standard healthy individual. This confirmed the clinical suspicion, proving the comprehensive diagnoses to be femoral anteversion. Following the diagnosis, a femoral derotational osteotomy was performed without complications. After surgery, the patient showed significant short-term improvement with promising postoperative clinical results, with data extending up to 12 weeks. **Case particularities:** As a result of its low prevalence, femoral anteversion requires extensive therapy, and the diagnosis is challenging, thereby emphasising the importance of raising awareness for the steadily increasing number of cases with persistence in adolescence. **Conclusion:** This case illustrates the value of a thorough clinical examination before and after inconclusive radiological tests broadening the spectrum of possible pathologies to include less common clinical conditions.

**Keywords:** adolescence, clinical recognition, computer tomography-based rotational assessment, femoral anteversion, femoral derotational osteotomy

---

## RARE CASE OF MILD HELLP SYNDROME IN COMBINATION WITH MILD POSTPARTUM HEMORRHAGE

Hanna-Marie Schmal<sup>1</sup>, Mihaela Butiulca<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Anesthesiology and Intensive Care Medicine (II) and Emergency Medicine, UMFST Tîrgu Mureş

**Background:** HELLP syndrome, a rare complication in pregnant and postpartum patients, presents with a triad of hemolysis (H), elevated liver enzymes (EL) and low platelets (LP). It results in a high mortality rate, where the only curative treatment is the delivery of the fetus, with a subsequent improvement of symptoms, setting in within 48 hours. The risk for developing postpartum hemorrhage (PPH) in patients with preeclampsia (PE), often a precursor of HELLP syndrome, is higher than in patients with normal pregnancies. PPH, with a redefined diagnostic criteria of a cumulative blood loss of 1000ml or above, is the most preventable cause of maternal death, being frequently under- or overestimated. The four treatable causes are tone, trauma, tissue and thrombin. **Case presentation:** A 29-year-old nulliparous primigravida woman at 36 weeks and 6 days gestation, with no remarkable medical history, was diagnosed with preeclampsia, based on new onset hypertension (160/100mmHg), edema and proteinuria of 75mg/dL and therefore admitted to the hospital. The hypertension (180/120mmHg) was refractory to Nifedipine and additionally nausea and upper gastric pain manifested. The escalation of signs and symptoms forced the decision to deliver the child via cesarean section (CS). Following a complication-free operation with a blood loss of 300ml and a normal hemoglobin (Hb: 14.6g/dl), she was admitted to the intensive care unit (ICU) and received 3000 I.U. Certoparin as a thrombotic prophylaxis. Postoperative laboratory panels revealed an increase in aspartate aminotransferase (AST: 275U/l), alanine aminotransferase (ALT: 200U/l), lactate dehydrogenase (LDH: 619U/l), a drop in Hb (10.2g/dl), thrombocytopenia (platelet count: 98x10<sup>3</sup>/µg) and a haptoglobinemia (HAPT: < 10mg/dl). Thus, the criteria for HELLP syndrome were fulfilled. Throughout the first night, an excess amount of blood with clot formation appeared as well as phases of tachycardia (104-118bpm) and concentrated urine. Approximately 800ml of blood containing clots were manually expressed and 10 I.U. Oxytocin were administered, with additional furosemide and fluids to support her low diuresis. During the 8 hours postpartum, orthostatic dizziness, headaches, lower abdominal tension and vaginal bleeding occurred. Sonographic imaging offered no specific cause for the PPH. By the end of the second day postpartum, the signs and symptoms as well as laboratory values improved so that the patient was transferred to the gynaecology department and discharged 7 days postoperative without complications. **Case particularities:** This case highlights the rare combination of HELLP syndrome and mild postpartum hemorrhage, notable for the absence of life-threatening complications despite the inherent severity of both conditions. **Conclusion:** Documentation and dissemination of HELLP syndrome cases are essential to increase clinical awareness and promote further research into its incompletely understood pathophysiology, for which delivery remains the only definitive treatment. The concurrent occurrence of postpartum hemorrhage significantly elevates the risk of maternal and fetal mortality, highlighting the importance of early recognition, particularly given that the majority of such cases do not follow as favorable a course as the one presented here.

**Keywords:** HELLP syndrome, maternal mortality, postpartum hemorrhage, preeclampsia

---

## MANAGEMENT OF PACEMAKER-RELATED COMPLICATIONS: A CASE SERIES

Florentine Gerlach<sup>1</sup>, Andreea Varga<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Internal Medicine , UMFST-UMCH Hamburg

**Background:** Cardiovascular implantable electronic devices are widely used in the treatment of cardiac arrhythmias, cardiac conduction disorders and for cardiac resynchronisation therapy. They can significantly improve the life quality of the patient. The two most common indications for permanent pacemaker therapy are high-degree atrioventricular block and sinus node dysfunction. Despite technological advances, serious complications still occur of which early detection is crucial, especially in elderly and multi-morbid patients. **Case presentation:** This case series describes three cases of early common complications following pacemaker implantation. The first case illustrates a pacemaker pocket infection after exchange of a long-standing device in an elderly patient with multiple comorbidities, in whom guideline-based management was of high risk due to the

longstanding implantation of the leads and the patients age. This is why, a conservative treatment approach with antibiotics and wound debridement was preferred, leading to successful revision of the symptoms. The second case describes atrial lead displacement caused by Twiddler Syndrome, a complication caused by device manipulation by the patient causing lead displacement. The patient was successfully treated by lead revision. The third cases illustrates an iatrogenic pneumothorax induced by previous pacemaker implantation which was discovered on a postoperative chest radiography in a disoriented patient and managed with a thorax drainage.

**Case particularities:** The three cases of completely different post-implantation complications highlight the importance of early intervention and management of pacemaker-related complications. They emphasise the importance of individualised management strategies adapted to the age, comorbidities and risk factors of each patient and point out, how prevention strategies can be applied to improve patient outcome. **Conclusion:** The cases highlight that risk factor assessment before a procedure is crucial to provide suitable peri-operative adaptations to prevent pacemaker complications. Guideline-based management has to be carefully weighted against the procedural risk and individualised, risk adapted therapy should be pursued, instead of a generalised approach for all patients to improve patient outcome and avoid the need for re-interventions which are linked to a higher complication risk and higher healthcare costs.

**Keywords:** pacemaker complications, pocket infection, lead dislodgement, pneumothorax

## FROM SILENT REMODELLING TO SUDDEN COLLAPSE: A CASE OF ATRIAL FUNCTIONAL TRICUSPID REGURGITATION

Lea Haselwanter<sup>1</sup>, Mihaela Butiulca<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>, UMFST Tîrgu Mureş

**Background:** Severe tricuspid regurgitation (TR) has been increasingly recognised as a clinically relevant condition that is associated with significant morbidity and mortality. Its frequency increases with age and comorbidities such as atrial fibrillation (AF), still it remains frequently underestimated, underdiagnosed and consequently undertreated. In particular atrial-secondary tricuspid regurgitation (A-STR), driven by chronic atrial remodelling and annular dilation, may progress insidiously. Due to the ability of the right ventricle to tolerate and compensate chronic volume overload, patients often remain asymptomatic for prolonged periods. Delayed clinical manifestations will obscure disease severity and contribute to late presentation and limited treatment options.

**Case presentation:** We present the case of a 78-year old male patient with longstanding AF, treated with anticoagulants after failed electrical cardioversion, and initially mild TR. Serial echocardiographic follow up demonstrated progressive right atrial and ventricular dilation with worsening TR, evolving from mild to severe which was consistent with annular dilation. At the time of diagnosis he already presented signs of venous congestion and right-sided chamber dilation. Despite New York Heart Association (NYHA) class II-III dyspnea, the patient reported only a low subjective symptom burden and declined further diagnostic workup and interventional treatment. Within a few months the patient rapidly deteriorated and was admitted to the emergency department with decompensated right heart failure and marked signs of systemic congestion. **Case particularities:** This case demonstrated the characteristic clinical course of the A-STR marked by a prolonged period of clinical compensation followed by sudden deterioration. The right ventricle could initially maintain cardiac output despite chronic volume overload due to its high compliance and good adaptive mechanisms. However, once those compensatory mechanism were exhausted, even minor external stressors led to sudden decompensation and hemodynamic deterioration. Elevated right atrial pressures were transmitted to the systemic circulation, resulting in significant venous congestion affecting multiple organ systems. In this setting, the primary driver of organ failure was venous congestion rather than the reduced cardiac output, ultimately leading to cardiorenal syndrome. A self-perpetuating cycle of fluid retention and volume overload, worsening TR and progressive right heart failure. **Conclusion:** This particular case demonstrates the diagnostic and therapeutic challenges associated with A-STR. The prolonged asymptomatic phase may mask disease progression and structural remodelling processes until abrupt decompensation occurs, at which point treatment options are often limited. It highlights the importance of early recognition and careful monitoring, even in patients with low symptom burden. Timely evaluation and consideration of intervention are crucial to prevent delayed treatment, irreversible right heart damage and adverse outcomes such as cardiorenal syndrome.

**Keywords:** Tricuspid regurgitation, atrial fibrillation, atrial secondary tricuspid regurgitation, right heart failure, cardiorenal syndrome

---

## EVALUATION OF METABOLIC PROFILE IN HYPERTENSIVE PATIENTS

Sumaya Mohamed Ali<sup>1</sup>, Emma Murariu-Gligor<sup>2</sup>, Carmen Caldararu<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Internal Medicine , UMFST Tîrgu Mureş

**Background:** The Hepatic Steatosis Index (HSI) and Triglyceride-Glucose (TyG) index are simple, non-invasive markers for assessing liver fat accumulation using routine clinical and biochemical parameters. Their possible association with hypertension has gained growing attention as metabolic dysfunction, manifested also as the development of hepatic steatosis, may contribute to elevated blood pressure through mechanisms like insulin resistance and chronic inflammation. **Objectives:** Our study aimed to evaluate the Hepatic Steatosis Index and Triglyceride-Glucose Index in patients with arterial hypertension and documented hepatic steatosis. **Material and method:** A retrospective study was conducted using medical records of patients hospitalized between 01.01.2024 and 31.12.2025 in the Internal Medicine Department of Mureş County Hospital, Romania, with the diagnosis of Hepatic Steatosis (ICD code: K76.0). Exclusion criteria consisted of patients with an inflammatory syndrome in the context of systemic infection that required antibiotherapy, advanced hepatic diseases such as cirrhosis, absence of hypertension, and incomplete records. Collected data included lab workup (complete blood count, liver function tests, lipid profile, inflammation markers). Indexes derived from the collected data were calculated, such as Hepatic-Steatosis index (HSI), Neutrophil-to-lymphocyte ratio (NLR), Platelet-to-lymphocyte ratio (PLR), Systemic Immune-Inflammation Index (SII), and lipid profile-derived indexes such as Triglyceride-Glucose (TyG) index. **Results:** A total of 48 patients diagnosed with both arterial hypertension and hepatic steatosis were identified. When stratified by the degree of hypertension, no significant differences were observed in the mean or median values of HSI, TyG, NLR, PLR, or SII. However, when patients were grouped according to their associated cardiovascular risk, significantly higher mean TyG values were found in the very high and high cardiovascular risk groups ( $8.75 \pm 0.65$  and  $9.05 \pm 0.73$ , respectively) compared to the moderate-risk group ( $8.49 \pm 0.35$ ), with p-values of 0.037 and 0.047, respectively. Additionally, NLR was significantly elevated in the very high cardiovascular risk group, with a median of 3.27 (IQR 2.52–4.29), compared to 2.12 (IQR 1.45–2.82) in the moderate-risk group ( $p = 0.0327$ ). Furthermore, mean LDL-cholesterol levels exceeded guideline-recommended values across all cardiovascular risk categories:  $96.88 \pm 41.28$  in the very high-risk group,  $113.58 \pm 22.28$  in the high-risk group, and  $125.82 \pm 49.09$  in the moderate-risk group. **Conclusion:** Our findings support the concept of a metabolic continuum in the evaluation of cardiovascular disease. Hypertensive patients with very high associated cardiovascular risk exhibit a more pronounced inflammatory status, as indicated by elevated NLR values, along with greater metabolic dysregulation, reflected by higher TyG index levels. These results further emphasize the importance of achieving recommended lipid targets in patients at very high cardiovascular risk.

**Keywords:** Hepatic Steatosis, Hypertension, Hepatic Steatosis Index

---

## THE FUCHS SYNDROME, IS IT WORTH THE DISTINCT CLINICAL RECOGNITION?

Charlotte Sophie Staubach<sup>1</sup>, Maria Oana Sasaran<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Pediatrics , UMFST-UMCH Hamburg

**Background:** The Fuchs Syndrome, as it is called in German-speaking countries, or erythema multiforme major, as it is known in the rest of the world, is a rarely diagnosed dermatological syndrome. It is mostly triggered by infections and should not be confused with the ophthalmological Fuchs Syndromes. It is discussed as an immune-mediated reaction followed by mucosal changes affecting any population during or after an infection, the most common ones being *Mycoplasma pneumoniae* and Herpes simplex. The typical location triad includes the oral, ocular, and genital mucosa, with the skin being un- or slightly affected. The clinical picture shows erythema with erosions and ulcerations, accompanied by flu-like symptoms in the prodromal phase (fatigue, fever, malaise, and vomiting), as well as additional ocular manifestations, such as conjunctivitis. The mucosal manifestations happen secondarily, one to two weeks after the primary prodromal phase, and can cause excruciating pain, which may lead to decreased liquid and food intake and negatively impact the patient's quality of life. **Case presentation:** In this case series, three pediatric patients, the age ranging from six to sixteen, are described presenting with similar symptoms and courses of the Fuchs Syndrome, following a *Mycoplasma pneumoniae* infection. These involved the

oral and ocular mucosa, with bilateral conjunctivitis, as well as one patient presenting with additional genital mucosal involvement. All three cases presented with systemic complaints, including fever and flu-like symptoms, and pivotal gastrointestinal manifestations in two patients. They occurred over the span of eleven months in 2024, during a *Mycoplasma pneumoniae* outbreak in Germany. Before the diagnostic results were obtained, the treatment was already initiated to shorten the duration and reduce the severity. The initial treatment included antibiotics and antivirals, as long as the associated trigger was unknown, analgesia, and fluid replacement therapy. Additionally, two cases received intravenous corticosteroids and/or immunoglobulins after the diagnosis was made. Concerning the topical therapy, the patients received Lidocaine-containing mouth sprays, antibiotic- and corticosteroid-containing eye drops, as well as Panthenol-containing ointments. The diagnosis was based on the obligatory typical mucosal involvement, with minimum presence at two sites, and on the presence of *Mycoplasma pneumoniae* in the patient's serum or nasopharyngeal swab. **Case particularities:** The diagnostic challenges mainly refer to a postponed diagnosis, since the mucocutaneous lesions may be minimal and can have a delayed onset. Additionally, the misdiagnosis as Toxic epidermal necrolysis is of importance and faces a widely-recognized challenge in the pediatric practice. **Conclusion:** The goal of this case series is to show the diversity and positive outcomes of the early diagnosis and treatment, and the sole recognition of the Fuchs Syndrome. Thus, the prompt diagnosis of this condition ensures an early therapeutic management; However, there is no current specific treatment protocol recommendation.

**Keywords:** fuchs syndrome, mycoplasma pneumoniae, misdiagnosis, mucosal involvement

## AUTONOMY VERSUS INFLUENCE: ETHICAL CONSIDERATIONS IN BARIATRIC SURGERY FOR A PATIENT WITH DOWN SYNDROME.

Pablo Antonio Martínez Peña<sup>1</sup>, Hadassa Claudia Muller<sup>1</sup>, Flavius Mocian<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Surgery , UMFST Tîrgu Mureş

**Background:** Surgery, especially sleeve gastrectomy, is a good way to treat severe obesity because it helps people lose a significant amount of weight and improves other health problems. As the American Society for Metabolic and Bariatric Surgery emphasizes, a psychological evaluation and informed consent are necessary before surgery. Dilemmas arise when patients have cognitive impairment, as occurs in Down syndrome, where decision-making capacity may be limited and external influence becomes more pronounced. **Case presentation:** We present the case of a 25 years old female patient with Down syndrome and significant obesity who underwent the sleeve gastrectomy surgery. Preoperative data, gathered via a standardised preoperative monitoring instrument, revealed an elevated BMI with a value of 35.1 kg/m<sup>2</sup> (Obesity Class II) and corresponding comorbid risks. The patient's choice to undergo surgery seemed significantly influenced by her mother who is her legal representative and expressed concerns about long-term health risks and social integration. After the surgery, the patient showed measurable weight loss going from 92kg to a minimum of 53kg (which is still her actual weight) and some improvement in symptoms related to obesity. However, the preoperative assessment did not include a structured evaluation of decisional capacity or a thorough psychological assessment specifically designed for cognitive disability, which raises questions about the validity of informed consent. **Case particularities:** This case underscores a significant ethical quandary: to what degree can bariatric surgery be warranted when patient autonomy may be jeopardised. Evidence from PubMed-indexed studies suggests that individuals with intellectual disabilities may derive benefits from bariatric procedures, such as sleeve gastrectomy, achieving outcomes similar to those of the general population when appropriately selected. Nonetheless, these studies consistently emphasise the imperative of a multidisciplinary evaluation, encompassing psychiatric and cognitive assessments, to ascertain that the patient's consent is congruent with their best interests. The lack of standardised protocols for evaluating decision-making capacity in these patients results in ambiguity in clinical practice. Family involvement is important, but too much influence can hurt the patient's freedom and raise legal and medical issues. **Conclusion:** This case highlights the necessity for more stringent preoperative evaluation protocols for bariatric candidates with cognitive impairments. It should be required to do a psychological and ethical tests to tell the difference between informed consent and outside pressure. Setting clear rules will help find a balance between doing good and respecting a person's freedom, making sure that surgical procedures are both medically necessary and morally right.

**Keywords:** Bariatric surgery, sleeve gastrectomy, Down syndrome, informed consent, decision-making capacity

---

## DIAGNOSTIC AND THERAPEUTIC CHALLENGES IN SPONTANEOUS INTRACRANIAL HYPOTENSION SYNDROME COMPLICATED BY CEREBRAL VENOUS THROMBOSIS

Anja Roscia<sup>1</sup>, Laura Iulia Bărcuțean<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Neurology, UMFST-UMCH Hamburg

**Background:** Spontaneous intracranial hypotension (SIH) represents a rare cause of secondary headache. The occurrence of cerebral venous thrombosis (CVT) is rare and is thought to be secondary to the compensatory expansion of the cerebral venous system. We report a case of SIH with the subsequent development of CVT, followed by a spontaneous spinal epidural hematoma (SSEH) during anticoagulation treatment. **Case presentation:** A 36-year-old male smoker presented to the emergency department (ED) due to severe orthostatic headache after a sneezing episode. His clinical condition was considered a first migraine attack, and he was discharged with analgesics. His ongoing symptoms led to a general practitioner consultation and a second presentation to the ED, with discharge on continued analgesic therapy and the recommendation to proceed with the scheduled brain magnetic resonance imaging (MRI). The outpatient brain MRI revealed diffuse pachymeningeal enhancement indicative of SIH, along with extensive CVT. Anticoagulation was started upon admission. A few days later, the patient experienced severe acute thoracolumbar pain. Urgent spinal MRI demonstrated an extensive anterior epidural hematoma from T7 to L2, which led to immediate cessation of anticoagulation. This was followed by a worsening headache, and imaging revealed progression of the venous thrombosis into both cavernous sinuses. Intravenous heparin was carefully initiated under close neurosurgical supervision, resulting in partial reduction of the CVT and regression of the epidural hematoma. The differential diagnosis for the SSEH included a spinal longitudinal epidural collection (SLEC), which could not be confirmed due to the lack of specific imaging modalities. **Case particularities:** This case illustrates the stepwise development of SIH, CVT, and SSEH, each a rare condition, followed by the progression of the CVT upon anticoagulation discontinuation. **Conclusion:** This case highlights the clinical challenge and the need for a multidisciplinary approach to balance the thrombotic against the hemorrhagic risk in patient care. Diagnosis of SSEH is challenging, particularly in the absence of hemorrhage-specific imaging modalities on the MRI.

**Keywords:** spontaneous intracranial hypotension, cerebral venous thrombosis, spinal epidural hematoma

---

## CASE REPORT: DELAYED DIAGNOSIS OF ECTOPIC PREGNANCY ASSOCIATED WITH AN ATYPICAL SS-HCG PATTERN

Maya Asabea Ottenstreuer<sup>1</sup>, Lucian Puscasiu<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Gynecology, UMFST-UMCH Hamburg

**Background:** Ectopic pregnancy is defined by a fertilized ovum implanted outside of the uterus, representing one of the leading causes of maternal death in the first trimester of pregnancy. Diagnostic methods include transvaginal ultrasound and serial  $\beta$ -human chorionic gonadotropin ( $\beta$ -hCG) measurements. Although it is routinely performed, diagnostic challenges often delay diagnosis. Clinical presentation is often nonspecific, including symptoms of abdominal pain and vaginal bleeding, which makes clinical diagnosis more difficult. Atypical patterns of  $\beta$ -hCG measurement may lead to misinterpretation and delayed diagnosis, increasing the risk of complications such as intrabdominal bleeding, hemodynamic instability and the need for surgical interventions. **Case presentation:** We report a case of a 26-year-old female patient presenting with a positive pregnancy test, unknown gestational age, with lower abdominal pain and mild vaginal bleeding. Initial assessment showed nonspecific ultrasound findings and low  $\beta$ -hCG levels. Serial  $\beta$ -hCG measurements demonstrated an atypical pattern. The patient was released from the hospital due to a decrease in physical symptoms and was planned to come back for outpatient follow-up measurements of  $\beta$ -hCG. One day later, she presented to the emergency department with increasing lower abdominal pain without vaginal bleeding. A repeated transvaginal ultrasound showed free intraperitoneal fluid and suspicion of ectopic pregnancy. A surgical intervention, including salpingotomy, was performed, confirming tubal ectopic pregnancy. **Case particularities:** This case shows the diagnostic difficulties associated with atypical  $\beta$ -hCG values, which may give false reassurance when interpreted in isolation. Even in the absence of a definitive imaging diagnosis, the presence of abdominal pain, vaginal bleeding and unknown early gestational age should

raise high suspicion of ectopic pregnancy and suggest an earlier correct diagnosis. The case demonstrates the limitations of relying mostly on biochemical markers and the importance of including clinical assessment, gradual follow-up of  $\beta$ -hCG levels, and imaging findings. In this case, delayed correct diagnosis led to clinical deterioration and limited opportunities for conservative management. **Conclusion:** Even though ectopic pregnancy is a common diagnosis and often seen in clinical work, it remains a diagnostic challenge. This is seen especially in cases of early gestational age and atypical biochemical findings. This case underlines the importance of careful interpretation of serial  $\beta$ -HCG measurements and the need for strict follow-up in pregnancies of unknown location. Early diagnosis and high suspicion in symptomatic patients are essential to prevent delayed diagnosis, reduce complications, and allow potential conservative management, which might reduce patient burden.

**Keywords:** Ectopic Pregnancy, Delayed Diagnosis,  $\beta$ -hCG Pattern

## AXILLARY MANAGEMENT AFTER NEOADJUVANT CHEMOTHERAPY IN BREAST CANCER: A CLINICAL STUDY

Ronald-Jozsef Felei<sup>1</sup>, Rares Georgescu<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureş

<sup>2</sup>Department of Surgery , UMFST Tîrgu Mureş

**Background:** Neoadjuvant chemotherapy serves as a treatment option that reduces breast cancer tumors and influences surgical requirements for patients. The surgical approach following neoadjuvant treatment requires both breast and axillary procedures which result in multiple surgical treatments that impact the duration of patient hospital stay and their initial recovery process. **Objectives:** To analyze how different combinations of breast and axillary surgical procedures affect postoperative length of hospital stay in patients with breast cancer treated with neoadjuvant chemotherapy. **Material and method:** The research studied 271 women with invasive breast cancer who underwent surgery after receiving neoadjuvant chemotherapy at the same hospital between 2017 and 2025. Data cleaning preceded all analyses. The study extracted two variables which included the type of breast surgery performed and the axillary approach that used either axillary lymph node dissection or sentinel lymph node biopsy or no procedure documented. **Results:** ALND appeared in 146 cases which accounted for 53.9% of the total cases. SLNB was used in 104 cases which represented 38.4% of the total cases. 21 patients (7.7%) had no axillary procedure on record. 130 patients underwent mastectomy (48.0%) while 120 (44.3%) patients had breast-conserving surgery and 21 (7.7%) patients did not fit into these two surgical methods. The research studied the length of hospital stay for 195 patients who had both surgical procedures and complete hospital stay records. Breast-conserving surgery with SLNB produced the shortest stays which averaged 3.58 days and had a median duration of 3 days that extended from 2 to 7 days. Conservative surgery with ALND produced a mean stay of 3.97 days and had a median duration of 4 days that extended from 2 to 7 days. Both mastectomy groups showed similar results with their SLNB procedure resulting in 4.31 days (median 4, range 2–11) and their ALND procedure resulting in 4.32 days (median 4, range 2–21) duration. **Conclusion:** Breast-conserving surgery combined with SLNB resulted in the shortest hospital stay while mastectomy combined with ALND resulted in the longest hospital stay. The study results demonstrate that analyzing both breast and axillary surgical procedures together enables better understanding of the factors that determine hospitalization duration for breast cancer patients who underwent neoadjuvant chemotherapy.

**Keywords:** breast cancer, neoadjuvant chemotherapy, ALND, SLNB, axillary management

## AN UNEXPECTED GYNECOLOGIC MALIGNANCY AFTER ACUTE URINARY RETENTION

Yvana Clos<sup>1</sup>, Lucian Puscasu<sup>2</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Gynecology , UMFST-UMCH Hamburg

**Background:** Vaginal squamous cell carcinoma shows up rarely among gynecologic cancers, only about one or two out of every hundred cases. Symptoms tend to blend in with common urinary or genital conditions, so detecting it early can be difficult. In women already having had a hysterectomy, doctors might overlook cancer at first, because they do not initially suspect it. That hesitation sometimes stretches out the diagnosis. **Case presentation:** A 52-year-old postmenopausal woman presented to the department with an acute urinary retention after taking oral ciprofloxacin for five days, having been prescribed by the family physician for a suspected urinary

tract infection. Although lab tests showed no signs of infection, she reported dysuria, along with abdominal discomfort and lower back pain, for about seven days. Years before, at the age of 35, she had undergone abdominal hysterectomy with adnexal preservation due to endometriosis and recurrent abnormal cervical cytology. Since the operation, she had no gynecological follow-ups. Gynecological examination revealed vaginal atrophy and she started bleeding once the speculum was inserted. The ultrasound was inconclusive, unlike the CT urogram, which clearly showed a left paravesical cystic mass, measuring 48 x 45 mm, compressing the bladder. Since an adnexal inflammation couldn't be ruled out, a bilateral adnexectomy was performed and a biopsy of the anterior vaginal wall was obtained. Histopathology confirmed high-grade squamous intraepithelial lesions. The diagnosis of a p16-positive squamous cell carcinoma with metastases of the left adnexal tissue was made. The lymph nodes were clear. The cancer was stage IV, according to the FIGO classification. Two days after the laparoscopic right completion salpingectomy with the left adnexectomy, the patient started to deteriorate. A sigmoid colon perforation with a fecal peritonitis and sepsis was diagnosed, requiring an emergency laparotomy. The Hartmann's procedure was performed and the patient was sent to the intensive care unit afterwards. Once stabilized, she was transferred to an oncological center in Kassel. They started treating her with a cisplatin-based chemotherapy followed by VMAT radiotherapy. The full treatment plan was completed despite the fact that the patient started having complications like urinary and mucosal toxicities. **Case particularities:** This case stands out because the primary vaginal squamous cell carcinoma presented in an atypical way, being first mistaken for a urinary tract infection. The lack of regular gynecological follow-ups over time, along with earlier hysterectomy, might have contributed to delaying the diagnosis. **Conclusion:** When a woman presents with urinary or pelvic symptoms, primary vaginal carcinoma should be considered as a differential diagnosis, especially if the laboratory findings seem to be normal and are not indicating a urinary tract infection. A gynecological referral might help to diagnose a pathology that elsewhere could be missed. An early multidisciplinary team can improve the management. Fast diagnosis and treatment are essential for optimal outcome. Furthermore, patients should be encouraged to attend regular gynecological and other preventive check-ups regularly.

**Keywords:** Primary vaginal squamous cell carcinoma, Acute urinary retention, p16 positive, Gynecologic malignancy, Case report

## THE ROLE OF TRUST IN DOCTOR-PATIENT COMMUNICATION

Mihaela-Cristina Crețu<sup>1</sup>, Dorina Maria Pașca<sup>2</sup>

<sup>1</sup>UMFST Tîrgu Mureș

<sup>2</sup>Department of Ethics and Social Sciences, UMFST Tîrgu Mureș

**Background:** In the medical context (hospital setting), trust plays a crucial role in doctor patient communication, providing a substantial benefit to therapeutic success. The manner of communication, as well as adapting tone and language to the patient's emotional state, can contribute to increasing the patient's level of trust in the medical procedure itself. **Objectives:** The primary objective of the present research is to evaluate the role of trust from the perspective of doctor patient communication and relationship dynamics, identifying the factors that promote its strengthening. **Material and method:** To conduct the proposed study, a structured online questionnaire was used as a method of psychological and social investigation, with data collected through Microsoft Forms and Google Forms over the period from October 2025 to March 2026. Two questionnaires were administered to both doctors and patients as the target group, with the sample consisting of 112 respondents (in equal numbers). **Results:** The results obtained from this investigation showed that the majority of participating patients (87.5%) trust their treating physician. From the data obtained, it was found that 91.1% of the patients considered communication to be a very important factor that can influence not only their understanding but also their acceptance of the diagnosis. Most participating doctors indicated that the approach to communication is shaped more by the patient's emotional state than by the nature of the diagnosis (40.2%). In relation to the adaptation of language and tone based on the patient's reactions during the communication of the final diagnosis, 29.5% of physicians reported doing so to a very large extent, while an additional 22.3% indicated doing so to a large extent. **Conclusion:** The applied study demonstrates that integrating trust into the process of communication and relationship dynamics between doctor and patient, enhances the quality of the medical interaction, as well as how patient centered communication improves the therapeutic relationship.

**Keywords:** Trust, Communication, Tone, Language, Patient

## THE ROLE OF INTERLEUKIN-6 AND FIBRINOGEN DEGRADATION PRODUCTS AS A POSSIBLE FEEDBACK MECHANISM IN HEPATIC PLASMINOGEN AND THROMBOPOIETIN BIOSYNTHESIS

Ivan Bergo<sup>1</sup>, Amelia Tero-Vescan<sup>2</sup>, Ylenia Pastorello<sup>3</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Department of Biochemistry, UMFST Tîrgu Mureș

<sup>3</sup>Department of Anatomy, UMFST Tîrgu Mureș

**Background:** Interleukin 6 (IL6) is a proinflammatory cytokine responsible for inducing hepatic acute phase protein biosynthesis. It was also demonstrated however, that IL6 induces hepatic biosynthesis of plasminogen, thrombopoietin (TPO) and fibrinogen. In the 1980s, IL6 was first characterized as part of the Fibrinogen degradation products (FgDP)-IL6-fibrinogen pathway, a feedback mechanism responsible for inducing fibrinogen biosynthesis when fibrinogen is degraded by plasmin into its degradation products. A recent study, published in October 2025, hypothesized a role for these FgDP in the feedback biosynthesis of TPO and plasminogen. **Objectives:** The objective of this abstract is to gather and present bibliographic evidence in favor of a possible FgDP-IL6-plasminogen and FgDP-IL6-TPO pathway. **Methods:** A thorough bibliographic analysis has been conducted on PubMed central and google scholar. 30 articles, published from 1950 onwards, containing the following keywords "Fibrinogen biosynthesis", "Plasminogen biosynthesis", "Thrombopoietin", "Interleukin 6" and "Fibrinogen degradation products", have been used for this state-of-the-art literature review. **Results:** FgDP have been studied extensively throughout the 1980s, with multiple studies suggesting and demonstrating a role in inducing IL6. FgDP are formed when plasmin, following its activation via tissue plasminogen activator, degrades fibrinogen into its degradation products. TPO synthesis has historically been attributed to a simple feedback mechanism underlying TPO uptake by circulating thrombocytes. Low thrombocyte count leads to low TPO uptake and subsequently higher circulating levels of the thrombocyte-stimulating hormone, whilst high thrombocyte count leads to increased uptake and low circulating levels of TPO. Recently published studies, however, demonstrated that IL6 can induce TPO synthesis in hepatocytes via a JAK2-STAT3 signaling cascade. The regulation of plasminogen biosynthesis by IL6 has also been demonstrated multiple times, with plasminogen being included

amongst the acute phase proteins. Whilst no experimental evidence exists connecting the induction of IL6 by FgDP to the stimulation of TPO and plasminogen by IL6, the idea itself is not far-fetched. Nevertheless, multiple elements still need to be elucidated, such as if the IL6 level induced by FgDP would be high enough to induce TPO and plasminogen biosynthesis. **Conclusion:** No direct experimental evidence exists connecting FgDP to plasminogen and TPO; yet it remains an interesting hypothetical concept that should be studied in the future. Experimental studies are needed to analyze not only if such pathways are feasible as possible feedback mechanisms, but also if FgDP induced IL6 levels would be high enough to justify their role in a physiological setting

**Keywords:** Fibrinogen biosynthesis, Plasminogen biosynthesis, Fibrinogen degradation products, Interleukin 6, Thrombopoietin

## REDO BILATERAL LUNG TRANSPLANTATION FOR CHRONIC LUNG ALLOGRAFT DYSFUNCTION IN CYSTIC FIBROSIS WITH SEVERE COMORBIDITIES: A CASE REPORT ON RISK-BENEFIT ASSESSMENT AND PERIOPERATIVE MANAGEMENT

Dennis Pelih<sup>1</sup>, Jan Hinnerk Stange<sup>2</sup>, Mate Stojanovski<sup>3</sup>

<sup>1</sup>UMFST-UMCH Hamburg

<sup>2</sup>Palliative Care department, UMFST – Partner Hospital

<sup>3</sup>Department of Pulmonology, UMFST – Partner Hospital

**Background:** Chronic lung allograft dysfunction (CLAD) is one of the most common long-term complications and leading cause of late mortality and morbidity after lung transplantation. It is a persistent functional decline which is classified into categories: bronchiolitis obliterans syndrome (BOS), restrictive allograft syndrome (RAS) and or the mixed form. Ultimately, the main approach of therapy will lead to a redo lung transplantation, which is particularly challenging for patients with high comorbidity burden, especially in patients with cystic fibrosis, since increased exposure to multisystemic comorbidity is associated with peri and post-operative risks. **Case presentation:** Presented is a 45-year-old female patient with cystic fibrosis with a history of bilateral lung transplantation due CF end stage respiratory disease in 2016. Despite initial improvement of pulmonary function, the patient developed a marked reduction in pulmonary function and was diagnosed with BOS-phenotype CLAD three years later. The development was characterized by a decline of forced expiratory volume in one second (FEV1) with the simultaneously development of dyspnea, recurrent respiratory infections and increased oxygen demand. Gradually, all attempts of non-surgical management strategies to reduce CLAD progression were exhausted. The patient experienced further functional decline, to such an extent that reconsideration for a redo bilateral lung transplantation had to be initiated. Relevant comorbidities are chronic kidney disease, cystic fibrosis related diabetes, hepatobiliary diseases, malnutrition, and hypergammaglobulinemia associated with chronic infections. Eventually, severe decline of FEV1 led to redo bilateral lung transplantation in the beginning of November 2025. **Case particularities:** Performing redo bilateral lung transplantation is rare and accounts a small portion of all lung transplantation and is commonly in setting of CLAD. This case illustrates the complexity of candidate selection in a patient with cystic fibrosis, as well as the importance of individualized perioperative management in a patient of CF-related comorbidities, requiring a multidisciplinary risk benefit assessment. **Conclusion:** This case report demonstrates that redo bilateral transplantation can still be considered as a therapeutic option in carefully selected patients with cystic fibrosis with advanced CLAD characteristics, provided that the overall assessment is precise and all comorbidities are managed individually in the perioperative period.

**Keywords:** Lung re-transplantation, Chronic lung allograft dysfunction, Cystic fibrosis

# INDEX OF AUTHORS

---

## A

Aalto Daniela 65  
 Abdullatif Hassan Ahmad 36, 55  
 Abdullatif Hassan Muhamad 55  
 Al Falah Manar 36  
 Ali Sumaya Mohamed 72  
 Almasy Eموke 58  
 Alshayeb Ali Abdulraoof Abdulla A A 36, 55  
 Andree Christoph 33  
 Andree Nora 33  
 Ayala Alamo Frank Enrique 63

## B

Balasa Adrian 66  
 Balasa Rodica 39  
 Balmos Ioan-Alexandru 41, 61  
 Ban Erika-Gyongyi 14  
 Ban Erica 51  
 Ban Erika 65  
 Ban Erika-Gyongyi 16, 25, 28  
 Baniás Laura 41, 45, 49  
 Barcutean Laura 5, 17, 39, 63  
 Barcutean Laura Iulia 74  
 Bartsch Isabelle 16  
 Bauer Orsolya 19, 24, 27  
 Baur Anton Sebastian 2  
 Bechir Farah 36  
 Beizaga Aguilar Ariana Patricia 11  
 Bender Dominik Alexander 25  
 Bergo Ivan 77  
 Bitzan Jana Karlina 13  
 Bodnar Nina Ioana 57  
 Boeriu Cristian 64  
 Bogris Angelica Thuy Mi 6  
 Botianu Sef lucr. dr. Petre Horea Vlah 30  
 Branea Oana - Elena 2  
 Branea Oana-Elena 17, 18  
 Braun Philip 51  
 Bredeck Paula 57  
 Bruder Oliver 57  
 Brunelli Bianca 22  
 Burlacu Ema 67  
 Butiu Otilia 6  
 Butiulca Mihaela 70, 71

## C

Caciula Teodora 23  
 Caldararu Carmen 72  
 Caluser Andrada Lavinia 21, 54  
 Caluser Lavinia Andrada 23  
 Carasca Cosmin 26  
 Cascaval Andreea - Daniela 12  
 Ceban Alexandre 39  
 Chinezu Dr. Rares 36  
 Chis (Copotou) Monica 29  
 Chis Monica 62, 68

Christoph Werry 40  
 Clos Yvana 75  
 Coello Novoa Oscar 47  
 Company Chulia Fernando 40  
 Cretu Mihaela-Cristina 77  
 Cucerea Manuela Camelia 45

## D

Derzsi Zoltan 59  
 Desiderio Gaia 26  
 Di Nella Eulalia 10  
 Dobru Daniela 54  
 Dobru Daniela 63  
 Dobru Daniela Ecaterina 21  
 Dobru Ecaterina-Daniela 23

## E

Einsiedler Jonas 47  
 Elmeligy Haytham 38  
 Elsaafin Mahmoud 53  
 Engelmann-Aldea Iulian 2  
 Erika Gyongyi Ban 22  
 Espina Prieto Sara 38  
 Eszter Anna Nagy-DHO 22

## F

Felei Ronald-Jozsef 75  
 Fischmann Joseph 4  
 Fons Jose Valles 28  
 Forster Evita 26  
 Fries Michael 28  
 Fugazza Greta 45  
 Furgler Simon 12

## G

Galizia Veronica 33  
 Gambera Marco 31  
 Garafulla Cruz Ana 5, 17  
 Gausepohl Hans-Jurgen 16  
 Genova Pezzella Achirópita Benedetta 8  
 George Dennis 66  
 Georgescu Rares 75  
 Gerlach Florentine 70  
 Gliga Maximilian 34  
 Gliga Maximilian Cosma 2  
 Gliga Maximilian-Cosma 7  
 Gurzu Simona 41, 45  
 Gyongyi Ban Erika 4

## H

Halatiu Bogdan 41, 61  
 Hartzo Erik 41, 61  
 Haselwanter Lea 71  
 Hassan Sumaya 64

## INDEX OF AUTHORS

---

Haugg Johannes 23  
Hohne Aaron 28

### I

Iacob Alina 55  
Ilieva Dilyana 60  
Isorna del Rio Malena 30

### K

Karamarkou Christina 57  
Kattan Mohammad 36  
Keresztes Matild 17  
Kertmen Ercan 24  
Kind Aliz 58  
Kirchlechner Christine 57  
Klein Michael 28, 43  
Kobori Marton 14  
Kobori Marton 16  
Kotterba Sylvia 8  
Kovacs Karl Tas 14, 16  
Krause Alicia 68  
Krause Nadine Stefanie Paulina 69

### L

Lapuerta Lucas 19  
Lazar Alexandra - Elena 2

### M

Madaras Timea 8, 10  
Maier Smaranda 46  
Maier Smaranda 31, 39, 55  
Mares Cristina Roxana 53  
Marginean Oana Cristina 67  
Markus Peter 6  
Martinez De Paz Fernando Alexander 42  
Martinez Pena Pablo Antonio 73  
Mattern Juri 59  
Matuschowitz Florian 61  
Mavaji Darya 6  
Meinel Tobias-Richard 41  
Menchi Marouane 42  
Merkle Sabrina 27  
Merschmann Sara 31  
Messner Elisabeth 34  
Mihai Adriana 9, 15  
Mocian Flavius 73  
Modiga Andrei 31  
Moldovan Diana 47  
Moldovan Diana Andreea 49  
Moldovan Flaviu 20, 32, 44, 69  
Morarevic Milos 44  
Moya Guerra Reimy Matias 52  
Muller Hadassa Claudia 73  
Mura Marta 21  
Murariu-Gligor Emma 72

Murariu-Gligor Emma-Eugenia 68  
Muresan Simona 60

### N

Nagy-Dho Eszter-Anna 48  
Nassar Ali 43  
Nemes-Nagy Eniko 33  
Nettis Davide 48  
Ngo Duong Minh Duc 21  
Nguyen Khac-Hien Steven 66  
Niamat Sada Pritam Mattu 54  
Niamat Sapana Pritam Mattu 53  
Noor Salmo Osman 56  
Nottbusch Franziska 43

### O

Oberhofer Eva 57  
Openkowski Laura 49  
Ottentreuer Maya Asabea 74

### P

Pantea Roxana 67  
Parlea Stefania-Ana 53  
Pasca Dorina Maria 77  
Pastorello Ylenia 77  
Pelih Dennis 78  
Pepparelli Antoniacopo 15  
Perez Vila Mireia 39  
Peters Gustav 52  
Peters Gustav 38, 43  
Pfeiffer Annika Ulrike 49  
Poepfel Kai-Uwe 19  
Pop Marian 61, 66  
Portulano Arianna 7  
Preg Zoltan 33  
Puscas Dr. Monica Marcela 12  
Puscasiu Dr. Prof. Lucian 11  
Puscasiu Lucian 35, 74, 75

### Q

Qazzaz Fausi 29

### R

Rasuli Sarah 55  
Reitmeier Frank 61  
Robillotta Giuseppe Biagio 62  
Roca Oriol 51  
Roscia Anja 74  
Rundine Carlo 32  
Rungger Klemens 10

### S

Salas Gallego Ana Maria 46

## INDEX OF AUTHORS

---

Sandor Stefania Lilla 14  
 Sandor Stefania Lilla 14  
 Sasaran Maria Oana 72  
 Sasaran Vladut-Bogdan 14  
 Sawade Linus 24  
 Schaffter Yasmin 4, 51  
 Schmal Hanna-Marie 70  
 Schmidbauer David 28, 51  
 Schollhorn Felix 18  
 Shohar Elias 41  
 Spielhaupter Carla Maria 45  
 Spiller Nele 24  
 Stange Jan Hinnerk 19, 55, 78  
 Starp Dr. med. Frank 50  
 Starp Frank 24, 27  
 Staubach Charlotte Sophie 72  
 Steiner Kilian Tim 59  
 Stojanovski Mate 78  
 Suciu Claudia-Floriana 56  
 Sulea Dr. Prof Paula-Anca 47  
 Suteu Anda-Cristiana 37

### T

Tero-Vescan Amelia 13, 77  
 Testoni Chiara 9  
 Tilea Ioan 47, 49  
 Togmat Deniz-Danyel 50  
 Tondulli Luca 12  
 Trambitas Cristian 8  
 Trambitas Christian 33  
 Trambitas Cristian 10  
 Trentin Virginia 20  
 Tress Pauline Anna Marie 59  
 Truta Sorana 10, 59  
 Truta Teodora Sorana 3, 64

### U

Uhlig Thomas 51  
 Ureche Corina 14

### V

Vahlhaus-Rutayungwa Veronika 26  
 Valentini Giulia 35  
 Valles Fons Jose 51  
 Varga Andreea 4, 21, 37, 70  
 Varga Dr. Andreea 12  
 Varga Zsanett Lili 17  
 Veber Kinga 68  
 Vultur Florina 23

### W

Wendler Stefanie 3  
 Werner Rascal 8  
 Wuster Mathis 52