MEDRI 2025 CONFERENCE

Second International Student Symposium on Future Doctors Educating the World

PRELIMINARY BOOK OF ABSTRACTS

This Book of Abstracts presents a preliminary compilation of abstracts accepted for the MEDRI 2025 Conference. All abstracts are published in the original form submitted by the authors and have not undergone proofreading or graphic editing. Institutional affiliations are also displayed as provided by the authors. The final version of the Book of Abstracts will be published as a supplement to the scientific journal *Liječnički vjesnik*.

LECTURES

Session S1. SYMPOSIUM SESSION 1

TUTORSHIP IN MEDICAL EDUCATION: EXPERIENCES AND PERCIEVED IMPACT AMONG STUDENTS AND TUTORS

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Aim: Tutorship plays an important role in developing academic, professional and personal competences within the ever-evolving medical education. At the faculty of Medicine, University of Maribor, a two-level tutoring system has been implemented to provide continuous peer support throughout the preclinical and clinical years of study. The system consists of pre-clinical and clinical tutoring, further divided into introductory and subject-based tutoring, as well as internal medicine, surgical and family medicine tutorship. Tutors not only assist peers in academic and clinical trainings but also participate in regular teaching activities within the core subjects *Surgery* and *Internal Medicine with Propaedeutics*, where they conduct practical sessions. Moreover, tutors offer their own elective course, *Selected Topics and Innovations in Propaedeutics*, enabling students to further refine their clinical and communication skills under the guidance of peers and faculty members. Additionally, tutors organize events, such as Clinicfest, a two-day marathon of clinical skills, Mini Clinicfest for preclinical students, "*Where to after medical school?",* a career fair featuring medical specializations, and international workshops for Erazmus students. In addition, tutors engage in research and academic projects, having completed more than 90 student-led research projects and contributing two publications.
This contribution presents the structure, objectives and functioning of the tutoring system at our faculty and highlights its perceived benefits and challenges from the perspectives of both students and tutors.
Materials and Methods: A case-based descriptive approach analysed faculty reports, evaluation reports and feedback form, scientific output to evaluate and further evolve the tutoring system.
Results: Preliminary findings show introductory and subject-based learning supports students not only academically but also personally, facilitating their adaptation to university life. Clinical tutoring places emphasis on the development of professional identity, communication and practical clinical skills. Feedback suggests that students highly value peer support and the opportunity to strengthen teaching and leadership abilities. Moreover, clinical mentors appreciate the preparedness of students upon entering the clinical environment, as they have already practiced essential skills with their tutors.
Conclusion: The tutoring system provides structured support through medical education, strengthens collaborations, contributes to the development of communication, teamwork, and professional competences.

Keywords**:** Peer teaching; Student teaching; Tutoring

Session S2. SYMPOSIUM SESSION 2

SPARKING WONDER – TURNING KIDS INTO CURIOUS SCIENTISTS

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Section for Neuroscience Osijek is a subsection of the Croatian Society for Neuroscience, operating under the Department of Medical Biology at the Faculty of Medicine Osijek. The section consists of 35 members - medical and pharmacy students at the Faculty of Medicine Osijek - young enthusiasts and neuroscience lovers whose goal is to make this field tangible, engaging and accessible to the general public. Each year, we organise Brain Awareness Week in Osijek, filled with new creative ideas and activities for citizens of all ages. The favourite part of our audience is the youngest children, whom we visit in schools and kindergartens and organise competitions and special activities for. Our goal is to awaken curiosity and interest in science from the earliest age, as it stimulates brain development, builds crucial skills such as critical thinking and problem-solving, and fosters a lifelong love of learning. It is well known that children learn, adapt, and create much more rapidly and easily compared to adults. The aim of this lecture is to provide a neuroscientific foundation for understanding how children's attention, motivation, and creativity are gained and maintained. Using examples from our long-standing practice, and evidence-based research, we'll try to offer concrete examples of an approach that nurtures children's potential for problem solving and out-of-the-box thinking and maintaining intrinsic motivation throughout development.
For future physicians, this knowledge can be particularly valuable in improving communication and therapeutic approaches towards the pediatric population, thereby contributing to better outcomes. Certain principles are applicable in enhancing creative thinking and learning among medical students, as well as in designing teaching methods that support creativity, effective encoding, and the development of long-term knowledge.

Keywords**:** Attention; Child Development; Learning; Neurosciences

Session S4. SYMPOSIUM SESSION 3

DO YOU THINK YOU CAN RECOGNIZE A ZEBRA? TAKE THIS RARE OPPORTUNITY AND THINK OUTSIDE THE BOX

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In medical education, we are often told, "When you hear hoofbeats, think horses." Yet every so often, there is a zebra among them. Although each rare disease is uncommon, together they account for 6–8% of all diagnoses, affecting around 30 million people in the European Union alone, and pose a significant challenge to medical education. The Students' Association for Rare Diseases Croatia at the University of Zagreb School of Medicine was established to empower students to develop critical thinking, empathy, and interdisciplinary knowledge while raising awareness of the importance of rare disease recognition and research. This lecture presents the Association's comprehensive educational and volunteer-based approach to medical learning. Through systematic training of new volunteers in research and communication skills, a series of lectures inspired by patients' real-life experiences, the organisation of six multidisciplinary Student Conferences on Rare Diseases, and volunteering in the national Helpline for Rare Diseases, the Association promotes a holistic, patient-centred view of medicine. The activities also encourage engagement with current scientific literature and case reports, enabling students to expand beyond textbook knowledge and outdated frameworks. By integrating education, research, and advocacy, the Association helps future physicians cultivate curiosity, sensitivity, and adaptability – qualities essential for diagnosing and managing rare conditions. This lecture highlights how student-led initiatives can enrich medical curricula and contribute to the long-term improvement of healthcare for patients with rare diseases.

Keywords**:** Awareness; Empathy; Medical Education; Rare Diseases; Students

Session S8. SYMPOSIUM SESSION 5

DIGNIFIED WORKPLACE LEARNING: CHALLENGES, CONSEQUENCES AND CULTURAL CHANGE

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In her talk, Lynn will address workplace dignity as a fundamental, yet frequently violated, principle in healthcare education and practice. In doing so, she will draw on her extensive international research programme spanning nine studies across 18 countries with over 7,000 participants. Through vivid narratives from healthcare students' professionalism dilemmas during workplace learning—those daily events where learners witness or participate in something they believe to be unethical or wrong—she will demonstrate how dignity violations ripple through healthcare systems, affecting patients, students, healthcare professionals, and entire organisations.
Lynn will explore the conceptual challenges of defining workplace dignity from a multicultural perspective, positioning the workplace not merely as a transactional space but as a community where people create meaning in their lives. Using Jacobson's taxonomy and contemporary workplace dignity theory, she will examine how dignity manifests across personal, interpersonal, physical, and organisational dimensions, encompassing both dignity-of-self (damages to identity, violations of bodily integrity, affronts to moral agency) and dignity-in-relation (infringements on autonomy, status, and citizenship). Drawing on research evidence, Lynn will reveal the cascading consequences when dignity is breached: patient disengagement from care, learner professional identity threats and moral injury, and organisational costs with safety implications. Lynn will ultimately consider pathways toward cultural change and our collective responsibility in creating healthcare environments where the dignity affirmed in the Universal Declaration of Human Rights becomes lived reality rather than aspiration.

Keywords: Medical Education; Professionalism; Workplace Dignity

Session S9. SYMPOSIUM SESSION 6

ART THERAPY, HIPOKART SECTION

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HipokArt is a student section of the University of Zagreb School of Medicine dedicated to promoting creative and artistic expression among students. Its goal is to help them take their minds off everyday stress and obligations through creative work. Over the years, HipokArt has organized numerous workshops – including drawing, dance, and origami sessions, as well as social board game gatherings. These activities offer students an opportunity to relax, try out new hobbies, and meet new people in a friendly and open atmosphere.
One of the section's main areas of interest is art therapy. Recently, growing attention has been devoted to the question of whether art can contribute to the treatment of various illnesses – and if so, through which mechanisms. Research has shown that engaging in art can help maintain both physical and mental health: it lowers stress hormone levels, enhances immune function, and improves emotional regulation. Moreover, it helps reduce feelings of loneliness and isolation, strengthens social skills, and fosters a sense of community and mutual support among workshop participants. Art therapy can take many forms, allowing everyone to find an activity that suits them – from music, drawing, and dance to visiting exhibitions or performances. Today, art therapy is used in working with individuals suffering from mental health conditions, as complementary care for patients with neurological disorders, and as a supportive approach in palliative care. The use of art therapy is steadily increasing both worldwide and in Croatia. In conclusion, art therapy represents a cost-effective and efficient therapeutic method that connects the mind, emotions, and body, making it an excellent complement to traditional forms of treatment.

Keywords**:** Art Therapy; Creativity; Mental Health; Psychological Stress; Social Support

SENTINEL OF STUDENTS' MINDS: WHAT LIES BENEATH THE SURFACE – MEDICAL STUDENTS AND THE (IN)VISIBLE STRUGGLES

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Aim: The aim of this presentation is to examine the mental health status of medical students through a dedicated survey and to highlight the psychological burden they experience during their training, as well as to present the results of the Sentinel Uma initiative and their implications for future support systems.
Materials and Methods: A cross-sectional, questionnaire-based survey was conducted among medical students, assessing stress, anxiety, depression, suicidal thoughts, burnout and experiences of unprofessional behaviour by teaching staff. The survey included 200 students from all six years of medical school. Standardised psychometric instruments were used, and quantitative findings were supplemented with qualitative insights that explored students' perceptions of the most demanding components of their academic environment.
Results: The surveyed cohort had an average age of 22 years and consisted predominantly of female students. More than one quarter of respondents reported suicidal thoughts during their studies, while alcohol consumption and the use of psychoactive substances were commonly reported. Female students demonstrated higher levels of depression, anxiety and stress, and emotional difficulties increased with academic progression. The highest stress and anxiety levels were found in third-year students, while those studying away from home showed greater emotional vulnerability. Indicators of burnout were elevated, especially emotional exhaustion, and cynicism increased with advancing study years. Unprofessional behaviour by teaching staff was frequently reported, particularly by students in the later years. More than 40% of respondents had sought psychological support. Qualitative comments emphasised high expectations, strong competitiveness, lack of faculty support, academic overload, perfectionism and challenges in maintaining a work-life balance as key stressors.
Conclusions: This questionnaire-based survey demonstrates a substantial mental health burden among medical students, shaped by academic pressure, institutional culture and insufficient preventive mental health education. The findings highlight the urgent need for systematic, accessible and stigma-free mental health support, including early screening, psychological services, faculty training, curriculum adjustments and resilience-building programmes. Strengthening preventive frameworks is essential to improve student well-being and protect the long-term sustainability of the future healthcare workforce.

Keywords: Anxiety; Burnout; Depression; Medical; Mental Health; Psychological; Stress; Students

WORKSHOP

Workshop session 1

Workshop

I'M REALLY LISTENING! ACTIVE LISTENING AND THE ART OF QUESTIONING IN MEDICAL EDUCATION

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In the dynamic and often high-pressure environment of medical education and clinical practice, effective communication forms the foundation of successful collaboration, knowledge transfer, and learner and peer support. Active listening and the ability to formulate meaningful questions are essential soft skills that foster understanding, trust, and deeper learning. This 60-minute interactive workshop is designed to strengthen the communication competencies of students, educators, and healthcare professionals through the practical application of active listening principles and the linguistic framework of the Meta Model from Neuro-Linguistic Programming (NLP).

The session begins with a brief experiential activity that allows participants to recognize the difference between passive and active listening. This is followed by a concise theoretical and practical overview of the core components of active listening—paraphrasing, summarizing, reflecting emotions, and the mindful use of nonverbal communication.

The central part of the workshop focuses on developing the skill of asking questions that open dialogue, encourage self-reflection, and minimize misunderstanding. Through structured exercises, participants analyse and practice different types of questions (closed, open, clarifying, and blocking), exploring their impact on the quality and flow of educational interaction.

The final segment introduces the Meta Model of language as a tool for precise questioning and message clarification. Working in small groups, participants learn to identify and reformulate common linguistic patterns of generalization, deletion, and distortion, thereby enhancing clarity and depth of communication. Each activity is grounded in experiential learning, supported by structured feedback and guided reflection.

Expected learning outcomes include: (1) increased awareness of the role of active listening in the educational process; (2) the ability to differentiate and apply effective question types; (3) understanding of the basic principles of the Meta Model; and (4) strengthened communication skills essential for educational and team-based work.

The workshop emphasizes practicality and immediate applicability of acquired tools in everyday professional interactions, promoting a culture of listening, understanding, and clear communication within medical education.

Keywords**:** Communication; Medical education; Skills

Workshop

SPREAD THE KNOWLEDGE

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Spread the Knowledge is an interactive workshop designed as a clinical case–based quiz. The session focuses on two relevant infectious disease cases presented through multiple-choice and open-ended questions aimed at assessing and expanding participants' knowledge. The primary goal is to promote education on common and significant infectious diseases while fostering teamwork and clinical problem-solving. Participants will engage in simulated real-life scenarios, progressing through all stages of patient management, from history taking and physical examination to diagnostic procedures and therapeutic decisions in a competitive setting with prizes for top-performing teams. Each group will consist of up to five participants.

The Student Society for Infectious Disease, based at the School of Medicine, University of Zagreb, aims to popularise the field and educate future doctors in infectious diseases (a vital part of primary care) by providing practical and applicable knowledge and skills.

Since its founding in 2018, the Society has realised several projects, including "Volunteer at the Infectious Diseases Clinic" and the panel discussion "COVID – The Vaccine Explained Without Deceptions, Interests, and Delusions" (2020/2021), viewed by more than 6,500 people. In the first project, 42 medical students volunteered over 6,400 hours at the Dr. Fran Mihaljević University Hospital for Infectious Diseases during the epidemic peak, assisting in the care of nearly 20,000 patients, for which they received the University Rector's Commendation.

Since its inception, the Society has also continuously run "On Call at the Infectious Diseases Clinic", a mentorship-based project pairing each student with a clinician for an entire shift, preparing participants for future independent clinical work. Since 2021/2022, the Society has organised "Infect Yourself with Knowledge", a series of 17 thematic workshops featuring clinical cases from everyday practice, intended for students and young doctors.

It also collaborates with numerous student sections in organising lectures and symposia, including "Hepatitis Alphabet" (2023), "Paediatric Infectious Diseases" (2024), and "One Health. Zoonoses and Antibiotic Resistance: Challenges of the 21st Century" (2025).

Keywords**:** Diseases; Infectious; Knowledge

Workshop

ABDOMINAL MAP: ORIENTATION THROUGH THE NINE QUADRANTS

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Aim is to present the Student Section for Internal Medicine, a student-led organisation dedicated to advancing clinical knowledge and practical skills among medical students through lectures, workshops, and case-based learning.

The workshop “Abdominal Map: Orientation Through the Nine Quadrants” explores the fundamentals of abdominal assessment using the nine-quadrant approach, focusing on anatomical landmarks, symptom localisation, and differential diagnosis. Through interactive discussions and clinical case analysis, students will learn to correlate abdominal pain and other key symptoms with potential underlying pathologies. The workshop will also include a detailed review of clinical assessments of each quadrant. Students will be able to identify possible pathological findings characteristic of specific abdominal regions, thereby gaining a comprehensive understanding of clinical evaluation and diagnostic reasoning in internal medicine.

Through this workshop, participants will have the opportunity to practice logical thinking and integrate information. In addition, this workshop provides a concise overview of the most common abdominal pathologies, making it an excellent review opportunity.

Keywords**:** Abdomen; Gastroenterology; Symptoms

Workshop

MASTER THE STITCH: A HANDS-ON WORKSHOP IN ADVANCED SURGICAL SUTURING

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The aim of this workshop is to present The Student section for neurosurgery which brings together medical students from the University of Rijeka Faculty of Medicine who share a passion for neurosurgery and a strong motivation to develop clinical skills and deepen their knowledge in the field. Now in its third year, the Section has hosted numerous engaging lectures and both basic and advanced surgical suturing workshops. It has also built collaborations with various student organizations and enabled students to volunteer and gain valuable hands-on experience at the Department of Neurosurgery, Clinical Hospital Centre Rijeka.
The Advanced Surgical Suturing Workshop, organized by the Student Neurosurgery Section, will provide medical students with the opportunity to acquire essential surgical skills required in the daily practice of future physicians. Through participation in this workshop, students will master the handling of surgical instruments and the tying of advanced surgical knots on realistic models, as well as gain insight into different types of surgical sutures and wound closure techniques.

Keywords: Education; Medical; Neurosurgical Procedures; Students, Medical; Suture Techniques

Workshop

WE TREAT EVERYONE BUT OURSELVES: ON THE MENTAL HEALTH OF MEDICAL STUDENTS

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Medical students face high stress levels and mental health challenges yet often neglect their own well-being due to stigma and intense academic pressure. This workshop explores the mental health of medical students through four structured and interactive segments.
First, an anonymous interactive visual installation via Mentimeter invites participants to submit three words describing how they feel about medical school. The resulting word cloud reveals common emotions (e.g., stress, fear, anxiety, exhaustion), highlighting that they are not alone in their struggles. The second segment is an evidence-based overview of mental health among medical trainees, focusing on burnout, anxiety, depression, and suicidality. For example, a 2019 meta-analysis of 69 studies (over 40,000 students) found 33.8% of medical students experience significant anxiety – about triple the rate in the general population – with the highest prevalence in Asia and the Middle East. These findings underscore that mental health issues in this population are widespread yet often unrecognized and untreated, negatively impacting academic performance, empathy, and the quality of future patient care. The presentation emphasizes the urgent need to destigmatize mental illness in medical education and encourage help-seeking among students. The third segment is a brief guided auditory experience. Participants listen to a two-part audio track that contrasts the chaotic sounds of a medical student's typical day (alarms, hospital bustle, professor's test instructions, study sessions) with a calming sequence (guided breathing, meditation, soothing nature sounds). This exercise allows participants to observe their physiological reactions to stress versus relaxation, serving as an experiential "reset" and an introduction to mindfulness techniques for stress reduction. Finally, a collaborative discussion ("What can we change?") will identify key problems – chronic stress, excessive academic pressure, perfectionism/impostor syndrome, sleep disturbances, and stigma around seeking help – and explore possible solutions. Proposed interventions include social media campaigns to destigmatize mental health by sharing authentic personal stories, integrating mandatory mental health and resilience training into the curriculum (shifting from reactive to preventive care), ensuring accessible confidential counseling services, and routine monitoring of student well-being via surveys. This multifaceted workshop will help future doctors recognize the prevalence and impact of mental health issues among their peers, experience mindfulness as a coping tool, and be empowered to foster a culture of self-care and psychological support in medical education.

Keywords: Students, Medical; Mental Health; Burnout, Professional; Anxiety; Depression; Mindfulness

Workshop session 2

Workshop

THE ART OF UNDERSTANDING: EXPLORING COMMUNICATION AND LITERACY IN PRIMARY CARE

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The Student Section for Public Health focuses on promoting health and empowering individuals through public health actions and initiatives**.** One of its key missions is to assess and promote health literacy, defined as ability of individual to gain access to, understand and use information in ways which promote and maintain good health. It is not only personal competence: higher levels of health literacy has beneficial effect on social, economic and environmental determinants of health for the entire population. The results show that the average level of health literacy in Croatia is on the borderline between problematic and adequate. This highlights the importance of comprehensive communication between physicians and patients to ensure optimal healthcare outcomes. The workshop focuses on strengthening mutual understanding and communication between physicians and patients. According to best-practice guidelines, the main objective is to apply the "teach-back" method, a communication technique used to confirm that patients truly understand the information provided. The workshop will include several structured scenarios, representing different clinical situations: chronic disease management, medication adherence, and lifestyle modification. Through these simulated cases, participants will engage in practical exercises that reflect real-world situations, highlighting common challenges in physician–patient communication. Each scenario will encourage participants to identify bounderies to effective dialogue and explore strategies to overcoming them. During the workshop participants will gain experience in how structured conversation and good preparation can improve patient adherence, strenghten patient-physician relationship and improve clinical outcomes and overall wellbeing. Emphasizing interdisciplinary collaboration, the workshop is intended for all current and future healthcare professionals involved in patient care; including physicians, students, and other healthcare workers. By fostering clear, empathetic, and tailored communication, healthcare professionals can build trust, enhance patient adherence, and contribute to better clinical outcomes and overall well-being. In addition, proficient communication and understanding of health literacy are fundamental elements of high- quality healthcare and remain central objectives within clinical practice and public health initiatives.

Keywords**:** Communication; Health Literacy; Public Health

Workshop

SECTION FOR ENDOCRINOLOGY AND DIABETOLOGY

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Aim of this workshop is to present the most common cases of endocrine emergencies.
The Student Section for Endocrinology and Diabetology is a section of the Faculty of Medicine, University of Zagreb since 2023, whose goal is to deepen knowledge in the field of internal medicine with an emphasis on endocrinology and diabetology. Through interesting clinical cases led by mentors, various endocrinological disorders and emergencies are discussed, and outpatient clinic visit workshops are organized with the possibility of improving practical skills. In addition to activities organized for students, the section organizes public health campaigns in which members of the section strive to prevent the development of diabetes and educate about the risks of the disease, enable early diagnosis and timely treatment.
The workshop ' Endocrinology Emergencies' is an interactive workshop that will present, through case studies, endocrinological conditions that often appear in family medicine clinics and emergency departments. Workshop participants will discuss therapeutic options for each individual case in small groups and then work together to discuss the patient's presentation and individual therapeutic procedure in detail. The goal of this workshop is to educate future physicians about the most common endocrinological conditions in practice that each of us may encounter in the near future.

Keywords: Adrenal crisis; Diabetic ketoacidosis (DKA); Endocrine emergencies; Hypoglycemia

Workshop

PATH TO THE DROP: INTRODUCTION TO VENOUS ACCESS FOR BLOOD DONATION

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The aim of this workshop is to present the work of our Student Section for Voluntary Blood Donors and Transfusion Medicine and to show the long path a blood bag takes from donor to patient. A practical lesson on determining blood types is also included in this workshop as it is one of the vital parts of blood analysis. We seek to enhance medical education by combining theoretical knowledge with hands-on experience, fostering both professional competence and social responsibility among future healthcare professionals. Our Student Section currently includes 15 active members and has organized 23 voluntary blood donation drives, collecting over 1,000 units of blood to date. Through our ongoing activities, we aim to promote awareness of the importance of blood donation and provide medical students with practical knowledge related to transfusion medicine. In this workshop, we want to show an overview of how blood donation drives are organized, followed by a short lecture on the donation process, blood processing and storage, and the clinical uses of donated blood. Participants will also be introduced to the work and goals of our Section. In the practical component of the session participants will have the opportunity to determine their own blood groups.

Keywords**:** Blood Donation; Venipuncture; Transfusion Medicine; Blood Preservation; Medical Education

Workshop session 3

Workshop

ESCAPE THE AMBULANCE

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The Section for Pharmacology and Toxicology of the Faculty of Medicine, University of Zagreb was established last academic year with the aim of connecting theoretical knowledge with clinical practice. Through interactive workshops, lectures and case studies, students deepen their understanding of the effects of drugs and toxic substances and develop critical thinking in the approach to rational pharmacotherapy. The section encourages interdisciplinary collaboration, research and professional development of students interested in clinical pharmacology and toxicology.
The workshop participants are divided into teams. Each group is assigned clinical cases with infectious or internal medicine conditions. In each case, the participants encounter difficulties such as allergic reactions to antibiotics, drug side effects, antibiotic resistance or drug interactions. The goal is to resolve all clinical cases as quickly and accurately as possible.
This workshop significantly contributes to the development of clinical thinking and decision-making in real-life situations. Participants learn to apply theoretical knowledge from infectology and internal medicine to concrete clinical cases. The team approach encourages a multidisciplinary approach, which contributes to the development of clinical judgment, therapeutic decision-making and rational treatment selection.

Keywords**:** Anti-Bacterial Agents; Drug Interactions; Drug-Related Side Effects and Adverse Reactions; Infection; Internal Medicine

Workshop

BASIC LIFE SUPPORT - STUDENT SECTION FOR EMERGENCY MEDICINE

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The Student Section for Emergency Medicine at the Faculty of Medicine, University of Mostar, was founded in 2019 with the goal of promoting emergency medicine knowledge and practical competence among medical students. Through structured workshops, simulations, and community engagement, the section supports early development of professional skills relevant to emergency care.
Basic Life Support (BLS) represents a fundamental component of resuscitation and is essential for all healthcare professionals. The workshop introduces participants to key elements of BLS in accordance with the European Resuscitation Council (ERC 2021) guidelines, focusing on recognition of cardiac arrest, activation of the Chain of Survival, and delivery of high-quality chest compressions and ventilations.
Participants learn the BLS algorithm, appropriate use of an automated external defibrillator (AED), and principles of effective team communication. Practical training is conducted through scenario-based simulations supervised by trained student instructors.
Simulated cases provide participants with experience in rapid assessment, maintaining compression quality under pressure, and coordinating within a resuscitation team. Emphasis is placed on early recognition, timely AED use, and the importance of continuous skills reinforcement. The workshop aims to improve preparedness for responding to cardiac arrest in both clinical and public settings, ultimately contributing to better patient outcomes.

Keywords: Basic Life Support; CPR; Emergency Medicine; Medical Education

Workshop

SPIROMETRY WORKSHOP FOR MEDICAL STUDENTS

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The aim of this workshop is to provide medical students with a practical understanding of the basic principles and interpretation of spirometry, as well as to develop essential skills for performing and analysing pulmonary function tests.
The Student Section for Pulmonology at the University of Zagreb School of Medicine is dedicated to educating students interested in further development of their knowledge and skills in the field of pulmonology. On a monthly basis, the Section organizes workshops, lectures, panel discussions, and educational activities, utilising social media to focus on the latest advancements in pulmonology. The Student Section for Pulmonology is also the founder of the project MediFER, established in collaboration with students from the Faculty of Electrical Engineering and Computing in Zagreb. MediFER is a project that connects medicine and technology, having been awarded the Rector's Award for socially beneficial work within the academic and broader community.
The workshop "Spirometry 101" was organised for medical students as part of the second International Student Symposium "Future Doctors Educating the World". Following a short theoretical introduction on respiratory mechanics, participants had the opportunity to analyse the provided spirometry reports and explain individual pulmonary function parameters.
Spirometry workshops serve as an effective educational tool for medical students, linking theoretical knowledge with practical skills. These types of activities can enhance understanding of respiratory physiology and stimulate interest in the clinical application of spirometry.

Keywords**:** Spirometry; Medical education; Respiratory function tests; Clinical skills

Workshop

LEARNING THE BASICS: PRIMARY WOUND CARE AND SUTURING CLASS

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The aim of this workshop is to present the Surgical Student Section in the Faculty of Medicine, Mostar, established to prepare medicine and dental medicine students for practical skills**.**
The Surgical Student Section was established to prepare medical and dental students for practical work in surgical courses. Our goal is to familiarize students with the basic surgical instruments and techniques they will encounter during the clinical phase of their studies. Through organised workshops, the section focuses on developing essential surgical skills, including primary wound care, suturing, knot-tying, local anaesthetic application, and other relevant techniques. These workshops provide students with the opportunity to practice and refine their skills in a controlled environment under the supervision of experienced professionals. The section is actively supported by students and volunteer doctors, who contribute to the quality of education and mentor students throughout the process. We hope that participants in our workshops will gain confidence in their abilities, reduce the anxiety often associated with clinical courses, and enhance their practical skills before facing real-world clinical challenges.

Keywords**:** Sutures; Suture Techniques; Surgical Wound; Wound Closure Techniques

Workshop

„RISTART“ YOUR HEART: STUDENTS TEACHING LIFESAVING SKILLS

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RiStart is an educational project organised by the Student Council of the University of Rijeka and implemented by medical students of the Faculty of Medicine, with the support of the Rijeka branch of the Croatian Medical Chamber. Established in 2019, the project aims to improve public health literacy by teaching Basic Life Support (BLS) procedures and the use of Automated External Defibrillators (AED) to non-medical participants.

The workshop is structured to ensure both understanding and practical mastery. It begins with a concise theoretical introduction that highlights the importance of early recognition and intervention in cardiac arrest, as well as the basic principles of first aid and the chain of survival. A live demonstration of resuscitation techniques follows, allowing participants to visualise each step of the process in real-time. The central part of the session focuses on hands-on training, where participants actively practice cardiopulmonary resuscitation (CPR) and AED use on manikins under the supervision of trained student instructors, who provide individualised feedback and correction. This interactive, learner-centred approach promotes confidence, critical thinking, and skill retention, enabling participants to respond effectively in real-life emergencies before professional help arrives.

According to the European Resuscitation Council (ERC), only 8% of patients survive out-of-hospital cardiac arrest, and bystander BLS is initiated in merely 58% of cases. As early BLS can double or even quadruple survival rates, there is a clear need for greater public education and awareness. Through RiStart, medical students play an active role in community health promotion while developing their own teaching and communication skills. The project cultivates empathy, responsibility, and professionalism among future doctors, empowering citizens and building a society where everyone is capable of saving a life.

Keywords: Cardiopulmonary Resuscitation; Education, Medical; Heart Arrest; Public Health

Workshop session 4

Workshop

StEPP INTO TRAUMA: NAVIGATING TRAUMA SCENARIOS

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Since its establishment in 2009, StEPP has been dedicated to empowering medical students to prepare their peers for future roles within emergency medical teams. In line with this mission, this workshop aims to equip participants with essential competencies for the initial assessment and pre-hospital management of severely injured trauma patients.
Effective trauma care requires rapid recognition and treatment of life-threatening conditions while maintaining a systematic approach to avoid critical oversights. To facilitate this, participants are introduced to the structured and logical trauma assessment algorithm, commonly referred to as the *"DR ABCDEFGH"* mnemonic. This framework enables healthcare professionals to promptly identify and manage life-threatening injuries, then address secondary issues in a comprehensive and organised manner.
The workshop will commence with a simulation scenario in which StEPP instructors, portraying an emergency medical team (physician, medical technician, and ambulance driver), demonstrate the practical application of the trauma algorithm in real time. Following the demonstration, instructors will review each component of the algorithm in detail, clarifying its clinical significance and implementation. Participants will then have the opportunity to individually practice the algorithm and associated emergency procedures under instructor supervision. In the second part of the workshop, participants will form their own emergency teams to apply the knowledge they have acquired in simulated trauma scenarios developed by the StEPP team. Through guided, hands-on experience, participants will assume various professional roles, make clinical decisions, and receive immediate feedback from instructors.
The workshop will conclude with a summary of key take-home messages and practical insights designed to reinforce learning outcomes and encourage participants to integrate these skills into their ongoing medical education and future clinical practice.

Keywords**:** Clinical Competence; Education; Emergency Medicine; Multiple Trauma

Workshop

"SCAN ESCAPE – CAN YOU OUTSMART THE RADIOLOGIST'S MIND?"

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Aim: to bring radiology closer to students in an engaging and playful way — combining teamwork, clinical reasoning, and quick thinking.
Designed as a light-hearted break from lectures, it allows participants to experience radiologic problem-solving through interactive challenges. Students are divided into four groups of five, each participating in a 15-minute round of the Radiology Escape Room. With group rotations, the entire workshop fits neatly into a 90-minute session. The storyline places teams in a medical emergency: a patient awaits surgery, but the final radiology report has gone missing. To retrieve it, students must progress through a series of tasks — matching X-rays to clinical cases, uncovering hidden clues under UV light, arranging CT and MRI images in the correct order, and finally revealing the diagnosis. Each stage encourages collaboration, communication, and critical thinking while showing that radiology is more than image interpretation — it's a field of discovery, teamwork, and problem-solving under pressure.

Keywords**:** Clinical; Diagnosis; Magnetic Resonance Imaging; Radiology

Workshop

STRAIGHT TO THE LINE: ULTRASOUND IN VASCULAR ACCESS

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Aim: The workshop aims to provide students with a comprehensive understanding of ultrasound-guided techniques — a rapidly evolving skill set often referred to as “the next stethoscope” for clinicians.

The Student Section for Anesthesiology has been an active entity at the University of Zagreb School of Medicine for many years. We organise lectures on a wide range of topics in this field, delivered by leading experts with extensive clinical experience. In addition, we host clinical skills workshops that focus on competencies essential for students at the start of their medical careers and during future specialisation, including Advanced Life Support, the use of the Oxylog in pre-hospital emergency medicine, airway management, and establishing peripheral and central venous access. To raise public awareness of the importance of prompt resuscitation initiation, we organise Basic Life Support workshops in secondary schools. We also regularly participate in student and professional congresses, contributing through hands-on workshops and clinical case presentations. This workshop offers an in-depth exploration of ultrasound-guided procedures, with a focus on peripheral and central venous catheterisation. It begins with an introductory lecture that covers the fundamental principles, techniques, and safety aspects of these essential skills, emphasising precision, good clinical practice, and patient safety. Ultrasound provides real-time, point-of-care and high-resolution imaging that enhances diagnostic accuracy and procedural success, allowing for safer and more precise interventions in clinical practice. By the end of the workshop, participants will have gained practical experience in using ultrasound to guide venous access and accurately place central venous catheters.

Keywords**:** Central Venous Catheters; Education; Ultrasonography

Workshop session 5

Workshop

THE CASE CHRONICLES

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The Student Section of Medicina Fluminensis, the official journal of the Croatian Medical Association – Rijeka Branch and the Faculty of Medicine in Rijeka, was founded in 2017 to support and encourage student engagement in scientific research. Since then, the Section has developed a wide range of activities that promote student research and participation on both national and international levels. Through its unique educational formats, the Section provides students with hands-on experience, guidance and training in research methodology, case report writing and active involvement in scientific meetings.
This workshop introduces participants to the key principles of identifying, structuring, and publishing high-quality case report abstracts, as well as using medical tools and online databases for effective literature searches. Participants will work in small groups, where they will critically analyze sample abstracts, identify common mistakes, learn strategies to address them and review the cases. The aim is to help students overcome the common challenges and fear often associated with writing case report abstracts. This kind of interactive format enhances critical thinking, scientific communication and teamwork skills while fostering interdisciplinary collaboration.

Keywords: Case Reports; Students, Medical, Teaching Methods; Teamwork

Workshop

MASTER THE KNOT

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The aim of this review is to present the concept, structure, and educational significance of the Student Surgical Society at the University of Zagreb.
The Student Surgical Society at the University of Zagreb has a long-standing tradition of promoting surgical education through practical, student-led courses. Among its initiatives, the “Master the Knot” workshop stands out as a comprehensive program designed to teach and refine surgical knot-tying techniques, an essential component of operative competence. Surgical knot tying is a fundamental skill in all operative disciplines, ensuring tissue integrity, proper wound healing, and the prevention of postoperative complications. The workshop combines theoretical instruction with intensive, stepwise practical training. In the introductory segment, students attend a brief interactive presentation that covers the principles of knot security, tension control, and ergonomics in instrument handling. During the practical part, a two-level learning model is implemented. In the first phase, participants practice basic hand and instrument knots using thick cords to develop coordination and understand knot mechanics. In the second phase, they advance to using surgical thread and gloves, simulating real operating room conditions. Training is supported by original video materials and the standardised Dinsmore nomenclature, ensuring clarity and consistency in the learning process. Each student works at an individual workstation with dedicated supervision, enabling personalised feedback and effective skill development. The workshop consistently receives positive evaluations from participants, who report increased manual dexterity, precision, and confidence in performing surgical tasks. By integrating simulation-based learning and peer-to-peer mentorship, “Master the Knot” fosters a deeper understanding of surgical technique and promotes active, experiential learning. Future improvements will include expanding the range of knot types taught and introducing structured assessments to further enhance educational outcomes.

Keywords**:** Education, Medical; Surgical Procedures, Operative; Suture Techniques; Teaching Materials; Wound Healing

Workshop

ACUTE POISONINGS"

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The PHARMiON Student Section operates at the Faculty of Medicine, University of Mostar, and is the first such section at this faculty. It was founded in 2018 with the aim of promoting students' interest in pharmacology, immunology, and scientific research. We offer a variety of lectures and workshops, with the primary goal of our Section being to provide additional clinical and pre-clinical education, as well as research opportunities.

The "Acute Poisonings" workshop is designed to present young doctors with the most common examples of poisonings and how to respond to them, ultimately saving human lives —a scenario that doctors often encounter in their practice. Within this workshop, we aim to review the basics of the action of certain drugs, the symptoms of their overdose, and teach students how to react in emergency situations. At the end of the workshop, participants should be able to:

1. Describe the mechanism of action of certain substances
2. Recognize the symptoms of overdose
3. Know how to react in case of an overdose

The workshop will be divided into a theoretical and a practical part. The duration of the theoretical part will be 20–30 minutes. The practical part consists of interactive case studies. The duration largely depends on the students' activity. On average, it can last between 30–40 minutes.

Keywords**:** Poisoning; Drug Overdose; Pharmacology; Education, Medical

Workshop

BASIC AND ADVANCED LIFE SUPPORT MEASURES IN THE PEDIATRIC POPULATION - FROM THEORY TO PRACTICE

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The Student Section for Pediatrics at the University of Zagreb School of Medicine has been active since 2012, continuously organizing various workshops and lectures in the field of pediatrics for both medical and non-medical students. We are especially proud of our annual Humanitarian Christmas campaign, which we are organising for the 13th consecutive year. Each year, we collect gifts for children who spend the holidays in hospitals, hoping to make their stay a little brighter. The gifts are collected in primary and secondary schools across Zagreb, as well as through donations from different firms and associations. We also organise charity pub quizzes, and all participation fees are used to purchase gifts for children and/or equipment for pediatric hospital wards in Zagreb.

This workshop focuses on acquiring fundamental knowledge and practical skills in Basic Life Support (BLS) and Advanced Life Support (ALS) for children. In the theoretical part, participants will be introduced to the specific aspects of pediatric resuscitation, key differences compared to adults, the most common causes of cardiac arrest in children, and the BLS and ALS algorithms.

The practical part will take place using an infant-sized resuscitation manikin (representing a 6-month-old), in small rotating groups. Emphasis will be placed on teamwork, correct assessment of vital functions (using the ABC algorithm), high-quality chest compressions, and effective artificial ventilation. Participants will work through several simulated emergency scenarios, such as a child losing consciousness, and practice following the BLS protocol after assessing ABC. The workshop will also include a scenario on how to respond when a child chokes on a foreign body.

The workshop is intended for senior medical students, young doctors, and other healthcare professionals to help them prepare for real-life pediatric resuscitation situations. Many students and young clinicians report that pediatric resuscitation is one of their greatest fears, which is why learning and regularly revising BLS and ALS protocols for children is essential. Educating healthcare professionals and students on timely and appropriate reactions greatly increases the chances of survival and recovery in such critical situations.

Keywords**:** Cardiopulmonary Resuscitation; Education; Emergency Treatments; Pediatric Emergency Medicine

POSTERI

S3. POSTER SESSION 1

CASE REPORT: OVARIAN MASS DURING PREGNANCY

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Aim: Ovarian cysts in pregnancy present a clinical challenge, as they can be asymptomatic or cause symptoms ranging from mild discomfort to acute complications. While most functional cysts resolve spontaneously, some may persist, grow, or lead to complications such as torsion, rupture, or compression of surrounding structures. Another challenge is choosing the right time for intervention, as fetal organogenesis ends by the twelfth week of pregnancy. Before then, operative procedures are not recommended due to possible teratogenic effects of anesthetics. In advanced pregnancy, laparoscopic surgery is challenging due to the gravid uterus limiting abdominal cavity. The aim of this case report is to highlight the importance of early recognition, appropriate management, and optimal timing of intervention to ensure the best outcomes for both mother and child.
Case report: A 21-year-old patient presented to the Perinatal Medicine Clinic for a gynecological examination. This is her first pregnancy. Based on the last menstrual period, the gestational age was calculated as 12+3. The patient reported having trouble urinating at 10 weeks of gestation, which improved by the next gynecological check-up. Ultrasound examination confirmed a single intrauterine fetus with a CRL of 67 mm and a rhythmic fetal heartbeat. A 110x61 mm anechoic cystic formation with smooth walls was detected anterior to the uterus and above the bladder. Additionally, the tumor marker CA 125 was elevated to 77.5 U/mL. The patient was indicated for laparoscopic cystectomy. During surgery, the gravid uterus was visualized, along with a 10cm cyst on the left ovary. The cyst was aspirated, its contents sent for cytological analysis, and the entire mass was removed. Histopathological analysis confirmed a benign serous ovarian cyst. Postoperatively, the patient remained afebrile and asymptomatic. Laboratory findings revealed mild anemia and leukocytosis, interpreted as a stress response to surgery. During hospitalization, she received Clexane and Utrogestan, and upon discharge, she continued Utrogestan and iron supplements. At the 21-week follow-up ultrasound, normal fetal morphology was confirmed, and the pregnancy progressed without complications.
Conclusion: Ovarian cysts in pregnancy pose a diagnostic and therapeutic challenge, especially in distinguishing benign from potentially malignant formations and assessing their impact on pregnancy outcomes. While most cysts detected early in pregnancy are functional and regress spontaneously, larger or complex cysts may require monitoring or surgical intervention. Early recognition is crucial for managing progression and optimizing patients' outcomes.

Keywords**:** Laparoscopy; Ovarian cysts; Pregnancy; Tumor biomarkers

CONTRASTING EMOTIONAL STRESSORS LEADING TO TAKOTSUBO CARDIOMYOPATHY- A CASE REPORT

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Aim: To highlight the role of emotional stressors in the onset of Takotsubo cardiomyopathy and the importance of psychosocial history in clinical reasoning.
Case report: A 76-year-old actress presented to the emergency department (ED) with persistent dyspnea and chest pain. Symptoms began a day before her visit to the ED, after receiving a lifetime achievement award. The pain was initially localised substernally, later radiating to her neck and persisting despite diazepam and paracetamol. From her previous medical records, the patient is treated with valsartan and atorvastatin for arterial hypertension and hyperlipoproteinemia. Moreover, she is an oncology patient, currently under immunotherapy treatment with pembrolizumab for lung adenocarcinoma and primary renal carcinoma. On physical examination, the patient was alert and responsive, with a normotensive blood pressure (105/75 mmHg), stable respiratory rate, a rhythmic pulse (90 bpm) and normal findings on heart and lung auscultation. Laboratory records revealed elevated levels of troponin I (3819.8 ng/L) and NT-proBNP (4424 ng/L), and electrocardiogram (EKG) recordings showed negative T waves in D1, D2, D3, V4-V6 leads and biphasic T waves in V2-V3. An emergency transthoracic echocardiography was performed, revealing a significant systolic dysfunction of the left ventricle due to apical ballooning, prompting further imaging. Computed tomography pulmonary angiography excluded a pulmonary embolism. To rule out a coronary obstruction, the patient was transferred to the catheterization laboratory for an urgent coronary angiography, revealing a normal coronary angiogram. With coronary and thromboembolic disease excluded, a diagnosis of Takotsubo cardiomyopathy was established. The patient was admitted to the Intensive Cardiac Care Unit, where she was hemodynamically monitored and treated with gastroprotection, thromboprophylaxis, bisoprolol and ramipril together with torasemide and symptomatic therapy. During hospitalization, the patient disclosed having attended a friend's funeral a day before her award ceremony, indicating dual emotional stressors as potential triggers. Her condition gradually improved, as well as the systolic function of the left ventricle. She was discharged from the hospital after seven days.
Conclusion: Takotsubo cardiomyopathy remains a great example of a close connection between heart and mind. While often connected to distress and grief, positive emotions can also be a powerful trigger. As a diagnosis of exclusion, Takotsubo can closely mimic acute coronary syndrome or pulmonary embolism, making a thorough workup essential to avoid misdiagnosis and ensure appropriate and timely care.

Keywords**:** Acute Coronary Syndrome; Coronary Angiography; Echocardiography; Takotsubo Cardiomyopathy

A DEVELOPMENTALLY DELAYED NEONATE WITH GENERALIZED MUSCULAR HYPOTONIA AND NONSPECIFIC MALFORMATION SIGNS - A RARE CASE REPORT OF A PATIENT WITH CARDIOFACIOCUTANEOUS SYNDROME

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Aim: Cardiofaciocutaneous (CFC) syndrome is a rare autosomal dominant genetic disorder caused by mutations in the Ras/MAPK signalling pathway. To date, around 690 cases of CFC syndrome have been reported in the literature. Here, we report a patient with the V487G variant of the *BRAF* gene who acquired distinctive facial dysmorphic features with age. We aim to provide references to help future clinicians in making a timely diagnosis.
Case report*:* A male infant was born prematurely in the 30th week of gestation. The course of pregnancy was complicated by polyhydramnios. At birth, low-set ears, generalised muscular hypotonia, hyperreflexia with clonus, and an inguinoscrotal hernia on the right side were noted. The skin was hyperkeratotic and ichthyotic, prone to infection, and showed numerous nevi, hemangiomas, and eczema. The nails were wide and dystrophic. After birth, the newborn was treated for respiratory distress syndrome with exogenous surfactant, accompanied by mechanical ventilation, and later, tracheotomy was performed. An early echo showed mild turbulence over the pulmonary valve, but at nine months of age, enlargement of both atria was noticed, as well as signs of hypertrophic cardiomyopathy, pulmonary stenosis and insufficiency. An early brain ultrasound showed a nonspecific enlarged cavum septi pellucidi and a thinner corpus callosum. Head ultrasound and magnetic resonance imaging (MRI) of the brain at one month of age demonstrated bilateral grade 1 periventricular leukomalacia. A repeated brain MRI in the fourth month of life showed frontotemporal atrophy, partial agenesis of the corpus callosum, and hypoplasia of the cerebellum, pons and the optic nerve. At this time, the patient developed generalised tonic seizures. Due to feeding difficulties, a gastrostomy tube was placed. As the patient grew, facial features such as a large forehead, bitemporal narrowing, hypertelorism, downslanting eyes, ptosis, a depressed nasal bridge, and externally rotated ears became more evident. A clinical psychology assessment at the corrected age of three months showed signs of delayed psychomotor development. After numerous negative tests and clinical pitfalls, a whole-exome sequencing analysis was performed. It demonstrated a *de novo* genetic mutation of the *BRAF* gene (V487G), and the diagnosis of CFC syndrome was set.
Conclusion*:* Although all of the most common clinical features were present, typical craniofacial dysmorphism and hair anomalies were only noted after a few months of hospital stay. Emphasising the importance of publishing rare cases like this could contribute to timely diagnosis and the development of more effective treatment methods.

Keywords*:* Cardiofaciocutaneous syndrome; Child; Genetic disease; Infant

FREEZING TO DEATH – ACCIDENTAL HYPERTHERMIA IN A 14-YEAR-OLD BOY

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Aim*:* Hypothermia is a condition in which the body's internal temperature falls below 35 degrees Celsius. Although rare, hypothermia is a reversible cause of serious cardiac and respiratory system malfunction. This case aims to emphasize the importance of recognizing reversible causes of cardiac arrest and treating them appropriately.
Case report*:* A 14-year-old boy was reported by a friend to be submerged in icy water and at risk of drowning. Firefighters pulled the boy out of the water, and emergency responders approached to examine the patient. He was pulseless and apneic with a patent airway, which suggested no water aspiration. Capillary refill time was 6 seconds, body temperature unmeasurable (no low-range thermometer), pupils mydriatic, and GCS 3. Cold, wet clothing was removed, and immediate Advanced Life Support (ALS) resuscitation was initiated. The patient was intubated with an 8.0 tube and ventilated with a transport ventilator. Initial asystole was treated with 1 mg of adrenaline, while subsequent ventricular fibrillation (VF) required three defibrillations. Two IV lines were established, delivering 2 L of warm Ionolyte solution, and active rewarming began with blankets and warm air. After that, an AutoPulse was applied, and the patient was transported to the hospital, with the anesthesia team pre-notified for further management. After three hours of resuscitation, the patient died of cardiac arrest caused by hypothermia.
Conclusion*:* This case underscores the importance of rapid ALS protocols, aggressive rewarming, and interdisciplinary coordination in the management of hypothermic cardiac arrest. The absence of water aspiration suggested primary hypothermia rather than drowning, guiding targeted interventions. Nevertheless, a timely call for professional help would significantly increase the likelihood of successful resuscitation in all emergencies, including this one.

Keywords*:* Cardiac arrest; Child; Hypothermia; Rewarming

THE HIDDEN TEAR: SPONTANEOUS CORONARY ARTERY DISSECTION AS A RARE TRIGGER OF ACUTE CORONARY SYNDROME – A CASE REPORT

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Aim: Spontaneous coronary artery dissection (SCAD) is a rare, non-atherosclerotic cause of acute coronary syndrome (ACS), accounting for up to 25% of cases in women under 50 years of age, who typically lack traditional cardiovascular risk factors. SCAD occurs due to the separation of the coronary artery wall layers, caused by intimal rupture or bleeding from the vasa vasorum, resulting in an intramural hematoma, a false lumen, and compression of the true lumen, leading to myocardial ischemia. This case report aims to raise awareness of accurate diagnosis of myocardial infarction etiology to ensure appropriate management.
Case Report: A 38-year-old female presented to the emergency department with constrictive chest pain, which began after a meal and was accompanied by shallow breathing. The pain gradually radiated to the left chest and back. Her medical history was unremarkable, except for chronic antihypertensive therapy. Upon admission, the electrocardiogram (ECG) revealed mild ST elevation in the inferior and lateral leads. Initial laboratory tests were within normal limits, including cardiac biomarkers (TnI 15.8 ng/L, NT-proBNP 72 ng/L). A repeat ECG after 30 minutes was normal, but the pain persisted. The patient was diagnosed with ACS with transient ST elevation and urgently referred for coronary angiography. Angiography showed no atherosclerotic lesions but revealed SCAD of the mid and distal segments of the left anterior descending artery (LAD). According to the classification, this is a type 2 SCAD, characterised by a diffuse, long tubular lesion caused by an intramural hematoma, which does not respond to intracoronary administered nitrates. As coronary flow was preserved, a conservative management approach was chosen. The following day, echocardiography was normal, while cardiac biomarkers peaked (TnI 3295.4 ng/L). On discharge, the fifth day of hospitalisation, TnI had decreased to 620.6 ng/L. The patient was discharged symptom-free with ongoing therapy, consisting of nebivolol 2.5 mg, amlodipine 5 mg, acetylsalicylic acid 100 mg, and alprazolam 0.25–0.5 mg as needed. A three-month follow-up was uneventful, with a normal ECG and no subjective complaints.
Conclusion: This case underscores the clinical significance of recognising SCAD as a non-atherosclerotic cause of ACS, particularly in younger women without traditional cardiovascular risk factors. Timely diagnosis and identification of the underlying cause enable appropriate management, which in most uncomplicated cases can be conservative, resulting in favourable outcomes.

Keywords**:** Acute Coronary Syndrome; Chest Pain; Coronary Artery Dissection; Myocardial Infarction

PRIMARY ADRENAL INSUFFICIENCY AS A RARE COMPLICATION DURING ADJUVANT TREATMENT OF RENAL CANCER WITH PEMBROLIZUMAB – A CASE REPORT

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Aim: Kidney cancer accounts for 5% of adult malignancies, and partial or radical nephrectomy is standard-of-care treatment for patients with localised renal cell carcinoma (RCC). However, almost half of patients will have disease recurrence after surgery, often with distant metastases, leading to a shortened life expectancy. In recent years, clinical trials have focused on targeted therapies and immunotherapies. Pembrolizumab, an anti-programmed death-1 immunotherapy, has demonstrated success as an adjuvant treatment for RCC with intermediate-to-high or high-risk of disease recurrence. However, despite the increase in disease-free survival, treatment with pembrolizumab can result in immune-mediated adverse effects, some of which can be fatal.
Case report: A 48-year-old man was admitted to the Emergency Department after experiencing worsening impaired vision during the previous month, along with overall weakness, fatigue, nausea, and decreased blood pressure for the previous ten days. He denied fever, diarrhea, vomiting or loss of consciousness. The patient has a history of RCC and underwent left-sided nephrectomy in February 2025 and was treated with 5 cycles of adjuvant pembrolizumab therapy. Laboratory findings revealed hyponatremia ($113 \times 10^{}$ nmol/L), hyperkalemia (7.7×10^{9} nmol/L), reduced cortisol levels (174×10^{6} nmol/L), and hyperglycemia (14.4×10^{6} nmol/L). The patient was admitted to the Clinic for tumors with suspected adrenal insufficiency, which most often occurs during pembrolizumab treatment due to immune-mediated hypophysitis. He was immediately given hydrocortisone 100mg i.v., followed by maintenance therapy with Cortef 20mg + 10mg. However, additional analysis demonstrated a high level of adrenocorticotropic hormone, suggesting primary adrenal insufficiency, which is described only in several case reports in the literature. After stabilisation of electrolytes, the patient was discharged with maintenance hydrocortisone 20mg + 10mg and pantoprazole 40mg, with instructions to adjust the therapy dose depending on the level of stress.
Conclusion: Immune checkpoint inhibitors, such as PD-1 inhibitor pembrolizumab, have an expanding role in the management of solid tumors and are associated with improved clinical outcomes. However, their use is also linked to a spectrum of immune-mediated adverse events that can affect any organ. With this case, we want to draw attention to primary adrenal insufficiency, a rare side effect of adjuvant pembrolizumab therapy, which is important to emphasize due to the potential for serious medical emergencies and increased mortality resulting from misdiagnosis or delayed intervention.

Keywords**:** Kidney Neoplasms; Chemotherapy, Adjuvant; Immune Checkpoint Inhibitors; Addison Disease

CASE REPORT: RAAA – CRITICAL ROLE OF BEDSIDE ULTRASOUND IN EARLY DIAGNOSTICS

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Introduction: A ruptured abdominal aortic aneurysm (rAAA) is a critical vascular emergency characterized by significant mortality requiring swift recognition and immediate surgical intervention. Due to its variable and often nonspecific clinical presentation, misdiagnosis can occur potentially causing delays in treatment. While CT angiography is considered a standard for diagnosis, the presence of hemodynamic instability requires rapid bedside assessment. Ultrasound plays a crucial role in detecting intra-abdominal hemorrhage guiding urgent surgical decisions
Case report: A 67-year-old woman was brought to the emergency department following a syncopal episode and abdominal pain. Signs of shock were observed upon examination: pale, clammy skin, tachypnea tachycardia and hypotension. A bedside ultrasound was performed and, while it did not reveal free fluid, it confirmed the presence of a 5 cm abdominal aortic aneurysm surrounded by a hematoma, indicating rupture. Arterial blood gas analysis showed a lactate level of 5.3 mmol/L, a standard base excess of -5.8 mmol/L, while maintaining a pH and hemoglobin within normal range. Her clinical condition and diagnosis were demanding the activation of a massive transfusion protocol, and administration of two units of O-negative units of blood. Due to severe hemodynamic instability instead of going for a CT aortography the patient was taken for emergency surgery. Postoperatively a CT aortography demonstrated hypoperfusion of the small intestine, renal ischemia and thromboembolic events affecting the mesenteric vein, iliac and femoral arteries. Despite aggressive resuscitation she remained refractory to vasopressor support and ultimately succumbed to multi-organ failure.
Conclusion: Ultrasound is an ideal method for detecting AAAs due to its accuracy, low cost, and ability to be performed at the bedside. This case highlights the importance of high clinical suspicion and the role of point-of-care ultrasound in the timely diagnosis and management of rAAA in unstable patients.

Keywords**:** Abdominal aortic aneurysm; Misdiagnosis; Shock; Ultrasound

ADVANCED LARYNGEAL SQUAMOUS CELL CARCINOMA PRESENTING WITH ACUTE AIRWAY OBSTRUCTION AND PULMONARY COMPLICATIONS: A CASE REPORT

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Aim: The aim of this presentation is to illustrate the management of advanced laryngeal carcinoma presenting with life-threatening airway obstruction, emphasizing the role of early recognition and definitive surgical treatment.
Case report: A 65-year-old male with a long history of smoking presented with progressive dyspnea, persistent throat pain, dysphagia, and a productive cough persisting for seven days, with notable worsening of symptoms during the night. Despite a four-day course of antibiotic therapy, his condition did not improve, but he remained afebrile throughout. Clinical examination revealed marked respiratory distress, inspiratory stridor, and diffusely reduced breath sounds on auscultation, findings highly suggestive of significant upper airway obstruction. Bronchoscopy identified an expansive glottic mass almost completely occluding the airway, and an urgent tracheotomy was performed to secure the airway. Subsequent imaging with computed tomography (CT) demonstrated a large laryngeal mass measuring 40×32×34 mm, accompanied by bilateral pleural effusions. Neck ultrasonography (US) was performed for staging and revealed no suspicious cervical lymphadenopathy. A biopsy of the lesion was obtained, and histopathological examination confirmed the diagnosis of invasive squamous cell carcinoma of the larynx. Considering these findings, the patient underwent definitive surgical management consisting of total laryngectomy with bilateral neck dissection and formation of a permanent tracheostoma. The patient recovered well postoperatively and was discharged following adequate recovery and adaptation to the tracheostoma. At nine-month follow-up, he remains alive, clinically stable, and in good general condition, with no signs of disease recurrence.
Conclusion: This case highlights the need for early recognition and prompt intervention in laryngeal carcinoma with airway obstruction and pulmonary complications. Definitive treatment involved total laryngectomy with neck dissection and tracheostoma formation. A multidisciplinary approach is vital to optimising patient outcomes. Early diagnosis, continuous airway monitoring, and timely surgical intervention remain crucial in managing advanced laryngeal malignancies and improving survival rates.

Keywords: Airway Obstruction; Laryngeal Neoplasms; Tracheostomy; Squamous Cell Carcinoma

THE USE OF EXTRACELLULAR MATRIX IN COMPLEX RECONSTRUCTION OF THE LOWER LEG AFTER MASSIVE AVULSION: A CASE REPORT

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Aim: The aim of this case report is to present an innovative approach to managing a complex avulsion injury using extracellular matrix (ECM). Avulsion injuries with exposed bone and extensive soft tissue loss remain among the most challenging reconstructive problems. While traditional management relies on necrectomy and primary closure, split-thickness skin grafts (STSG) or flap procedures, this case highlights a less invasive yet highly effective alternative. It demonstrates that ECM, serving as a biocompatible scaffold, in synergy with STSG and vacuum-assisted closure (VAC) therapy, can achieve successful wound closure, functional preservation, and favorable outcomes.

Case report: We present a case of a 30-year-old male who sustained injuries in a motorcycle accident. The patient has a history of type 1 diabetes mellitus, increasing the risk of delayed healing and infection. Clinical examination revealed a large necrotic soft tissue avulsion wound on the left lower leg, extending from the infrapatellar region to the lower third of the leg. The wound was deep, with skin degloving, exposing the tibia, fascia, and anterior compartment muscles. Additionally, injuries included a complex tibia-fibula fracture, an avulsion fracture of the medial malleolus, and an open forearm wound with arterial involvement. After trauma stabilization, the patient was transferred to Plastic and Reconstructive Surgery. Diabetes therapy was optimized, and hyperbaric oxygen therapy was initiated. Subsequently, the patient underwent an operation: excision of necrotic tissue from the entire anteromedial aspect of the left lower leg. Due to intraoperative findings of deperiosted tibia, the planned simple necrectomy and STSG needed to be adapted. Bone debridement was performed to achieve healthy spongiotic bleeding. Furthermore, an ECM was used to close the large defect. Contrary to recommendations, two sheets of ECM were covered with an STSG taken from the anterior thigh. Combined with VAC, this approach accelerated ECM integration, achieving optimal healing with both functional and aesthetic outcomes.

Conclusion: This case report highlights the importance of multidisciplinary care in managing complex traumatic injuries, where timely intervention and the utilisation of the latest medical technologies are crucial for achieving optimal outcomes. ECM can play a pivotal role in complex wound management, offering cost-effectiveness, reduced recovery time, and improved functional and aesthetic outcomes. The wider adoption of ECM-based techniques may represent a future standard in treating avulsion injuries, aligning with modern trends toward innovative and personalised surgical therapies.

Keywords: Avulsion; Extracellular matrix; Reconstruction; Skin graft

CLINICAL PRESENTATION OF GLIOTIC-MALACIC CHANGE NEAR THE FRONTAL LOBE OF THE RIGHT LATERAL VENTRICLE

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Aim: The aim of this case report is to present the clinical picture of a gliotic-malacic change. Their clinical significance depends on the localization, extent, and presence of accompanying neurological symptoms. Changes in the frontal brain regions may be associated with disturbances of executive functions, attention, behavior, or emotional control. In this case report, we present a patient in whom neuroimaging revealed a gliotic-malacic change near the frontal horn of the right lateral ventricle, with the aim of describing the clinical presentation, diagnostic approach, and potential clinical relevance of such a finding.

Case report: A 71-year-old female patient, previously treated for asthma, depression, metabolic syndrome, and arterial hypertension, was admitted to the emergency department due to memory loss, dizziness, and nausea. A brain MSCT scan showed brain parenchyma with normal absorption values and no clear signs of acute focal changes. A malacic area was noted near the right frontal horn. Significant asymmetry of the temporal structures was also observed, with a narrower left temporal horn and less pronounced sulci of the subarachnoid space. An MRI scan of the brain confirmed gliotic-malacic changes near the frontal horn of the right lateral ventricle and basal ganglia, with marginal hemosiderin deposits. Furthermore, it showed an enlarged ventricular system consistent with atrophy (GCA type 1, MTA type 2, Koedam type 1), and asymmetric lateral ventricles due to wider ventricles in the right cerebral hemisphere. MRI also verified a loss of “flow void” signal in the intracranial segment of the right internal carotid artery (ICA) and the M1 segment of the right middle cerebral artery (MCA), indicating occlusion. The post-ischemic lesion near the frontal horn of the right lateral ventricle and basal ganglia was a consequence of the occlusion of the right internal carotid artery. The patient presented multiple cerebrovascular risk factors — diabetes mellitus, hypertension, and hyperlipidemia — which likely contributed to this clinical picture. Regular follow-up and a tailored diet were recommended to reduce atherosclerotic risk factors. In addition to her previous therapy, the use of acetylsalicylic acid was also advised.

Conclusion: Changes in the frontal brain regions may be associated with disturbances of executive functions, attention, behavior, or emotional control. Their timely recognition and the avoidance of risk factors that increase their incidence are crucial to preventing complications and improving the patient’s clinical condition.

Keywords: Atherosclerosis; Frontal lobe; Neuroimaging; Post-ischemic lesion

TAV-IN-SAV: A CASE REPORT

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Aim: Aortic stenosis is a narrowing of the aortic valve that restricts blood flow from the left ventricle into the aorta. Transcatheter aortic valve implantation (TAVI) is a minimally invasive procedure that involves the percutaneous implantation of a new aortic valve through a catheter. The valve-in-valve procedure (transcatheter aortic valve in surgical aortic valve, TAV-in-SAV) consists of placing a new valve within a previously surgically implanted bioprosthetic valve that has failed. This method allows treatment without the need for repeat open-heart surgery.
Case report: The patient is a 75-year-old male with severe symptomatic stenosis of the bioprosthetic aortic valve, chronic heart failure with an ejection fraction of 30%, ischemic heart disease, hypertension, and permanent atrial fibrillation. He also has chronic kidney disease, type 2 diabetes mellitus, hyperlipoproteinemia, and pancytopenia. In 2016, he underwent surgical aortic valve replacement with bioprosthesis and coronary artery bypass grafting. In 2023, a pacemaker was implanted due to atrial fibrillation with a slow ventricular response. In October of 2024, he experienced worsening of chronic heart failure. Dobutamine stress testing confirmed severe stenosis of the bioprosthetic valve with preserved left ventricular contractile reserve. He subsequently underwent a TAV-in-SAV procedure, which was completed successfully with an optimal result. During the hospital stay, kidney function and blood count were closely monitored. By the end of the stay, both have improved. The control echocardiogram showed a proper position of the transcatheter valve with a low transvalvular mean gradient (13 mmHg) and a trace of paravalvular leak. At the beginning of hospitalization, the patient required very high doses of parenteral diuretics (furosemide 1000 mg daily combined with acetazolamide). Following the procedure, the diuretic regimen was reduced to 250 mg of furosemide daily, and acetazolamide was discontinued. This adjustment was associated with a marked improvement in the patient's functional status, and the patient was discharged after 21 days.
Conclusion: The patient with multiple comorbidities underwent a minimally invasive valve-in-valve procedure for severe stenosis of a surgical aortic valve. The intervention was completed successfully, with optimal valve function, demonstrating the effectiveness and safety of this approach in high-risk patients.

Keywords**:** Aortic valve stenosis; Heart failure; Heart Valve Prosthesis Implantation; Transcatheter aortic valve implantation

WHEN FIRST-LINE THERAPY FAILS: REFRACTORY AVNRT IN A 24-WEEK PREGNANT WOMAN

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Aim: Atrioventricular nodal reentrant tachycardia (AVNRT), although the most common sustained supraventricular arrhythmia in pregnancy, remains rare with an estimated incidence of 22 per 100,000 pregnancies. Sustained tachycardia may result in maternal hypotension, heart failure, and the urgent need for cesarean delivery. It may also compromise uteroplacental perfusion and expose the fetus to risks of growth restriction, preterm birth, or distress. Management is further complicated by the limited pharmacological options and by the hesitation of clinicians to intervene aggressively in pregnant patients. In this context, drug-refractory AVNRT represents a particularly challenging scenario. The aim of this case report is to highlight the importance of timely recognition, stepwise therapy, and a prompt multidisciplinary approach in stabilizing the mother and protecting the fetus at 24 weeks of gestation.
Case report: A 28-year-old woman at 24 weeks of gestation presented to the emergency department with persistent palpitations for the past 12 hours. She described similar, self-limited episodes during her first pregnancy seven years ago. Upon admission, she was tachycardic with a heart rate in the 170s, consistent with supraventricular tachycardia. Initial therapy with adenosine 6 mg followed by 12 mg produced only transient rhythm control, and the patient rapidly reverted. Vagal manoeuvres were attempted and unsuccessful. The patient subsequently received IV metoprolol 5mg, IV verapamil 2.5 mg, and oral flecainide 200 mg. A repeat bolus of adenosine (12 mg) finally converted the patient to sinus rhythm. During arrhythmia, she was mildly hypotensive, which improved with intravenous fluids. Continuous fetal monitoring remained reassuring. The patient was hospitalized, started on flecainide 50 mg twice daily, and remained in sinus rhythm. Echocardiogram and fetal growth ultrasound were normal. She was discharged hemodynamically stable, asymptomatic, and tolerating flecainide, with close cardiology and obstetric follow-up planned.
Conclusion: This case illustrates the challenges of managing refractory AVNRT in pregnancy, in which maternal stabilization must be balanced with fetal safety. Although adenosine is the first-line therapy, resistant arrhythmias may require cautious escalation to alternative agents, such as beta-blockers, calcium channel blockers, or class IC antiarrhythmics. Hemodynamic consequences of persistent tachycardia make timely intervention essential. Our patient's case demonstrates that a thoughtful stepwise approach with continuous fetal monitoring and close hemodynamic surveillance can achieve safe rhythm control without invasive measures.

Keywords**:** Anti-Arrhythmia Agents; Atrioventricular Nodal Reentry Tachycardia; Pregnancy; Supraventricular Tachycardia

AMIODARONE LUNG: A CASE REPORT

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Aim: The aim of this paper is to present a case of amiodarone pulmonary toxicity (APT), a serious respiratory complication of amiodarone therapy. APT occurs in 1–10% of patients, with risk increasing with treatment duration and cumulative dose. Its clinical manifestations vary from interstitial and organizing pneumonia to diffuse alveolitis, acute respiratory distress syndrome, or pulmonary fibrosis.
Case report: A 72-year-old male was admitted to the emergency department due to progressive dyspnea developing over several weeks. Symptoms included shortness of breath on minimal exertion, air hunger, throat tightness, and a productive morning cough with white sputum that became dry during the day. He denied chest pain, nausea, vomiting, diarrhea, or catarrhal symptoms but reported back pain and anterior neck tenderness. The day before admission, he was subfebrile (37.5 °C), which resolved after paracetamol. His medical history included arterial hypertension, hyperlipidemia, and atrial fibrillation (one DC cardioversion). Chronic medications were apixaban, atorvastatin, nebivolol, perindopril/amlodipine, zolpidem, amiodarone (introduced 10 months earlier), and a diuretic. No allergies were reported. On admission, the patient was conscious, oriented, and mobile but dyspneic, pale, and in poor general condition. Cardiac examination revealed a regular rhythm, muffled heart sounds, and a systolic murmur. Breath sounds were normal, but oxygen saturation was 86%. Chest X-ray showed an enlarged cardiac silhouette, prominent hilar markings, increased interstitial pattern, and small bilateral basal effusions. Laboratory results revealed an elevated CRP (68.5 mg/L). Contrast-enhanced chest MSCT demonstrated bilateral, ill-defined perilobular infiltrates across all lobes, consistent with an organizing pneumonia (OP) pattern, suggesting amiodarone-induced pulmonary toxicity. The patient received oxygen and diuretics (furosemide, eplerenone). After a pulmonology consultation, a diagnosis of interstitial lung disease of the OP type secondary to amiodarone was established. Amiodarone was discontinued, and corticosteroid therapy with methylprednisolone was initiated. A follow-up MSCT one month later showed regression of interstitial changes, supporting drug-induced toxicity. Compared with the initial findings, consolidations had resolved and were replaced by patchy ground-glass opacities, while mediastinal lymph nodes appeared normal.
Conclusion: Amiodarone-induced pulmonary toxicity is a rare but potentially severe complication. Prompt discontinuation of amiodarone and early corticosteroid therapy can lead to significant clinical and radiological improvement, emphasizing the importance of timely diagnosis and management.

Keywords**:** Amiodarone; Drug Toxicity; Lung Diseases, Interstitial; Pneumonia, Organizing

IL-23 INHIBITION AS AN EFFECTIVE STRATEGY FOR METHOTREXATE-RESISTANT PSORIASIS: A CASE REPORT

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Aim: Psoriasis is a common, chronic inflammatory skin disease characterized by circumscribed, erythematous plaques of varying size, commonly with silvery white lamellar scales on the surface. Psoriasis is caused by a T-helper 1 (Th1) and 17 (Th17) autoimmune response, in which IL-23 activates the Th17 cell pathway to mediate the inflammatory cascade that induces psoriatic plaque formation. Methotrexate is a folate derivative that inhibits several enzymes involved in nucleotide synthesis, thereby suppressing inflammation and preventing cell division. Guselkumab is a human immunoglobulin G1 lambda (IgG1λ) monoclonal antibody that selectively inhibits interleukin-23. This report aims to illustrate the role of biologic drug guselkumab in the management of patients with psoriasis refractory to methotrexate.

Case report: We report a case of a 57-year-old man with a 16-year history of psoriatic skin lesions, who presented to the Dermatovenerology Clinic, University Hospital Center Rijeka, due to worsening of the clinical presentation despite systemic methotrexate therapy over the previous seven years. During 2019, within a period of seven months, a significant exacerbation of the disease was noted. Clinical examination revealed extensive plaques on the extensor surfaces of the extremities and trunk, with pronounced scalp desquamation. The PASI index was 24.5. Due to worsening of the disease, the dose of methotrexate was increased to 17.5 mg per week with continued topical application of corticosteroids, and at the same time, a switch to biological therapy was considered. Two months after the dose increase, the patient came for a follow-up examination without sufficient clinical improvement. Laboratory findings revealed hypercholesterolemia and hypertriglyceridemia as contraindications for the use of retinoids, so the introduction of the biological drug guselkumab was indicated and subsequently started. At the follow-up examination ten months after the start of therapy, complete remission of the disease was achieved, with PASI 0 and DLQI 0.

Conclusion: In this case, we highlight the importance of using biological therapy in methotrexate-resistant psoriasis. Rapid and effective achievement of PASI 0 significantly improves the quality of life of patients affected by psoriasis.

Keywords**:** Biological Therapy; Guselkumab; Methotrexate; Psoriasis

UNDETECTED FOREIGN BODY IN THE KNEE

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Aim: This case report aims to underscore the fact that an intra-articular foreign body in the knee joint can remain undetected for years, especially when the scar is inconspicuous or the symptoms are absent. A prolonged asymptomatic phase is common if the object is adherent to the synovial capsule or located in synovial recesses; symptoms typically arise when it becomes mobile. It is essential to emphasise that a foreign body can penetrate a joint through various mechanisms, such as traffic accidents, explosions, or injuries that cause skin lacerations. The most common foreign body locations in the knee are the suprapatellar pouch, the intercondylar notch, and the posterior compartments, primarily due to gravity and movement. In this case, the object is found infrapatellarly in Hoffa's tissue.
Case report: A 49-year-old male presents with medial knee pain. Physical examination suggests a Frecciarossa meniscal injury. Radiographic imaging unexpectedly reveals a large infrapatellar intra-articular foreign body. A multislice CT scan with 3D reconstruction locates a 5x1 cm object in Hoffa's fat pad. Further history reveals a childhood motorcycle fall that caused a minor anterior knee laceration. At the time, the wound was cleaned, but because there was no swelling or restricted motion, radiographic evaluation was not considered necessary. Although arthroscopy is effective for visualising and removing foreign bodies, it was unsuccessful in this case due to obstruction by Hoffa's fat pad and its limited access to extracapsular areas, requiring an open surgical approach.
Conclusion: Any wound in the knee region with disrupted skin integrity may serve as an entry point for a foreign body. The size of the wound does not necessarily correlate with the shape or volume of the foreign body. Therefore, radiographic evaluation of the knee is recommended in cases of trauma involving disruption of skin integrity.

Keywords**:** Arthroscopy; Foreign Bodies; Hoffa's Fat Pad; Intra-articular; Knee Joint

FROM WHEELCHAIR TO WALKING: FUNCTIONAL RECOVERY AFTER BILATERAL PANTALAR ARTHRODESIS IN A PATIENT WITH ADVANCED RHEUMATOID ARTHRITIS

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Aim: This case report emphasizes the remarkable restoration of mobility in a patient with advanced rheumatoid arthritis who presented with severe bilateral foot deformities and was initially wheelchair-bound. It illustrates the role of bilateral ankle arthrodesis as a salvage procedure to correct deformity, relieve pain and significantly improve mobility and quality of life.
Case report: A 45-year-old female with long-standing rheumatoid arthritis presented with severe bilateral foot pain and inability to walk. Her history included bilateral total knee and hip arthroplasties and left wrist arthrodesis. Examination revealed rigid bilateral planovalgus deformities, more pronounced on the left, with medial skin maceration, calluses and superficial ulceration. Radiographic imaging showed a lateral distal tibial defect, medial talar subluxation with erosion and fibular articulation with the lateral calcaneus. Due to the severity, the left side was prioritized and treated with one-stage tibiotalar, talocalcaneal and talonavicular arthrodesis, along with tibialis posterior tendon refixation. Fixation was achieved using a tibiotalocalcaneal locking plate, lag screw with washer and additional locking screws. Postoperatively, the foot was immobilized in a below-knee splint in a neutral position. Non-weight-bearing was maintained for 14 days, followed by gradual weight-bearing in a custom-made fiberglass boot for three months. One month postoperatively, the patient developed a panaritium on the left thumb and received co-amoxiclav, leading to *Clostridium difficile* sepsis due to dysbiosis. The patient fully recovered after antimicrobial and supportive therapy. One year later, satisfied with the outcome, the patient underwent tibiotalocalcaneal arthrodesis of the right ankle and metatarsophalangeal arthrodesis of the right hallux with locking plate fixation. The same postoperative regimen was applied. Six months after the second surgery, the patient is walking unaided.
Conclusion: In advanced rheumatoid arthritis, severe foot and ankle deformities can persist despite multiple joint replacements, severely affecting function. Multijoint arthrodesis combined with tendon refixation can restore alignment and weight-bearing capacity. Successful outcomes depend on detailed preoperative planning, advanced imaging, meticulous technique and individualized postoperative care.

Keywords**:** Arthrodesis; Callus; Foot Deformities; Planovalgus; Rheumatoid Arthritis

PREMATURE TWINS WITH PLACENTA PREVIA AND AN UNEXPECTED COMPLICATION – A CASE REPORT

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Aim: Placenta previa is a pregnancy condition where the placenta covers all or part of the cervix. During the second half of pregnancy, the most common symptom is vaginal bleeding, which can be life-threatening for the pregnant woman and the baby. The method of delivery for placenta previa is almost always a cesarean section (C-section). Tension pneumotorax in premature infants is a rare but serious condition, most often caused by respiratory distress syndrome (RDS). This case report highlights the importance of an emergency delivery by C-section following massive placental bleeding, as well as the timely management of tension pneumotorax in preterm neonates.
Case report: A 27-year-old woman was admitted to the gynecology department for mild placenta previa bleeding in the 29th week of twin pregnancy. An emergency C-section was performed due to the progression of bleeding. Two little girls were safely brought into the world, repeatedly sensory stimulated, and surrounded by heaters. The first twin was administered continuous positive airway pressure at 5 cm H2O with a fraction of inspired oxygen of 40%, without the need for positive-pressure ventilation. She was born with a very low birth weight of 1250g and an Apgar score of 6/7. Following admission to the neonatal intensive care unit, noninvasive positive pressure ventilation was initiated. Since the antenatal corticosteroid prophylaxis wasn't performed, she developed severe RDS and surfactant was applied (LISA method). A few minutes after application, there was a deep oxygen desaturation to 60% with pronounced signs of dyspnea, bradycardia, sudden abdominal distension, and absent breath sounds on the right. Radiologically, a complete right-sided tension pneumothorax was confirmed. Emergency needle thoracentesis was performed with rapid clinical improvement, and a thoracic drainage catheter was placed. The conventional mechanical ventilation was initiated, but on the 2nd day of life, she developed pulmonary hypertension that was treated with inhaled nitric oxide for three days, resulting in clinical improvement. In the following days, the high-frequency oscillatory ventilation led to further improvement, with chest x-rays confirming complete regression of the pneumothorax. She was discharged from the hospital at 37th weeks of corrected gestational age.
Conclusion: Tension pneumothorax in a premature infant is a medical emergency that requires rapid recognition and prompt treatment – needle thoracocentesis – to avert sustained hypoxia, thus reducing the risk of long-term sequelae and allowing for normal psychomotor development of the premature newborn.

Keywords**:** Placenta Previa; Premature Birth; Pneumothorax; Thoracentesis

MYOCARDIAL INFARCTION WITH NON-OBSTRUCTIVE CORONARY ARTERIES IN PREGNANCY – A DIAGNOSTIC CHALLENGE

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Aim: To report a case of myocardial infarction with non-obstructive coronary arteries (MINOCA) in a patient at 37 weeks of gestation and outline pregnancy-related diagnostic challenges.
Case Report: A 31-year-old patient at 37 weeks' gestation developed sudden chest pain radiating interscapularly while driving. Upon arrival at the emergency department, she was hemodynamically and respiratory stable (BP 110/70 mmHg, HR 75/min, SpO_2 98%, RR 16/min). Examination showed clear lungs, a discrete systolic murmur consistent with a known bicuspid aortic valve, a gravid non-tender abdomen and mild ankle oedema. Electrocardiogram (ECG) demonstrated dynamic ischaemic ST–T changes, and high-sensitivity troponin exhibited a rise-and-fall pattern fulfilling myocardial infarction (MI) criteria. Laboratory tests were notable for mild anaemia and neutrophil-predominant leukocytosis, with normal levels of the inflammatory parameters, platelets and liver enzymes. The urine analysis excluded significant proteinuria. Transthoracic echocardiography showed preserved left ventricle (LV) function without regional wall-motion abnormality. The bicuspid aortic valve was unchanged, without significant functional disorders. To exclude the most common causes of MI in pregnancy, the spontaneous coronary artery dissection (SCAD) and atherosclerotic coronary artery disease, coronary CT angiography with aortography was done, selected to minimise invasiveness and radiation. It revealed patent epicardial coronaries without obstructive lesions or dissection, with an anomalous origin of one coronary artery as an incidental finding. Compression ultrasonography of the lower-limb veins showed no DVT, making pulmonary embolism unlikely. With cardiology–obstetric co-management, she was treated conservatively (analgesia, rest, haemodynamic surveillance). Her symptoms resolved, and there were no further events. Outpatient follow-up was arranged, with postpartum reassessment planned for vasospasm or microvascular dysfunction.
Conclusion: MINOCA in a pregnant patient often represents a diagnostic challenge because of the heterogeneity of its etiology, varied clinical presentation, the difficulty in distinguishing MINOCA from other pregnancy-related conditions, and the lack of a gold-standard test. A diagnostic pathway should employ a comprehensive approach using multimodality imaging, while balancing the risks of maternal and fetal complications.

Keywords: Aortography; Coronary Angiography; Coronary Artery Dissection; Electrocardiography; Myocardial Infarction; Pregnancy

FROM MOTHER TO SON – A FAMILIAL HYPERTROPHIC CARDIOMYOPATHY CASE REPORT

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Aim: Familial hypertrophic cardiomyopathy (HCM) is an inherited condition characterized by abnormal thickening of the myocardial wall, mainly affecting the left ventricle, in the absence of other cardiac or systemic disorders. The two most common genes associated with HCM are MYBPC3 and MYH7. About 50% of HCM cases are caused by pathogenic variants in the MYBPC3 gene. MYBPC3 encodes myosin-binding protein C, a sarcomere component that regulates myocardial contraction. HCM caused by MYBPC3 variants follows an autosomal dominant inheritance pattern. Homozygous individuals are more severely affected, often leading to neonatal death, while heterozygous individuals show incomplete penetrance, ranging from 50 to 62% for familial HCM-related pathogenic variants. This case report emphasizes the importance of recognizing symptoms early in hereditary cardiac conditions.
Case report: A 55-year-old woman with arterial hypertension and class III obesity underwent cardiological evaluation in mid-September 2025 due to progressive dyspnea and fatigue. Examination revealed a grade V/VI systolic murmur over the aortic valve and bilateral pretibial edema. Family history revealed that her 28-year-old son has been diagnosed with HCM exhibiting a non-obstructive phenotype. Genetic analysis identified a variant of uncertain significance in the MYBPC3 gene. Considering these findings, complete cardiac and genetic screening was advised for all first-degree relatives at the time of his diagnosis. Transthoracic echocardiography (TTE) was scheduled, but by late September 2025, the patient experienced chest pain and worsening heart failure. The electrocardiogram showed atrial fibrillation with rapid ventricular response, and she was hospitalized. TTE demonstrated left ventricular hypertrophy, most pronounced in the septum, an enlarged left atrium, severe left ventricular outflow tract obstruction, mild aortic stenosis, and moderate mitral regurgitation with systolic anterior motion of the anterior mitral leaflet. These findings were consistent with an obstructive HCM phenotype. Coronary angiography showed no abnormalities. Her HCM risk score, which estimates the 5-year risk of sudden cardiac death in patients, was 3.2%, and after stabilization, she was discharged. Further evaluation, including cardiac magnetic resonance, genetic testing, and assessment for infiltrative heart disease, is planned.
Conclusion: Conditions such as HCM often have a heritable component. In such cases, prompt completion of the recommended investigations for at-risk relatives is advised to guide appropriate management and to identify individuals who may benefit from genetic testing and early intervention.

Keywords**:** Cardiac Myosins; Cardiomyopathies; Genetic Testing; Hypertrophy

A HEADACHE CAUSED BY CAVERNOUS SINUS THROMBOSIS; CASE REPORT

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Aim: To underline the importance of including rare but serious causes of headache in the differential diagnosis. This case illustrates how atypical presentations in elderly patients can rapidly progress to neuro-ophthalmologic emergencies.
Case report: An 84-year-old female patient presented to the emergency department independently due to a severe frontotemporal headache that woke her up. She also complained of neck and occipital pain. After applying analgesic therapy, which resulted in regression of symptoms, and after proper radiological processing, the patient was discharged. Two days later, she returned with a headache, periorbital edema bilaterally (stronger on the left eye), impaired vision, mildly painful eyeballs when palpated, and tearing of the left eye. The patient received a referral for an ophthalmologist's examination, which she attended the day after. The ophthalmologist described bilateral ptosis, weaker pupillary reaction, left-sided protrusion, and limited bulbomotor movement in all directions. A CT orbit scan was performed urgently and showed primarily the left superior ophthalmic vein thrombosis (SOVT) and the right sphenoid sinuses. A CT cavography scan confirmed bilateral cavernous sinus thrombosis (CST). The sphenoid sinus was -molecular-surgically treated, and low molecular weight heparin (LMWH) was ordered to treat SOVT and CST. The infectologist prescribed meropenem and vancomycin. On the day of the discharge, the inflammatory eye changes were in regression. LMWH was replaced with edoxaban, and a nasal spray with silver was given. The patient was referred for a control check-up after getting the results of an MRI scan.
Conclusion: Headaches can have a wide range of causes, from benign to life-threatening. This case highlights the importance of considering rare but severe conditions such as CST in the differential diagnosis, especially when symptoms worsen or new neurological signs appear. Early diagnosis and prompt multidisciplinary treatment are crucial for improving patient outcomes and preventing severe complications.

Keywords**:** Cavernous Sinus Thrombosis; Headache; Sinusitis; Thrombosis

PERSISTENT VENTRICULAR TACHYCARDIA: A CASE REPORT

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Aim: Radiofrequency ablation is an invasive cardiology procedure used to selectively destroy a small part of the heart muscle. This area conducts an abnormal electrical impulse that causes tachycardia. The aim of this case report is to present a patient who did not have an adequate response to medical therapy and therefore required this form of treatment.
Case Report: A 77-year-old female patient was admitted with recurrent episodes of rapid heart rate and chest pain. Her medical history included refractory ventricular tachycardia, ischemic heart disease with prior myocardial infarction and PCI, hypertension, hyperlipidemia, and glaucoma. Ablation treatment of ventricular tachycardia was planned. A cardiac CT was performed, revealing a large thrombus in the apex of the left ventricle measuring 30 × 11 millimetres and a chronic infarction of the basolateral wall of the heart in the perfusion area of the LCx. Atherosclerotic changes of the coronary arteries were also observed, with moderate stenoses of the right coronary artery (RCA) and left anterior descending artery (LAD), as well as an occlusion of the LCx in its distal half. As ventricular tachycardia was refractory to pharmacological therapy, the patient was referred for an electrophysiological study of the heart with radiofrequency ablation. A three-dimensional voltage and activation map of the left ventricle was performed, demonstrating a large scar across the entire posterior wall. The affected area was ablated, resulting in termination of the arrhythmia. After the procedure, there were no recurrences of ventricular tachycardia. Due to the development of a hematoma at the puncture site, appropriate diagnostics were carried out, including an ultrasound of the groin and CT peripheral angiography of the lower extremities. By the time of discharge, the hematoma had spontaneously regressed, and anticoagulant therapy was introduced.
Conclusion: The acute success rate of such procedures ranges from 60% to 80%, and they should be performed in patients who, despite optimal pharmacological therapy, fail to control the arrhythmia. Continuous follow-up of patients after the procedure and adequate supportive therapy are essential.

Keywords**:** Heart Disease; Interventional Cardiology; Radiofrequency Ablation; Ventricular Tachycardia

ACUTE MYOCARDIAL INFARCTION – A CASE REPORT

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Aim: Acute coronary syndrome (ACS) is a collective term for clinical syndromes that occur due to a sudden, critical reduction of blood flow through the heart muscle. The aim of this paper is to demonstrate the importance of continuous ECG monitoring in patients to track the progression of cardiac changes in emergency conditions.
Case report: A 74-year-old male patient was brought to the emergency department by ambulance due to chest pain. He reported that on the same day, while sitting, he began to feel a dull pain in the centre of his chest, without radiation, with an intensity of 6 out of 10. Prehospital therapy included acetylsalicylic acid 300 mg orally, enalapril 5 mg orally, and amlodipine 5 mg orally due to elevated blood pressure levels. The first ECG showed mild ST elevation in lead V1 with a biphasic T wave. The second ECG, obtained after the patient complained of new left arm pain and decreased chest pain, also showed mild ST elevation in V1 with a biphasic T wave, as well as ST depressions in the septal and lateral leads with hyperacute T waves. Laboratory findings revealed a markedly elevated troponin I level of 502.5 ng/L (normal <17.5 ng/L). During his stay in the emergency department, the patient was administered ticagrelor 180 mg orally. He was then referred for a cardiology consultation. An emergency coronary angiography and primary percutaneous coronary intervention (PCI) were performed, with the placement of a stent in the left anterior descending (LAD) coronary artery. During subsequent hospitalisation and at discharge, the patient remained cardiacally compensated, normotensive, and haemodynamically stable.
Conclusion: This case demonstrates the importance of serial ECG recordings in patients with chest pain and suspected acute coronary syndrome, as dynamic changes observed between the first and second ECGs can be crucial for diagnosis and timely intervention. Prompt and appropriate management is essential to maximize the chances of a favorable outcome, minimize myocardial damage, and prevent permanent complications.

Keywords**:** Acute Coronary Syndrome; Coronary Angiography; Myocardial Infarction; Percutaneous Coronary Intervention

ALICE IN WONDERLAND – A CASE REPORT

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Aim: This complex clinical case is presented within the context of chronic paranoid disorder, highlighting the occurrence of perceptual disturbances described in the literature as *Alice in Wonderland Syndrome* (AIWS). The aim of this case report is to emphasize the need for an integrated multidisciplinary approach to diagnosis and treatment, particularly the collaboration among psychiatrists, neurologists, and psychologists.
Case report: A 76-year-old female patient, a widow under long-term psychiatric care, was hospitalized in the Department of Resistant and Chronic Disorders following acute treatment at the Psychiatry Clinic due to the need for extended care related to persistent paranoia, hypobulia, and ingrained experiences of specific perceptual disturbances. She described experiences of changes in her body, with a constant sensation that parts of her body were growing, accompanied by a subjective feeling of space distortion, which suggested AIWS. Therapeutically, she was stabilized with antipsychotics, clozapine and quetiapine, anxiolytics, and corrective somatic treatment. However, it was only after the introduction of depot fluphenazine with weekly applications that partial remission of perceptual disturbances was achieved. As a result, she no longer exhibited intense affect and showed improvements in mood and daily functionality. In agreement with the patient's family, she was discharged for outpatient care, with recommendations for partial assistance and continuous monitoring due to persistent vulnerability and insufficient compliance with psychopharmacological treatment.
Conclusion: Alice in Wonderland Syndrome in elderly age can manifest as part of a psychotic, but also partially neurological spectrum of disorders. A multidisciplinary approach, including psychiatric, neurological, and psychological evaluations, is crucial for differential diagnosis and optimal treatment. Timely recognition of perceptual distortion phenomena can contribute to a better understanding of the patient's subjective experience and the individualization of therapeutic approaches.

Keywords**:** Alice in Wonderland Syndrome; Body Dysmorphic Disorder; Fluphenazine; Geriatric Psychiatry; Psychotic Disorder

EXTENSIVE STANFORD TYPE A AORTIC DISSECTION WITH PROMPT DIAGNOSIS AND SURGICAL SUCCESS - A CASE REPORT

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Aim: Aortic dissection is a rare but life-threatening cardiovascular emergency that results from a tear in the intimal layer of the aorta, leading to blood entering the media and creating a false lumen. If not recognised, dissection can lead to rupture and extensive bleeding from the aorta, which is connected to a high mortality rate. This case report highlights the importance of prompt recognition and surgical repair of aortic dissection, Stanford type A.
Case report: A 65-year-old female patient was admitted to the emergency department for experiencing sudden and severe chest pain, rated 8/10 on the VAS scale, predominantly on the left side. The patient experienced symptoms while sitting at home. She also reported shortness of breath and vomited multiple times during transportation to the emergency department. Upon examination, the patient was hemodynamically stable, with normal heart rate, blood pressure, and respiratory rate. No abnormalities were found on ECG or laboratory tests, including normal troponin levels. However, due to persistent symptoms and high clinical suspicion, a CT aortography was performed, revealing an extensive Stanford type A aortic dissection. The dissection originated above the right carotid artery and extended distally to the iliac arteries. The celiac trunk, superior mesenteric artery, and both renal arteries arose from the false lumen, although no signs of abdominal organ mal perfusion were identified. Coronary arteries were neatly opacified. An echocardiogram revealed a left ventricular ejection fraction of 55% and severe aortic regurgitation. The patient underwent emergent open surgical repair with implantation of an AMDS stent and graft interpositum. After surgery, she was transferred to the intensive care unit, where she was stable and was extubated on the second day post-surgery. The patient was discharged from the hospital on the ninth day in excellent condition and without complications.
Conclusion: Aortic dissection is a medical emergency that requires early recognition and immediate treatment. Typical dissection symptoms should raise clinical suspicion, and advanced imaging confirms the diagnosis. Timely surgical intervention, especially in extensive type A dissections, is crucial in improving patient outcomes.

Keywords**:** Aortic dissection; Aortography; Chest pain; Surgery; Troponin

POSTOPERATIVE COMPLICATIONS FOLLOWING RESECTION OF A MEDULLARY HEMANGIOBLASTOMA: A CASE REPORT AND ETHICAL CONSIDERATIONS IN INTENSIVE CARE MANAGEMENT

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Aim: To present a complex case of medullary hemangioblastoma complicated by postoperative hemorrhage, brainstem edema, and secondary ischemic injury, emphasizing the challenges of neurosurgical management and ethical decision-making in prolonged intensive care.
Case report: A 34-year-old male presented with progressive dysphagia, dysarthria, dizziness, and left-hand paresthesia. MRI revealed a medullary hemangioblastoma. Microsurgical resection via median suboccipital craniotomy achieved near-total removal of a highly vascularized lesion. Postoperatively, the patient developed respiratory instability and aspiration requiring bronchoscopy and reintubation. CT demonstrated a hemorrhage within the resection cavity extending into the ventricular system, necessitating surgical revision with evacuation and external ventricular drain placement. Despite decompression and adequate ICP control, the patient remained ventilator-dependent due to persistent dysphagia and posterior fossa oedema. Subsequent MRI revealed bilateral hemispheric infarctions in the anterior and middle cerebral artery territories with loss of cortical evoked potentials, indicating irreversible cortical damage. Following multidisciplinary discussion and ethics consultation, active treatment was discontinued in accordance with the patient's presumed will. The patient passed away under palliative care measures.
Conclusion: Medullary hemangioblastomas represent a significant surgical challenge due to their vascularity and critical location. This case illustrates the potential for severe postoperative complications despite technically successful resection and highlights the need for early multidisciplinary and ethical involvement in managing patients with poor neurological prognosis.

Keywords**:** Hemangioblastoma; Medulla oblongata; Postoperative complications; Brain edema; Ethics; Palliative care

MILIARY TUBERCULOSIS WITH CROHN'S DISEASE: A CASE REPORT

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Aim: Appearance of miliary tuberculosis while using anti-TNF therapy is rare, but a serious condition. It should be treated as soon as it is found, which shows the importance of early screening and prophylaxis. This case report describes the appearance of miliary tuberculosis as a side-effect of using anti-TNF therapy for Crohn's disease treatment.
Case report: A 44-year-old male was hospitalised at the Emergency department due to fever. The patient was given amoxicillin/clavulanic acid and cefixime therapy by his general practitioner, which caused severe diarrhea. First suspicion was perforation of the gallbladder, but it was confirmed negative after a CT scan and an ultrasound of the abdomen. Due to his persistent fever and respiratory insufficiency, he was relocated to the Department of Pulmology. Radiogram showed shading in the upper and middle parts of the lungs, corresponding to an inflammatory infiltrate. The patient has an earlier diagnosis of Crohn's disease, which leads to suspicion of miliary tuberculosis. *Mycobacterium tuberculosis* was detected as positive on the PCR test of the sputum. A CT scan of the thorax revealed that the patient has miliary nodules distributed throughout the lungs, accompanied by ground-glass opacity (GGO). The patient was given Quadruple Anti-Tuberculosis therapy (ATL), and his Adalimumab therapy for Crohn's disease was discontinued.
Conclusion: This case represents the potential risk of reactivation of latent tuberculosis during anti-TNF therapy and illustrates how pre-treatment screening for latent tuberculosis and continuous monitoring during biological therapy are essential to prevent this life-threatening condition. Early recognition of symptoms can significantly improve patient outcomes.

Keywords: Miliary tuberculosis; Biological therapy; Crohn's disease; Screening

INTEGRATIVE APPROACHES TO PEDIATRIC ABDOMINAL RECONSTRUCTION: STRATEGIC SOLUTIONS FOR NEONATAL UMBILICAL CORD HERNIA - CASE REPORT

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Aim: The aim is to present a case of umbilical cord hernia, a rare anomaly and a subtype of omphalocele, which belongs to the congenital defects of the anterior abdominal wall. Omphalocele is a birth defect of the abdominal wall in which the abdominal organs protrude into the base of the umbilical cord, and treatment in such cases is always surgical when ileus is proven.
Case report: We present the case of a female infant born at Pula General Hospital from the mother's first pregnancy. The child was diagnosed with an umbilical cord hernia, a type of omphalocele and transferred the next day to the Rijeka Clinical Hospital Center. In the ninth hour of life, the newborn presented with vomiting of greenish-brown intestinal contents, prompting further diagnostic evaluation. A supine abdominal X-ray was performed, revealing signs of ileus. An abdominal ultrasound confirmed the presence of distended bowel loops filled with fluid and lacking peristalsis, indicating intestinal obstruction. The combination of imaging findings confirmed mechanical intestinal obstruction, which required urgent surgical management. Early recognition of these signs was essential in preventing bowel necrosis and further complications. Bowel passage revealed a distended intestinal coil partially protruding into the omphalocele. The patient underwent emergency surgery due to clinical and radiological signs of ileus. A median laparotomy was performed. The enlarged portion of the small intestine adhered to the omphalocele sheath's base, connecting to a significantly narrowed and atretic segment of the small intestine was resected and a T-T anastomosis and appendectomy were performed. The remaining omphalocele sheath was resected and separated, followed by individual layer suturing of the abdominal wall. Navel reconstruction was performed in the lower section of the abdomen.
Conclusion: Omphalocele can be treated conservatively and surgically. Surgical intervention is the standard for anterior abdominal wall defects with associated intestinal atresia. To ensure good quality of life, layered reconstruction should focus on navel reconstruction. Multidisciplinary collaboration between neonatologists, pediatric surgeons, and radiologists remains essential for achieving a favorable prognosis in patients with umbilical cord hernia.

Keywords**:** Abdominal Wall Defects; Anastomosis; Intestinal Atresia; Omphalocele

A CASE REPORT OF CHRONIC BURN WOUND FAILURE: THE INTERPLAY OF STAPHYLOCOCCUS AUREUS, HYPOALBUMINEMIA, AND ANXIETY

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Aim: This case report aims to analyze the multifactorial etiology of delayed burn wound healing in a 53-year-old female, emphasizing the often-overlooked influence of systemic factors such as chronic infection, nutritional deficiency, and psychological distress.

Case report: A 53-year-old female was hospitalized after several months with non-healing superficial and partial-thickness burns affecting multiple body sites, characterized by excessive hypergranulation tissue. Diagnostic evaluation identified three key systemic impediments. The wounds were persistently colonized by Staphylococcus aureus, maintaining chronic inflammation as reflected by elevated inflammatory markers. This infection was accompanied by pronounced hypoalbuminemia, indicative of a nutritional deficit impairing tissue regeneration. In addition, the patient was diagnosed with generalized anxiety disorder, highlighting the adverse effect of sustained psychological stress on immune function and wound repair. Treatment consisted of surgical debridement of hypergranulation tissue, targeted antibiotic therapy, nutritional supplementation, and anxiolytic medication. The coexistence of infection, nutritional compromise, and psychological stress was identified as a triad of modifiable barriers to successful wound closure.

Conclusion: This case demonstrates that chronic burn wound healing failure is a multifactorial process seldom resolved by a single therapeutic approach. The interplay of Staphylococcus aureus, hypoalbuminemia, and anxiety formed a self-perpetuating cycle of inflammation and impaired regeneration. Comprehensive management addressing infection control, nutritional support, and psychological stabilization is essential for achieving complete wound healing.

Keywords**:** Burns; Case Reports; Nutrition Therapy; Staphylococcus aureus; Wound Healing

LIVING 30 YEARS WITH CEREBELLAR LYMPHOMA - CASE REPORT

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Aim: To present the coexistence of the patient and cerebellar lymphoma and the progress in treatment methods over almost 30 years.
Case report: At the age of 25 (1997), the patient was diagnosed with primary diffuse large B-cell non-Hodgkin lymphoma of the right hemisphere of the cerebellum. The first line of therapy consisted of a combination of surgery, chemotherapy, and radiotherapy, after which she was in remission for 11 years. She experienced relapses in 2008 and 2010, during which she was treated again with chemotherapy and entered remission. A relapse occurred in 2015, when she was treated with radiotherapy, but her neurological symptoms worsened. Considering the MRI stationary changes on the right cerebellar and in the ipsilateral half of the pons, along with partial gliotic-malatogenic changes present on the same side of the cerebellum, which may indicate the consequences of surgery, radiation, chemotherapy, or possible recurrence of lymphoma, the patient is being monitored in an interdisciplinary manner. A relapse then occurred in 2016. The patient is gradually deteriorating neurologically; however, this is due to the effects of treatment. The lymphoma is currently in remission. In 2025, the patient was admitted to the emergency department several times due to falls and transient ischemic attacks. On CT, gliomalation of the right cerebellar hemisphere, pons area, mesencephalon, and cerebellar peduncles persists, along with atrophy of the left cerebellar hemisphere. The patient is currently mobile in a wheelchair, has right-sided weakness and difficulty speaking, which occasionally progresses.
Conclusion: This case highlights the potential for long-term remission in primary cerebellar diffuse large B-cell lymphoma with combined multimodal therapy. Progressive neurological deficits predominantly reflect treatment-related complications rather than active disease. Sustained multidisciplinary surveillance is crucial for optimizing long-term outcomes and managing late neurotoxic effects.

Keywords**:** Cerebellum; Combined Modality Therapy; Lymphoma; Radiotherapy

PATIENT WITH LEG WEAKNESS CAUSED BY CORONAVIRUS DISEASE 2019 INFECTION: CASE REPORT

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Aim: The aim of this case report is to present the systematic diagnostic evaluation of a patient with leg weakness. We highlight the complexity of the differential diagnosis and emphasize the crucial steps that led to the correct diagnosis of this neurological condition and its Coronavirus disease 2019 (COVID-19) related etiology.
Case report: Patient R.S. presented to the emergency department due to leg weakness that appeared on the morning of admission. The weakness was most prominent in the lower legs, causing a tendency to fall forward upon standing. He denied other associated sensory symptoms (numbness, burning, or cramps) or history of trauma. R.S. reported experiencing chills, general weakness, decreased appetite, altered taste, diarrhea and a sore throat for the past 3–4 days. Neurological examination was preformed which showed no abnormalities except for a quadriceps reflex graded 1+ bilaterally and an absent triceps reflex bilaterally. Laboratory findings revealed an elevated CRP of 40.9 mg/L. In the differential diagnosis, cerebrovascular insult (CVI), acute polyradiculitis (Guillain-Barré syndrome – GBS), transverse myelitis, lumbar fracture, and COVID-19 infection were considered. Microbiological testing confirmed COVID-19 infection, which could explain the patient's symptoms; however, other possible causes still needed to be excluded. Brain CT showed no abnormalities or significant changes compared with a CT preformed in 2023. A chest and abdominal X-ray showed no significant findings. A thoracic and lumbosacral spine X-ray revealed the same compressive fractures of the Th9 and L1 vertebrae as previously documented. Electromyoneurography (EMNG), performed the next day, showed no signs of polyradiculitis or GBS. On 5th day of hospitalization, MRI was performed, revealing a stable fracture with a larger Schmorl's node in the upper half of the Th12 vertebral body (non-recent). Edema of the Th12–L1 intervertebral discs was noted, without changes in adjacent vertebral bones. Following infectious disease consultation and clinical improvement, the patient was discharged after 6 days of hospitalization with a course of moxifloxacin.
Conclusion: This case report shows an interesting differential diagnostic process where a seemingly "simple" cause produced concerning neurological symptoms. Although the cause was only a COVID-19 infection, this case demonstrates the importance of carefully ruling out more serious underlying causes. Furthermore, it highlights the importance of considering COVID-19 related neurological symptoms even in the absence of classical findings of Guillain-Barré syndrome.

Keywords**:** Guillain-Barré Syndrome; Medical Emergencies; Muscle Weakness; Neurologic Manifestations; Polyradiculopathy

FROM AN IMPLANTATION TO AN EXPLANATION: A TAVI POP-UP

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Aim: This case aims to present the complex management of a high-risk patient with a bicuspid aortic valve undergoing Transcatheter Aortic Valve Implantation (TAVI), highlighting the occurrence of intra-procedural complications and underscoring the importance of timely diagnosis and multidisciplinary intervention in achieving optimal patient outcomes. Transcatheter aortic valve implantation is a procedure involving percutaneous bioprosthetic valve implantation in a severely stenosed aortic valve. This case report highlights the importance of timely diagnosis and management of newly arising complications during the procedure.
Case report: A 76-year-old female patient was hospitalized in December 2023 due to heart failure and severe aortic stenosis. The case was presented to the Heart Team, and TAVI was recommended. However, in June 2024 the patient suffered a major stroke and underwent mechanical thrombectomy. After a period of neurorehabilitation, at the time of the TAVI procedure, there was a significant neurological improvement. Computed tomography (CT) analysis showed a bicuspid aortic valve (BAV) with a severely calcified raphe. During the procedure, after proper placement and towards the end of the procedure, the valve embolized into the ascending aorta. It was snared further into the ascending aorta, and a second valve was introduced. However, due to inadequate expansion and significant residual paravalvular regurgitation caused by the heavily calcified BAV, the implantation was aborted. Following the retraction of the system, the patient experienced sudden cardiac arrest due to cardiac tamponade. Emergency pericardiocentesis with autotransfusion was performed. Echocardiography confirmed aortic dissection and annular injury, prompting surgical aortic valve and ascending aorta replacement.
Conclusion: BAV with severely calcified raphe in high-risk patients represents a challenge in both percutaneous and surgical replacement procedures. Application of theoretical knowledge, combined with technical skills and multidisciplinary collaboration, enables timely intervention, which is critical for reducing mortality and improving outcomes.

Keywords**:** Aortic Valve Stenosis; Bicuspid Aortic Valve Disease; Transcatheter Aortic Valve Replacement

VESSEL-TRACKING SOFTWARE TO ASSIST PROSTATIC ARTERY EMOLIZATION FOR LOWER URINARY TRACT SYMPTOMS: A CASE REPORT

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Aim: Prostatic artery embolization (PAE) is an increasingly accepted minimally invasive treatment for lower urinary tract symptoms (LUTS) secondary to benign prostatic hyperplasia (BPH). The procedure remains technically challenging due to variable pelvic vascular anatomy and the small calibre of prostatic arteries.
Case report: A 75-year-old male presented with dysuria, frequency, nocturia, and significant post-void residual urine, resistant to medical therapy. After recurrent urinary retention, PAE was performed using a vessel-tracking software integrated into the angiographic workstation. The software automatically reconstructed 3D vascular anatomy from cone-beam computed tomography data, identified prostatic artery origins, and allowed virtual path navigation and target confirmation prior to catheterization. This software-assisted workflow reduced fluoroscopy time, contrast load, and overall procedure duration. Bilateral embolization was successfully completed using 250–400 µm microspheres. The patient reported significant symptomatic improvement and reduction in prostate volume on follow-up ultrasound.
Conclusion: Vessel-tracking technology provides real-time 3D guidance and automatic vessel identification, facilitating safe and efficient PAE. Integration of such software into interventional radiology practice enhances precision in complex pelvic anatomy and may improve procedural outcomes in patients with BPH-related LUTS.

Keywords**:** Benign Prostatic Hyperplasia; Cone-Beam Computed Tomography; Lower Urinary Tract Symptoms; Software.

ANCHORED TOO LOW: A TEACHING CASE ON PLACENTA PREVIA

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Aim: Placenta previa signifies the placenta extending to or over the internal cervical os, thereby preventing vaginal delivery. Usually suspected at 20 weeks and confirmed after the 26th, placenta previa often resolves spontaneously, occurring in 4–5 per 1,000 births. It can result in severe uterine bleeding, the need for cesarean delivery and preterm birth. Among the major risk factors are a history of placenta previa, previous cesarean delivery, multiple gestation, prior uterine surgical procedures, abortion or miscarriage, a male fetus and advanced maternal age, among others. Placenta accreta spectrum is a condition in which the placenta attaches too deep into the uterine wall, preventing it from separating normally after childbirth. It brings a substantially greater risk for complications at delivery. The aim of this case report is to provide a detailed overview of placenta previa through a real clinical case, highlighting key learning points for improving maternal and fetal outcomes.
Case report: A 35-year-old pregnant woman was hospitalized at the Clinic for gynecology and obstetrics at 36+0 weeks gestation due to a previously diagnosed placenta previa. Among risk factors for placenta previa, this patient had a cesarean delivery four years prior, as well as a previous miscarriage. Both the combined screening test and the non-invasive prenatal test (NIPT) performed at 13 weeks were within normal range. Laboratory tests showed mildly elevated leukocytes and C-reactive protein. Urinalysis showed elevated leukocyte esterase and bacteria, so cefazoline (1g i.v.) was prescribed to treat urinary tract infection. Ultrasound findings showed that the placenta was located anteriorly and low, entirely situated in the lower uterine segment, with possible invasion into the anterior uterine wall, which could suggest placenta accreta. One week after hospitalization, following the completion of 37 weeks of gestation, a decision was made to deliver by cesarean section. It was noted that through the scar of the previous uterotomy, placental tissue was visible in an area of approximately 4×3 cm. As expected, the placental tissue was entirely located in the lower uterine segment and completely occupied it. On the third day postpartum, the puerpera was discharged with her newborn in good general condition, with prescribed oral iron capsule supplementation.
Conclusion: Placenta previa is a rare condition associated with a high risk of severe antepartum and intrapartum hemorrhage as well as preterm birth. However, favorable maternal and fetal outcomes can be achieved through early detection and intensive prenatal management.

Keywords**:** Cesarean Section, Repeat; Placenta Accreta; Placenta Previa; Risk Factors

WHEN SELF-MEDICATION TURNS DANGEROUS: RECURRENT MRSA SEPTIC ARTHRITIS IN IATROGENIC CUSHING'S SYNDROME – CASE REPORT

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Aim: The aim is to present the clinical course of recurrent MRSA septic arthritis in a patient with iatrogenic Cushing's syndrome resulting from uncontrolled and prolonged corticosteroid use.
Case Report: A 60-year-old man presented to the emergency department with pain, swelling, and redness of the right shoulder joint. One month earlier, he had been hospitalized for septic arthritis with methicillin-resistant *Staphylococcus aureus* (MRSA) isolated. After a short period of improvement, the symptoms recurred. In his medical history, the patient reported previous treatment for gout, along with self-initiated use of additional medications and traditional remedies. Consequently, clinical features of iatrogenic Cushing's syndrome developed (moon face, petechiae, striae rubrae, central obesity), indicating long-term corticosteroid use. On admission, he was subfebrile with laboratory evidence of infection. Ultrasound and clinical examination suggested recurrent joint infection. Surgical evacuation of purulent material, excision of infected tissues, and drainage were performed. Samples were sent for microbiological and histopathological analysis. Postoperatively, the patient remained hemodynamically stable. Antimicrobial therapy was continued, and endocrinological evaluation was planned.
Conclusion: This case highlights the importance of caution when prescribing and administering corticosteroids, as well as the risks of self-medication. Prolonged, uncontrolled corticosteroid use can lead to immunosuppression and the development of severe infections such as recurrent septic arthritis. A multidisciplinary approach is essential for successful treatment and prevention of complications. Furthermore, this case emphasizes the need to educate patients about the dangers of unsupervised medication use outside the regulated healthcare system.

Keywords: Arthritis; Infectious; Cushing syndrome; Glucocorticoids; Methicillin-resistant staphylococcus aureus; Self medication

DIFFICULT PATH TO STABILITY - FROM TOTAL TO TUMOUR ENDOPROTESIS. CASE REPORT.

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Aim: Gonarthrosis is a degenerative disease of the articular cartilage. The leading symptom is pain, decreased mobility and function of the joint. In advanced forms (stage IV), the treatment of choice is the implantation of a total knee arthroplasty (TKA) but possible complications are prosthetic fracture, infection and mechanical aseptic loosening.
Case report: 76-year-old woman, with normal body mass index, history of arterial hypertension and tendency toward frequent urinary tract infections first time came to orthopedic specialist 17 years ago because of severe knee pain and difficulty walking. A total knee arthroplasty (TKA) of the right knee was indicated. But, one year later due to onset symptoms on the opposite side, TKA of the left knee was performed as well. Ten years later after bilateral TKA implantation the patient developed pain in the left knee with occasional effusions and reduced mobility. During multiple outpatient check-ups, joint aspiration, laboratory testing (inflammatory parameters, uric acid) and analysis of the punctures were performed. All tests were normal, but the radiograph showed signs of aseptic loosening of the tibial and femoral components of the prosthesis. Bone scintigraphy confirmed increased activity in the left knee area indicating loosening or infection of the prosthesis, which is why explanation of the prosthesis with collection of samples for microbiological analysis and subsequent implantation of a revision prosthesis was indicated. The bacteriological findings were negative, and postoperatively the patient underwent rehabilitation according to the standard protocol. In 2025, after a fall, the patient sustained a complex periprosthetic fracture of the left femur with a significant bone defect. A tumour endoprosthesis was implanted as the only option that allowed for the replacement of lost bone mass and joint stabilization. The procedure went smoothly, and postoperative management included protocol-based rehabilitation, thromboprophylaxis and broad-spectrum antibiotic therapy due to the presence of an extensive hematoma. Three months postoperatively, patient walked with crutches, without any pain.
Conclusion: Implantation of a TKA reduces symptoms and restores mobility in patients with advanced gonarthrosis but due to complications precise differential diagnosis of aseptic versus septic loosening of the endoprosthesis are crucial for the correct choice of therapeutic approach. Reconstruction with a tumour endoprosthesis allows stabilization and represents an optimal solution in the absence of other methods that would ensure satisfactory biomechanical function.

Keywords: Knee Osteoarthritis; Periprosthetic Fractures; Prostheses and Implants; Total Knee Arthroplasty

MELANOMA OF UNKNOWN PRIMARY WITH UNCOMMON METASTATIC SITES – A CASE REPORT

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Aim: Melanoma of unknown primary (MUP) is a well-defined clinical entity accounting for approximately 3.2% of all melanoma diagnoses, characterized by metastatic melanoma in subcutaneous tissue, lymph nodes (LNs), or visceral organs without a detectable primary cutaneous, ocular, or mucosal lesion. This report presents two cases of MUP with uncommon metastatic presentations—supraclavicular lymph node and cardiac involvement—to highlight diagnostic challenges and underscore the importance of a multidisciplinary approach in managing this distinct disease entity.
Case report: Two patients, a 66-year-old female and a 51-year-old male, were referred to our institution for evaluation of clinically suspicious findings. In the first patient, a palpable left supraclavicular mass was confirmed as melanoma by cytological examination (HMB-45 positive). In the second patient, a cardiac metastasis of melanoma was discovered intraoperatively during cardiac surgery for a suspected myxoma. Comprehensive dermatological evaluation, including full-body skin examination and detailed history, failed to identify a primary tumor in either case. Previous histopathological analysis of multiple atypical moles in both patients had not demonstrated invasive melanoma but rather showed lesions with regression features or severe atypia. The treatment approach was focused on managing the metastatic disease, involving immunotherapy and radiotherapy for the first patient, and oncological evaluation for the second patient, who also had comorbid alcoholic liver cirrhosis.
Conclusion: MUP most commonly presents with LN involvement, often in the axillary region, though visceral metastases—such as cardiac involvement—are also documented. Classified as AJCC stage III (LN/subcutaneous disease) or stage IV (visceral disease), MUP paradoxically demonstrates improved overall survival compared to stage-matched melanomas with known primaries, potentially due to immune-mediated regression of the primary tumor. Management mirrors that of known-primary melanoma: aggressive surgical resection for stage III disease and multimodal therapy (surgery, systemic therapy, radiotherapy) for stage IV. These cases emphasize the need for thorough diagnostic evaluation to exclude non-cutaneous primaries and a personalized, multidisciplinary strategy to optimize outcomes in MUP patients.

Keywords**:** Diagnosis; Melanoma; Neoplasm Metastasis; Unknown Primary

SEVERE THERMAL INJURY DUE TO ALCOHOL EXPOSURE RESULTING IN UPPER EXTREMITY AMPUTATION: CASE REPORT

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Aim: The aim of this case report is to present a rare and life-threatening thermal injury indirectly associated with alcohol consumption, and to emphasize the assessment and emergency management of burns in patients with altered consciousness.
Case report: We report a case of a 75-year-old man who fell asleep for 20 minutes on a stove while distilling alcohol and was subsequently transported by ambulance to Cho Ray Hospital. On arrival he had impaired consciousness, while clinical history was obtained from family members by phone. Initial management included vital signs and wound assessment. Examination revealed extensive fourth-degree burns involving the anterior left torso, back, and the entire left arm, which was covered with circumferential eschar. The patient was promptly admitted to the Department of Plastic Surgery where he underwent urgent amputation of the affected arm and debridement of adjacent necrotic tissue. During admission the patient received supportive care and after ten days the patient underwent a second debridement; seven days later he was discharged home with outpatient follow-up and a plan for rehabilitation.
Conclusion: Superficial burns are typically extremely painful; however, when patients have altered consciousness and the heat source is not removed, superficial injuries can rapidly progress to deep, full-thickness burns with irreversible tissue loss and life-threatening complications. Proper management of such burns requires a multidisciplinary team providing extensive debridement and supportive therapy in critical care units.

Keywords**:** Alcohol drinking; Amputation; Burns; Debridement

MANAGEMENT OF NEWLY DIAGNOSED DIABETES IN A SEDENTARY MIDDLE-AGED PATIENT - CASE REPORT

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Aim: In this case report, we aim to highlight the use of early tirzepatide therapy in the treatment of newly diagnosed diabetes in a patient with multiple metabolic risk factors. This therapeutic approach, combined with lifestyle intervention, is an emerging option for improving metabolic control, with its reliability and effectiveness continually progressing through advances in modern incretin-based pharmacology.
Case report: A 58-year-old male presented with elevated fasting glucose, weight gain, reduced physical activity, and irregular dietary habits. His medical history included hypertension and dyslipidemia. Laboratory testing confirmed newly diagnosed diabetes mellitus, hypertriglyceridemia, and mildly elevated liver enzymes. While being on standard cardiometabolic therapy, the patient also reported fatigue, daytime sleepiness and decreased libido, which were associated with low testosterone levels. Tirzepatide therapy was selected as the method of treatment for his metabolic condition and was introduced with gradual dose escalation together with medical nutrition counseling and increased physical activity. Over the following months, fasting glucose and hemoglobin A1c improved significantly, liver enzymes and lipid values normalized, and blood pressure control was enhanced. The patient reported improved wellbeing, weight reduction and better adherence to lifestyle changes, while testosterone levels increased in parallel with metabolic improvement.
Conclusion: Early initiation of tirzepatide therapy in newly diagnosed diabetes may achieve broad metabolic benefits, improving glycemic, hepatic, and hormonal parameters. This case supports its potential role as a comprehensive treatment option in patients with multiple metabolic risk factors.

Keywords**:** Diabetes Mellitus; Hypogonadism; Metabolic Syndrome; Obesity; Tirzepatide

THE USE OF LIVER SUPPORT SYSTEM DEVICES IN ACUTE LIVER FAILURE AS A CONSEQUENCE OF METASTATIC MELANOMA IN THE LIVER: CASE REPORT

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Aim: Liver support systems should be included as a new step for treating patients with metastatic melanomas in liver.
Case Report: A 38-year-old patient enters the clinic with an irregular, variably pigmented lesion on the upper left part of his back without any clinical symptoms of disease. A biopsy of this lesion confirmed a superficial melanoma with metastases in the left axilla. The next step in treatment, decision-making was to check if the patient had a positive BRAF mutation, which in this patient turned out to be positive. Based on this information, aggressive immunotherapy with a combination of ipilimumab and nivolumab was initiated. Seventeen days after the start of therapy, the patient's clinical condition worsened significantly; he developed a fever, diarrhea, began coughing, experienced abdominal pain and felt extremely weak. Physical examination revealed pain in the upper right quadrant, accompanied by elevated laboratory values of liver transaminases and cholestatic parameters. Three days later, a chest X-ray showed pneumonia in the right lobe, for which oral therapy with amoxicillin and clavulanic acid was initiated. Due to the presence of pneumonia, colitis and suspected hepatitis, immunotherapy and antibiotics were discontinued, and methylprednisolone was introduced. Methylprednisolone helped with the colitis, but liver transaminases remained markedly elevated, alongside worsening symptoms of dyspnea. The patient underwent a CT pulmonary angiography, which revealed nodular opacities in the lungs and pathologically enlarged lymph nodes in the mediastinal, retro pectoral and axillary regions. An abdominal MRI was also performed, confirming metastases in the liver, spleen and thoracic spine. As a result of corticosteroid therapy, the patient developed insufficiency of the liver's secretory, synthetic, and metabolic functions. In agreement with the patient and his family, therapy with continuous venovenous hemodiafiltration and TPO therapy was initiated. Forty-eight hours after this therapy, the patient's liver function tests improved significantly. Therapy with dabrafenib and trametinib was successfully introduced. Two months after new therapy, CT and MRI scans revealed a significant reduction in lung, liver and spleen metastases, as well as an exceptional improvement in the liver function, which returned to reference values.
Conclusion: Liver failure was caused by multiple liver metastases as well as inadequate treatment. The successful return to normal liver function was achieved through the use of liver support system, which allowed the introduction of new therapy with dabrafenib and trametinib. Therapy using liver support system represent a new step in the treatment of liver metastases in oncology.

Keywords: Hepatic failure; Immunotherapy; Liver, Artificial; Melanoma

BEYOND ASSUMPTIONS: RARE AV MALFORMATION, RENAL LYMPHOMA, AND CARDIAC TUMOR, A CASE REPORT

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Aim: The aim of this case report is to present a rare combination of a renal lymphoma, a large pelvic arteriovenous malformation, and an incidental cardiac tumor, each with an incidence below 1 in 100,000 population. It highlights the diagnostic and therapeutic challenges when initial clinical assumptions are overturned.
Case report: A 53-year-old woman presented with abdominal and pelvic pain. Abdominal ultrasound revealed a round, hypoechoic lesion of the right kidney measuring 2–3 centimetres, prompting referral for further urological evaluation. Computed tomography (CT) confirmed a solid renal mass suspicious for neoplasm, along with multiple pulmonary nodules. In addition, a possible arteriovenous malformation (AVM) in the region of the right ovarian fossa was suspected, leading to further evaluation with CT angiography and digital subtraction angiography (DSA) of the pelvis in preparation for surgical planning. Angiography demonstrated a large AVM approximately 10 cm in length, with arterial supply from the ovarian artery and a 5 cm aneurysmal dilatation. The ovarian vein was diffusely dilated and drained into the right renal vein. The AV malformation was successfully embolized. Subsequently, enucleation of the renal mass, clinically suspected to be adenocarcinoma, was performed, and in the same surgical procedure, the efferent limb of the AV malformation was occluded. Surprisingly, histopathology revealed peripheral B-cell non-Hodgkin lymphoma. Following initiation of hematologic therapy with rituximab, one month after the initial surgery, the patient developed renal hemorrhage with gross hematuria and clot formation, necessitating urgent nephrectomy. In the remaining renal tissue, an incidental benign interstitial tumor was found. The postoperative course after nephrectomy was complicated by persistent fever despite antibiotic therapy. The etiology of the fever remained undetermined, although imaging demonstrated a right atrial mass, with differential diagnosis including myxoma versus metastasis. However, following cardiac surgery, pathology confirmed a papillary elastofibroma. After completion of hematologic treatment, follow-up PET-CT showed no evidence of active or progressive malignancy. Surgical treatment was reconsidered; Due to spontaneous regression of the AV malformation, planned surgery was not required anymore.
Conclusion: This case illustrates the importance of comprehensive diagnostic evaluation and multidisciplinary management in patients with rare and unexpected findings. It emphasizes that individualized therapeutic strategies are essential for optimal patient outcomes.

Keywords**:** Arteriovenous Malformations; Heart Neoplasms; Kidney Neoplasms; Lymphoma

ENLARGED CARDIAC SILHOUETTE CAUSED BY EXCESSIVE PERICARDIAL AND MEDIASTINAL FAT: A RARE CAUSE OF ARRHYTHMIAS – CASE REPORT

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Aim: To present a rare case of arrhythmias associated with excessive pericardial and mediastinal fat, emphasizing its potential role in arrhythmogenesis.
Case report: A 68-year-old male was referred for cardiology evaluation after an incidental finding of an enlarged cardiac silhouette on chest X-ray. His medical history included hypertension, hyperlipoproteinemia, obesity, smoking, and exertional dyspnea. On physical examination, the only remarkable findings were obesity and mild shortness of breath on exertion. Electrocardiogram showed sinus rhythm with occasional premature ventricular complexes (PVCs), prompting initiation of nebivolol and further evaluation. Echocardiography demonstrated biventricular enlargement, preserved left ventricular ejection fraction, and severe pulmonary hypertension. A treadmill stress test and 24-hour Holter monitoring confirmed exercise-induced PVCs and occasional premature supraventricular complexes (PSVCs). Cardiac magnetic resonance imaging demonstrated significant pericardial fat pericardial fat, biatrial enlargement, and a large hiatal hernia with herniation of abdominal fat into the posterior mediastinum. Serial Holter monitoring documented fluctuating PVC burdens, peaking at over 32,000 daily. Additional comorbidities included obstructive sleep apnea (OSA), chronic obstructive pulmonary disease (COPD), and progressive weight gain. The patient declined surgical hernia repair and was managed pharmacologically. Treatment with metoprolol followed by flecainide led to a significant reduction in arrhythmic burden and improvement of symptoms.
Conclusion: This case illustrates a rare potential cause of arrhythmias: excessive pericardial and mediastinal fat. Differential diagnoses such as structural heart disease and coronary artery disease were excluded. The presence of ectopic fat and a large hiatal hernia may have contributed to arrhythmogenesis through mechanical and metabolic effects. Recognition of fat-associated arrhythmic substrates is crucial in similar patients, especially when classical cardiac pathology is absent. Further studies are needed to clarify the role of ectopic fat in arrhythmia development and guide management strategies, particularly considering emerging evidence on the effect of SGLT2-inhibitors on reducing epicardial adipose tissue as a novel therapeutic option. This case also highlights the importance of addressing fat-related cardiac risks amid the global obesity pandemic.

Keywords**:** Adipose Tissue, Epicardial; Arrhythmias, Cardiac; Cardiomegaly; Obesity

NAVIGATING THE CHALLENGES OF AN ANOMALOUS LEFT CORONARY ARTERY WITH SEVERE STENOSIS: A CASE REPORT

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Aim: To report a complex case of an anomalous left coronary artery (LCA) with severe stenosis, highlighting the diagnostic and management challenges this condition presents.
Case report: A 60-year-old male presented with exertional chest pain persisting for several days. Initial clinical, laboratory, and ECG findings were unremarkable. His history included left nephrectomy for rhabdomyosarcoma, prostate adenoma surgery, and multiple sclerosis. Due to persistent symptoms, a treadmill stress test was performed and returned positive. Transthoracic echocardiography showed no structural abnormalities. Coronary angiography revealed an anomalous origin of the LCA from the right coronary sinus, with 95% stenosis in the proximal left anterior descending artery (LAD) and additional atherosclerotic lesions. Multi-slice computerized tomography (CT) coronary angiography confirmed the anomalous interarterial course of the LCA passing between the aorta and pulmonary artery. Stress cardiac magnetic resonance imaging (MRI) demonstrated reversible myocardial perfusion deficits. The patient underwent percutaneous coronary intervention (PCI) with drug-eluting stent placement in the LAD. Six months later, he was re-hospitalized for unstable angina. Angiography showed new stenoses beyond the previously placed stent. These were treated with balloon angioplasty, drug-coated balloon (DCB) angioplasty, and spot stenting. Despite prior interventions, the patient remained symptomatic, warranting a stress cardiac MRI. It demonstrated persistent anterior and lateral wall ischemia. Surgical unroofing of the left main coronary artery with new ostium creation was performed. The postoperative course was uneventful aside from transient post-pericardiotomy syndrome. On follow-up, the patient remained angina-free.
Conclusion: This case illustrates the diagnostic complexity of concurrent coronary artery anomaly and atherosclerotic disease. The presence of an anomalous LCA, a rare congenital anomaly associated with increased ischemic risk, was only revealed through multimodal imaging. This case underscores the importance of considering congenital anomalies in patients with atypical ischemic symptoms and highlights the need for a tailored, multidisciplinary approach combining interventional and surgical strategies. Further studies are warranted to evaluate long-term outcomes of such combined treatment modalities.

Keywords: Anomalous Left Coronary Artery; Coronary Angiography; Coronary Artery Disease; Percutaneous Coronary Intervention

DIAGNOSTIC COMPLEXITY OF INSULAR EPILEPSY: AUTONOMIC SYMPTOMS MIMICKING SYSTEMIC EVENT

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Aim: This case report presents a diagnostically challenging and rare case of a young woman with episodes of autonomic dysfunction and unresponsiveness who was ultimately diagnosed with insular epilepsy. Insular epilepsy is an uncommon focal epilepsy syndrome that often mimics temporal or frontal lobe epilepsy due to its highly variable semiology as well as its deep location complicating scalp electrographic monitoring. The case highlights the difficulty in distinguishing insular seizures from other focal epilepsies, the importance of recognizing catamenial patterns in women of reproductive age, and the diagnostic evaluation for possible autoimmune epilepsy.
Case report: A 33-year-old woman was admitted two days after a seizure-like episode characterized by cyanosis, foaming at the mouth, facial grimacing and unresponsiveness. She sustained a lateral tongue bite and urinary incontinence. In the preceding weeks, she reported intermittent fevers, chills, fatigue, nausea, vomiting, somnolence, non-bloody diarrhea, photophobia, and speech difficulties. She denied prior seizures or recent infections. Significant unintentional weight loss (9 kg over 2 months) alongside possible psychiatric changes suggested a possible systemic or autoimmune process. Workup included continuous video-EEG, MRI, lumbar puncture, and CT chest/abdomen/pelvis to rule out malignancy. During hospitalization, she experienced recurrent episodes of facial flushing, cold extremities, tachycardia, hypotension (BP 60/40 mmHg), and tachypnea in a cyclical pattern. Video-EEG captured a left temporal seizure with facial flushing, vocalizations, and “chapeau de gendarme“, lasting about one minute with autonomic symptoms prior to scalp EEG changes. Lacosamide was initiated and uptitrated to 200mg, with zonisamide 200mg added. Levetiracetam was avoided due to behavioral side effects and history of anxiety and depression. Insular epilepsy was suspected based on autonomic symptoms (flushing, tachycardia, throat closing sensation, hypotension) and semiology suggesting spread into the temporal lobe with loss of awareness and ictal pout. MRI showed increased T2/FLAIR signal in the left hippocampus, raising concern for possible autoimmune encephalitis, however APE2 score of 3 and ACES score of 1 suggested against this etiology. High-dose methylprednisolone was administered empirically, without significant clinical improvement. Lumbar puncture was unremarkable. Later, her fiancé reported episodes of staring spells around her menstrual cycle, consistent with possible catamenial epilepsy.
Conclusion: This case illustrates the importance of history in the diagnosis and clarification of epilepsy and its potential autoimmune etiology, as well as establish a catamenial influence. Insular epilepsy remains an uncommon localization and understanding the nuances with appropriate diagnosis is imperative. Additionally, establishing a catamenial component offers unique treatment strategies that can allow for improved seizure control for these patients.

Keywords**:** Catamenial; Epilepsy Flushing; Hypotension; Insular

FROM PREECLAMPSIA TO ECLAMPSIA IN 48 HOURS: THE IMPORTANCE OF TIMELY MANAGEMENT – A CASE REPORT

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Aim: Eclampsia is a life-threatening complication of pregnancy, defined by the onset of seizures or loss of consciousness in pregnant women with previously diagnosed preeclampsia or gestational hypertension. The condition can lead to placental abruption, disseminated intravascular coagulation, pulmonary edema, acute renal failure, premature birth or death of the mother and the fetus. Eclampsia increases the risk of developing chronic hypertension and the recurrence of preeclampsia or eclampsia in subsequent pregnancies. This case report aims to highlight the importance of timely management in order to prevent maternal and fetal complications.
Case report: A 25-year-old primigravida was admitted to the Department for gynaecology and obstetrics with a diagnosis of preeclampsia at 37 weeks of gestation. The patient peaked at 160/110 mmHg, while laboratory analyses revealed mild anemia and urinalysis demonstrated massive proteinuria with an elevated protein-to-creatinine ratio (368 mg/mmol/L). At admission, the treatment with 20mg of nifedipine was administered and the blood pressure was subsequently normalised. Considering the term pregnancy, preeclampsia and possible complications of the disorder, labor was induced using a prostaglandin vaginal gel, resulting in the vaginal delivery of a healthy newborn. The early postpartum period was uneventful. However, on the second day, the puerperal woman developed an eclamptic seizure. The patient developed generalized tonic-clonic convulsions, after which she became unconscious. On examination, her blood pressure was 205/120 mmHg, heart rate 163/min, and oxygen saturation 66%. An emergency CT scan was performed, revealing no abnormal findings. Oxygen therapy was administered, along with 10mg of diazepam and 2g of magnesium sulfate intravenously. The patient was administered to the Intensive care unit. On the first day of intensive care, the patient was placed on mechanical ventilation and sedated with propofol and sufentanil, while continuing magnesium sulfate and nifedipine therapy, with the addition of intravenous labetalol. On the following day, she was successfully extubated and transferred back to the gynaecology ward, where she remained hospitalized for an additional 11 days. After discharge, the patient was regularly followed by a nephrologist and remained normotensive.
Conclusion: Eclampsia is rare condition that may result in acute or long-term complications, and can be fatal for both the mother and the fetus. For this reason, timely management, including supplemental oxygen, antihypertensive therapy, benzodiazepines, and magnesium sulfate, are essential for optimal maternal and fetal outcomes.

Keywords**:** Critical care; Eclampsia; Hypertension, Pregnancy-Induced; Magnesium Sulfate; Pre-eclampsia

BILATERAL FACIAL NERVE PALSY FOLLOWING RHOMBOENCEPHALITIS

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Aim: To present a rare case of bilateral facial nerve palsy caused by rhomboencephalitis and to highlight its diagnostic and therapeutic challenge
Case report: A previously healthy adult developed acute onset of dizziness, headache, diplopia, and progressive facial weakness. Neurological examination revealed bilateral lower motor neuron facial palsy and mild dysarthria. Brain MRI demonstrated T2/FLAIR hyperintensity in the pontine and medullary regions consistent with rhomboencephalitis. Extensive laboratory and microbiological workup, including serologic and CSF analysis, was performed, but no definitive infectious agent was identified. The patient received empirical antimicrobial and antiviral therapy, followed by corticosteroids and intensive physical rehabilitation. During hospitalization, the patient's condition stabilized, with gradual improvement of cranial nerve function over several months. Intensive outpatient physiotherapy led to partial recovery of bilateral facial movement, improvement in eye closure, and normalization of speech and swallowing. Follow-up neuroimaging demonstrated resolution of brainstem lesions without new pathology.
Conclusion: This case underlines the diagnostic difficulty of rhomboencephalitis and the importance of early recognition of brainstem involvement in patients Corresponding with bilateral facial nerve palsy. Multimodal treatment, including prompt empirical therapy and long-term neurorehabilitation, can significantly improve functional outcomes. Further research is needed to clarify the pathophysiological mechanisms and optimal management strategies in idiopathic or post-infectious rhomboencephalitis.

Keywords: Bilateral facial palsy; Cranial neuropathies; Encephalitis; Facial nerve diseases; Neurorehabilitation

EFFICACY OF FINERENONE IN REDUCING ALBUMINURIA IN PATIENTS WITH DIABETIC NEPHROPATHY

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Aim: Diabetic nephropathy is a chronic kidney disease characterized by persistent albuminuria and progressive decline in renal function, commonly affecting adults with type 2 diabetes. It is one of the leading causes of end-stage renal disease. The standard of care for chronic kidney disease associated with type 2 diabetes includes the use of ACE inhibitors, ARBs, SGLT2 inhibitors and GLP-1 agonists. A newer drug - finerenone, a selective non-steroidal mineralocorticoid receptor antagonist, has been shown to reduce renal inflammation and fibrosis, thereby slowing disease progression. The aim of this study was to investigate the effect of finerenone on albuminuria and the recovery of estimated glomerular filtration rate (eGFR) in patients with diabetic nephropathy.
Materials and Methods: This retrospective study analyzed the clinical records of nine patients diagnosed with diabetic nephropathy who received finerenone between July 2024 and May 2025. Parameters analyzed included albuminuria, eGFR, potassium, creatinine, and other medications or comorbidities of the patient. Data were collected prior to initiating finerenone, after one month of treatment, and again during follow-up between three and nine months of therapy.
Results: After one month of finerenone treatment, all patients presented with a reduction in albuminuria, with an average decrease of 49.43%. Patients with a shorter duration of diabetes (up to 2 years) experienced a greater reduction in albuminuria, averaging 82.99%, suggesting a higher potential for renal recovery when treatment is initiated earlier in the disease course. eGFR values in all patients remained stable throughout follow-up, indicating no evidence of accelerated decline. Finerenone was well tolerated, and no cases of hyperkalemia or treatment discontinuation were observed.
Conclusion: Finerenone therapy was associated with a significant reduction in albuminuria in patients with diabetic nephropathy, particularly in those with a shorter duration of diabetes. These findings highlight the importance of early treatment in preserving kidney function. Although limited by its small sample size, this research is consistent with larger clinical trial data and suggests that finerenone represents a promising therapeutic option for managing diabetic nephropathy.

Keywords**:** Albuminuria; Diabetic nephropaties; Finerenone; Hyperkalemia

A COMPLETE UTERINE SEPTUM DOES NOT NECESSARILY AFFECT PREGNANCY OUTCOME: CASE REPORT

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Aim: Müllerian anomalies are congenital malformations of the female reproductive tract that appear during embryologic development. A septate uterus is the most common anomaly and is associated with reduced fertility, and increased miscarriage and preterm birth rates. Hysteroscopic septum resection is commonly performed in our setting prior to pregnancy.
Case report: We report two cases of patients with a complete uterine septum and successful pregnancies. A 30-year-old healthy patient presented with an incidental finding of multiple vaginal polyps during a gynecological examination. Her history showed one uncomplicated spontaneous pregnancy and vaginal delivery of a healthy term infant. Her postpartum course was without difficulties. Three-dimensional ultrasound after delivery showed a complete uterine septum. Excision of the polypoid structures was performed together with a diagnostic hysteroscopy to confirm the Müllerian anomaly. Histology of the polyp structures showed connective tissue remnants that could be explained as an intrapartum torn vaginal septum.
The other patient was a healthy 35-year-old female who was referred to our clinic for hysteroscopic polypectomy. Her history revealed one uncomplicated spontaneous pregnancy and vaginal delivery of a healthy term infant. Her postpartum course was also without difficulties. The diagnosis of a complete uterine septum was made a year after delivery during the workup for prolonged menstrual bleeding. The patient underwent hysteroscopic polypectomy, and the described Müllerian anomaly was confirmed.
Conclusions: Various studies have assessed the efficacy of hysteroscopic uterine septum removal in increasing fertility and preventing preterm births. The patients with a complete uterine septum presented in this report had no fertility, pregnancy, delivery, or postpartum issues, suggesting that a uterine septum alone does not necessarily cause infertility, and its removal may be less beneficial for optimal pregnancy outcomes than previously thought.

Keywords: Uterine Septum; Hysteroscopy; Müllerian Duct Anomalies; Pregnancy Outcome

OPTIMAL OUTCOME OF FRONTAL BONE RECONSTRUCTION IN PEDIATRIC PATIENT USING 3D PRINTED CUTTING GUIDES AND AN IMPLANT MOLD: A NEXT-GENERATION PERSONALIZED SURGERY

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Aim: This case aims to provide an insight into the production process of personalized 3D printed surgical guides and molds for matching cranial implants. Here, we present a case of a 16-year-old patient diagnosed with eosinophilic granuloma located on the right half of the frontal bone and the roof of the orbit.
Case Report: Eosinophilic granuloma (EG) is a localized form of Langerhans cell histiocytosis. In the pediatric population, the most common site of the lesion is the skull. Not all EGs require surgical treatment, but when the lesion compromises the integrity of the bones, cranioplasty is indicated.
The patient presented with a tumefaction sensitive to touch in the temporal region, with no other symptoms. After examination, further diagnostic approach included head Magnetic Resonance Imaging (MRI) and ultrasound-guided puncture of the bone lesion. A patient-specific, computer-aided design (CAD) 3D model of the patient's skull was generated from *Digital Imaging and Communications in Medicine (DICOM)* data of the computed tomography (CT) head scan, using an open-source software 3D Slicer by a radiologist. The model was 3D printed using a *Fused Deposition Modeling* (FDM) 3D printer Prusa i3 MK3, with polylactic acid (PLA) filament. The skull model was used for preoperative planning and determining the osteotomy margins. Next, the patient-specific surgical cutting guides for osteotomy and a matching implant mold were created with the open-source programs Blender and Meshmixer. For the 3D printing of the cutting guides and mold, a stereolithography technology-based 3D printer, Formlabs Form 2, and biocompatible resin BioMed Clear were used. A neurosurgeon and maxillofacial surgeon performed precise osteotomy in an inconvenient anatomical area of the right frontal bone: the superior orbital wall and the skull base. This approach requires cuts in three different planes, in comparison to conventional one-plane cranial osteotomies. A patient-personalized implant was created by injection of the polymethyl methacrylate (PMMA) into the previously printed 3D mold. Further, it was fixed to cover the defect. Follow-up CT scans confirmed a successful result – proper implant placement with most of the previous defect covered, apart from a minimum incongruity of the frontozygomatic suture due to difficulties regarding the osteotomy line. Postoperatively, the patient reported feeling well and eventually, started the adjuvant chemotherapy treatment.
Conclusion: This case highlights how a multidisciplinary approach results in performing cranioplasty with a patient-specific 3D implant used for cranial reconstruction, a procedure that marks next-generation personalized surgery.

Keywords**:** Biocompatible Materials; Computer-Aided Design; Craniotomy; Polymethyl Methacrylate; Printing, Three-Dimensional

BROKEN HEART SYNDROME: A CASE REPORT

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Aim: Broken heart syndrome also known as stress cardiomyopathy is clinical syndrome characterized by an acute and transient left ventricul (LV) systolic and diastolic dysfunction often related to emotional or physical stress. It is suspected based on the clinical context, ECG abnormalitis, mild troponin elevation, significant elevation of serum natriuretic peptide (NT-proBNP), and exclusion of coronary obstruction on angiography. First described in 1990, it was named Takotsubo because the apical ballooning on echocardiography resembles a Japanese octopus trap. The symptoms are similar to those of patients with acute coronary syndrome, so initial diagnosis and treatment in the emergency department remain a challenge. With growing awareness, incidence is rising (15–30/100,000 annually), though the true rate remains underestimated.

Case report: A 58-year-old woman was admitted to the emergency department with respiratory insufficiency. She had been diving at 30 meters and surfaced correctly. At a depth of 3 meters, she suddenly experienced shortness of breath, without chest pain or loss of consciousness. She is a non-smoker and has had no significant medical history to date. On admission, she was tachycardic at 121/min, dyspnoic, with an oxygen saturation of 87%. Lung auscultation revealed diffuse crackles. High-resolution computed tomography showed bilateral pleural effusions and bilateral perihilar patchy ground-glass infiltrates in the lung parenchyma, along with thickened interlobular septa-findings suggestive of pulmonary edema. Laboratory tests showed elevated troponin (240 ng/L) and NT-proBNP (4544 pg/mL), indicating cardiac dysfunction. ECG demonstrated a global reduction of left ventricular function (35%) with preserved contractility of all basal segments, but hypokinesia of the mid and apical segments, consistent with a diagnosis of Takotsubo syndrome. Coronary angiography showed normal findings of the epicardial arteries. With therapy consisting of diuretics, beta-blockers, and angiotensin-converting enzyme inhibitors, echocardiography after five days showed almost complete recovery of left ventricular systolic function.

Conclusion: Broken heart syndrome is an acute reversible heart failure syndrome that, although often self-limiting in clinical course, can be associated with serious complications. This cardiomyopathy represents a form of neurocardiogenic myocardial stunning and although a brain-heart connection has been established, the exact pathophysiological mechanisms remain unclear.

Keywords: Cardiomyopathy; Case Report; Takotsubo; Stress

WHEN A HUSKY HOWLS LIKE A WOLF: THE PANCREATIC PSEUDOTUMOR TRAP

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Aim: The aim of this case report is to emphasize the importance of considering immunoglobulin G4 (IgG4)-related disease, particularly autoimmune pancreatitis, in the differential diagnosis of pancreatic cancer. It underlines the clinical, radiological, and histopathological similarities between these conditions and the potential diagnostic pitfalls that may lead to misdiagnosis and unnecessary invasive treatment.
Case report: A 74-year-old patient presented to the hospital with diarrhea, lower abdominal pain, and painless jaundice. Further evaluation raised suspicion of a neoplastic process in the pancreas, as abdominal and pelvic computed tomography revealed a suspicious focal pancreatic lesion. The tumor marker Ca 19-9 was negative. Multiple attempts at histopathological confirmation of malignancy were inconclusive; however, cytology from endoscopic retrograde cholangiopancreatography described cells suspicious for adenocarcinoma. During endoscopic retrograde cholangiopancreatography, a stent was placed. Subsequently, surgical excision of the suspected pancreatic tumor and two liver segments was performed. Histopathological examination revealed no evidence of malignancy but instead reactive inflammatory changes consistent with IgG4-related disease. Intraoperatively, a firm infiltration of the entire pancreas—known as a “sausage-like pancreas”—was observed.
Conclusion: This case highlights the importance of considering IgG4-related disease as a differential diagnosis of pancreatic cancer, given the markedly different treatment strategies and outcomes. In this patient, painless jaundice, advanced age, and a pancreatic mass on computed tomography suggested malignancy. Furthermore, brush citology was suggestive of adenocarcinoma. However, it is important to bare in mind that citology may be false-positive in up to 5,4% of cases.

Keywords**:** Autoimmune pancreatitis; IgG4-related disease; inflammatory disease; painless jaundice; pancreatic cancer

SECONDARY RENAL AMYLOIDOSIS AS A COMPLICATION OF CROHN'S DISEASE: A CASE REPORT

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Aim: The aim of this case report is to highlight secondary renal amyloidosis as a rare but serious complication of Crohn's disease, illustrated by a 74-year-old patient who progressed to end-stage kidney failure requiring hemodialysis.
Case report: A 74-year-old female patient presented to the emergency department due to worsening kidney function and the need for hemodialysis. Findings included hyperkalemia (7.2 mmol/L), metabolic acidosis (pH 7.01), and dehydration. Creatinine levels were elevated (700 µmol/L), total proteins were low (42–54 g/L), and estimated glomerular filtration rate was 15 mL/min/1.73 m². The patient has had Crohn's disease since 2002 and has been treated with a series of biological therapies, including infliximab, ustekinumab, vedolizumab, adalimumab, and upadacitinib. She has also undergone multiple surgeries, the most recent being the creation of a unipolar ileostomy four months ago. She also has arterial hypertension.She was hospitalized and diagnosed with secondary renal amyloidosis by biopsy, presenting with nephrotic syndrome. The patient was discharged home after 8 days on once-daily low molecular weight heparin (LMWH) on non-dialysis days for thrombosis prevention due to nephrotic syndrome, as well as her chronic medications: upadacitinib, calcium carbonate, sodium bicarbonate, roxadustat, pantoprazole, bisoprolol, atorvastatin, and high-energy, high-protein complete liquid nutrition.
Conclusion: Secondary renal amyloidosis is a rare but severe complication of long-standing Crohn's disease that can lead to nephrotic syndrome and end-stage renal failure. Early recognition and monitoring of kidney function in patients with chronic inflammation are crucial to prevent progression and improve outcomes.

Keywords: Amyloidosis; Crohn Disease; Nephrotic Syndrome

BALLOON EUSTACHIAN TUBOPLASTY FOR REFRACTORY EUSTACHIAN TUBE DYSFUNCTION IN A PROFESSIONAL PILOT: A CASE REPORT

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Aim: Eustachian tube dysfunction (ETD) is a significant clinical concern in individuals exposed to rapid ambient pressure changes, particularly professional pilots. Affected patients typically present with otalgia, aural fullness, and transient hearing loss, all of which may impair operational performance and compromise flight safety. This case report aims to demonstrate the application of Balloon Eustachian Tuboplasty (BET), a minimally invasive procedure, in the management of chronic ETD unresponsive to conservative treatments.
Case report: A professional pilot presented with chronic ETD refractory to long-term conservative management, including nasal decongestants, corticosteroids, and manual pressure equalization manoeuvres. BET was performed under general anaesthesia. The intraoperative course and early postoperative period were monitored using tympanometry and standard otorhinolaryngological protocols. No intraoperative complications were observed, and the patient reported symptomatic improvement in the postoperative period. Follow-up tympanometry demonstrated normal middle ear ventilation, and during subsequent flight activity, the patient was able to equalize pressure effectively without any symptoms of barotrauma.
Conclusion: BET proved to be a safe and effective treatment for chronic EDT in a specific patient population such as professional pilots, whose occupational performance and safety rely on normal middle ear ventilation. This case report supports the potential role of BET as a standard therapeutic option in the management of baro-challenge–related disorders.

Keywords**:** Barotrauma; Eustachian Tube; Middle Ear Ventilation; Pilot

ALCOHOL AND VINEGAR-INDUCED LEUKOCYTOCLASTIC VASCULITIS: A CASE REPORT

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Aim: Leukocytoclastic vasculitis (LCV) is a small-vessel immune complex-mediated vasculitis often triggered by infections, medications or systemic diseases. Dietary triggers are rarely reported. This report describes a unique case of recurrent LCV associated with alcohol and alcohol-containing vinegar consumption to remind that it should be considered in the differential diagnosis to ensure timely and appropriate patient management.
Case report: 45-year-old otherwise healthy female patient reported to the dermatologist due to lesions on her lower extremities, which clinically resembled purpuric and vasculitic lesions. The clinical presentation of skin lesions raised suspicion of LCV. The patient denied any recent infections, use of medications or the presence of systemic illnesses which are well known triggers for LCV. Throat, nasal and gynecological swabs showed physiological flora. Laboratory tests were within normal limits and there were no signs indicative of internal organ involvement. Bacteriological and parasitological stool samples were unremarkable. Tumor marker levels were normal, antinuclear antibodies and rheumatoid factor were negative. Skin biopsy confirmed the diagnosis of allergic leukocytoclastic vasculitis. The patient noted lesion recurrence following social events where she consumed alcoholic beverages. The treatment she received included oral prednisone (30mg daily with gradual tapering until discontinuation) and betamethasone cream topically. Following treatment completion, the patient was advised to undergo an exposure test using the specific alcoholic liqueur she typically consumed during social events. Upon re-exposure to alcohol, lesions on her lower extremities reappeared within 24 hours. Despite complete abstinence from alcohol, the patient continued to experience occasional vasculitic flare-ups. Careful dietary tracking revealed a correlation with large quantities of salad dressed with alcohol-based vinegar. Complete resolution of vasculitic lesions occurred after strict elimination of both alcohol and alcohol vinegar from the diet. At the two-year follow-up, the patient remains asymptomatic and continues to abstain from both alcohol and alcohol-based vinegar.
Conclusion: This case highlights a rare but clinically significant dietary trigger for LCV. Alcohol is a known immunomodulator, and vinegar may contain residual ethanol or act as a chemical irritant. The case underscores the importance of detailed dietary history in recurrent vasculitis. In patients with idiopathic or recurrent LCV, clinicians should consider dietary triggers, including alcohol and alcohol-based condiments. Elimination may lead to complete remission.

Keywords: Alcohols; Biopsy; Vasculitis, Leukocytoclastic, Cutaneous

EOSINOPHILIC GRANULOMATOSIS WITH POLYANGIITIS FOLLOWING A DECADE OF ASTHMA: A CASE REPORT

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Aim: Eosinophilic granulomatosis with polyangiitis (EGPA), or Churg-Strauss Syndrome, is a rare autoimmune disease. It presents with asthma, eosinophil-rich granulomatous airway inflammation, glomerulonephritis, and systemic vasculitis affecting small-sized vessels. Management typically involves glucocorticoids (GC), immunosuppressants (cyclophosphamide, azathioprine, methotrexate), and biologics such as rituximab for severe disease. This case report highlights the rarity of EGPA and the challenges associated with its diagnosis.
Case report: A 72-year-old female patient has a 10-year history of asthma with intermittent symptoms. She experienced progressive clinical deterioration following recovery from COVID-19 in 2024, with the onset of persistent dyspnea both at rest and on exertion. She was hospitalized the same year for prolonged fever, dyspnea and markedly elevated inflammatory markers. Despite multiple courses of antibiotics, symptoms did not improve; however, she demonstrated a rapid clinical response after initiation of GC therapy. Immunological testing revealed positivity for PR3-ANCA, raising the suspicion of granulomatosis with polyangiitis. Therapy was initiated with mycophenolate mofetil, but later was discontinued due to medication intolerance. Treatment was continued with GCs. The clinical course was complicated by gallblader perforation, cholecystectomy was performed in 2024. CT imaging demonstrated abdominal abscesses in the area of the prior cholecystectomy and pancreatic tail, as well as pulmonary infiltrates, which on biopsy were identified as sterile granulomatous lesions. Abdominal abscesses regressed with antibiotic therapy. GCs and IVIG remained part of the treatment regimen, due to complicated course of the disease. Fibrobronchoscopy revealed pathologically altered bronchial mucosa, narrowing of the bronchial tree and limited bronchoscopic accessibility. Given the clinical course, diagnosis od EGPA was established and rituximab was introduced resultig in condition improvement.
Conclusion: This case highlights the diagnostic complexity of EGPA and underscores the importance of considering vasculitis in patients with late-onset asthma and unexplained systemic manifestations, particularly when symptoms evolve rapidly following infectious triggers such as COVID-19. Establishing the diagnosis of EGPA is particularly challenging, given its heterogeneous presentation, overlap with other eosinophilic and vasculitic disorders, and the absence of a single definitive diagnostic test.

Keywords**:** Asthma; Biopsy; Churg-Strauss Syndrome; Rituximab; Vasculitis

BEYOND THE CLASSROOM: DISCOVERING VULNERABLE GROUPS THROUGH CASE-BASED LEARNING

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Aim: The topic of vulnerable groups in healthcare is often addressed only briefly in medical education, despite its importance. A patient's social and economic circumstances significantly influence health outcomes, well-being, and clinical decision-making. Vulnerable groups are defined as those whose health is disproportionately affected by social, economic, or environmental disadvantages, stigma, discrimination, or limited access to healthcare. In Croatia, determinants such as poverty, older age, and geographic inequality are common. These sensitive and sometimes controversial topics are often excluded from the traditional curriculum. To address this gap, a targeted educational intervention was introduced within the Summer School of Island Medicine to educate medical students about vulnerable populations and highlight the importance of these issues in future practice.
The Summer School of Island Medicine is a five-day, hands-on program held on the island of Šolta for senior medical students and recent graduates, focusing on critical thinking and clinical decision-making in isolated settings. Students are divided into small groups and assigned clinical case reports involving vulnerable patients, with accompanying questions and guidelines for group presentations. Case scenarios include: a foreign worker with diabetes, highlighting language barriers and health insurance issues; a Roma minority woman facing fertility problems, emphasizing stigma and health disparities; an elderly rural patient with diabetic retinopathy, illustrating isolation and poverty; and a single parent with cancer caring for a child with Down syndrome, demonstrating complex vulnerability. These cases integrate medical knowledge with lessons on patient vulnerability, illustrating how social, economic, and cultural factors influence clinical outcomes. Each presentation is followed by an open discussion.
Small-group work over several days encourages students to exchange ideas and reflect on their perspectives, resulting in a deeper understanding and increased confidence in articulating their views. In an informal setting, participants are more open to new concepts and willing to share experiences. Using case reports to explore social and ethical topics not only makes learning more engaging but also enables students to effectively connect clinical knowledge with broader considerations, reinforcing the importance of these interconnections in their future practice.

Keywords**:** Education, Medical; Rural Health Services; Social Determinants of Health; Vulnerable Populations

INTERSCALENE BLOCK AS AN ANESTHETIC CHOICE IN ACUTE INTERMITTENT PORPHYRIA: A CASE REPORT

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Aim: The interscalene block provides anesthesia by targeting the brachial plexus, commonly used for shoulder surgery. It is performed under ultrasound guidance between the anterior and middle scalene muscles. In patients with acute intermittent porphyria, the administration of anesthesia presents a challenge due to the risk of triggering acute attacks. This case report aims to illustrate the rationale for selecting the interscalene block as the preferred anesthetic technique in these patients.
Case report: A fifty-year-old female patient was admitted to the Department of Endocrinology for reevaluation of her general condition. She exhibited limited mobility and reported occasional headaches and dizziness. Twenty years earlier, she had been diagnosed with acute intermittent porphyria due to severe diffuse abdominal pain and gastrointestinal symptoms. In the same year, she experienced cardiorespiratory arrest. In recent years, she attended follow-up appointments irregularly and had several epileptic seizures accompanied by loss of consciousness. During her hospital stay, the patient fell and sustained a subcapital fracture of the humerus, after which she was transferred to the Department of Traumatology. Preoperative evaluation revealed that approximately twenty medications were contraindicated due to their potential to trigger porphyria attacks, necessitating particular caution in anesthetic selection. Therefore, an interscalene block was chosen by the anesthesiologist to minimize the use of systemic medications and reduce metabolic stress. The surgery was uneventful and free of complications. Dexamethasone used as an adjuvant prolonged analgesia for 16 hours; the patient remained in stable condition.
Conclusion: This case underscores the educational importance of recognizing safe anesthetic strategies for patients with rare metabolic disorders. It highlights the need for careful anesthetic selection in patients with comorbidities that increase the risk of complications. In this instance, the interscalene block ensured safe surgical management, provided effective intraoperative anesthesia and postoperative analgesia, and helped prevent the development of chronic pain.

Keywords**:** Analgesia; Anesthesia; Brachial Plexus Block; Humeral Fractures; Porphyria, Acute Intermittent

FAMILY ASPECTS OF X-LINKED ADRENOLEUKODYSTROPHY: A CASE REPORT

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Aim: To present a case of adrenomyeloneuropathy and discuss its clinical, genetic, and reproductive aspects within an affected family.
Case report: A 47-year-old male presented with adrenal insufficiency and progressive paraparesis leading to wheelchair dependence. Laboratory tests showed low serum cortisol and normal renin and potassium levels. Elevated concentrations of very long-chain fatty acids confirmed the diagnosis of adrenomyeloneuropathy caused by an ABCD1 gene variant [c.251C>T (p.Pro84Leu)]. Hydrocortisone therapy was initiated, resulting in partial neurological improvement and regained partial mobility, walking with a cane. Genetic counseling and testing revealed two heterozygous carrier daughters. The older daughter had an unplanned pregnancy and delivered a clinically healthy male child, whose genetic results are pending. The younger daughter underwent preimplantation genetic testing (PGT) for the ABCD1 gene in Belgium. Analysis of 11 embryos identified five unaffected, euploid embryos that were cryopreserved for future transfer. Since adrenoleukodystrophy follows an X-linked inheritance pattern, heterozygous carrier mothers have a 50% chance of transmitting the pathogenic variant to each child. Affected males transmit the altered ABCD1 gene to all daughters, who become carriers, and to none of their sons. Understanding these transmission probabilities is crucial for family counseling and reproductive planning.
Conclusions: This case underscores the value of comprehensive genetic counseling, early diagnosis, and preimplantation genetic testing in managing X-linked disorders such as adrenoleukodystrophy. Multigenerational evaluation enables tailored reproductive decisions and improved outcomes for at-risk families. Importantly, this case highlights the educational potential of integrating genetic counseling into multidisciplinary patient care, emphasizing its role in fostering informed decision-making and patient engagement.

Keywords**:** Adrenoleukodystrophy; Adrenomyeloneuropathy; ABCD1 gene; Genetic counseling; Preimplantation genetic testing; X-linked disorders

AN OVERVIEW MULTI-LANGUAGE TRANSLATIONS AND VALIDATIONS OF THE UCLA SCTC GIT 2.0 QUESTIONNAIRE

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The UCLA SCTC GIT 2.0 is the most widely used patient-reported outcome instrument in systemic sclerosis research and clinical practice. It was developed to measure gastrointestinal symptoms and their impact on quality of life, providing a standardized approach to assessing gastrointestinal involvement in this complex multisystem disease. The questionnaire consists of 34 items grouped into seven domains—reflux, distension/bloating, diarrhea, fecal soilage/incontinence, constipation, emotional well-being, and social functioning. The aim of this overview was to compare the translations, cross-cultural adaptation, and psychometric performance of the UCLA SCTC GIT 2.0 in various language versions. Published validation studies from the Netherlands (Dutch), Italy, Croatia, Serbia, Portugal, Turkey, and Korea were reviewed. Across studies, the total GIT score consistently showed strong internal consistency and good test-retest reliability in all regions. However, domains such as diarrhea and fecal soilage/incontinence frequently showed lower reliability, especially in translated versions or among populations with milder gastrointestinal symptoms. These variations likely reflect cultural and linguistic nuances, differences in symptom prevalence, and sample size limitations. Overall, cultural factors, translation clarity, and methodological rigor emerged as key moderators of domain-level performance. Despite these differences, The UCLA SCTC GIT 2.0 remains a robust and versatile instrument for assessing gastrointestinal symptom burden and its impact on quality of life in systemic sclerosis. Continued refinement and region-specific adaptation will further enhance its accuracy and clinical usefulness across diverse populations.

Keywords**:** Gastrointestinal Diseases; Quality of Life; Surveys and Questionnaires; Reproducibility of Results; Scleroderma, Systemic

SILENT UNTIL THE BLEED: A CASE REPORT OF ACQUIRED HEMOPHILIA A

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Aim: Acquired hemophilia A (AHA) is a rare but potentially life-threatening bleeding disorder caused by autoantibodies against factor VIII (FVIII). It typically presents with spontaneous skin hematomas or excessive bleeding after even minor trauma. Delayed recognition and inadequate management can result in severe complications. Although it may be idiopathic, AHA is frequently associated with malignancy, autoimmune diseases, pregnancy, or certain medications. Treatment requires both hemostatic control and eradication of the inhibitor.
Case report: A 54-year-old woman with no personal or family history of bleeding presented with swelling and limited motion of the left knee two weeks after trauma. Examination revealed a large hematoma extending from the knee to the lower leg. Suspected hemarthrosis prompted surgical incision, leading to excessive and prolonged bleeding. Laboratory results showed normocytic anemia (Hb 69 g/L), prolonged activated partial thromboplastin time (aPTT), and markedly reduced FVIII activity (1.5%), raising suspicion for AHA. Red blood cell transfusion was given, and treatment with corticosteroids and recombinant activated factor VII (rFVIIa) was initiated. The patient was transferred to a tertiary center where AHA was confirmed (FVIII <1%, FVIII inhibitor titer 53.8 Bethesda kIU/L). Immunosuppressive therapy with corticosteroids and rituximab was started, along with sequential hemostatic treatment (rFVIIa, FEIBA, and later emicizumab). Bleeding gradually subsided, although a large skin necrosis developed over the knee. During hospitalization, metastatic breast cancer was diagnosed as the likely underlying cause. After completing rituximab, FVIII activity normalized and inhibitors became undetectable within six weeks. Necrotic tissue from the knee was removed surgically, and the wound was managed by the Vacuum-Assisted Closure therapy to accelerate healing. The procedure went uneventful, without further bleeding symptoms. Hormonal treatment for the breast cancer was started.
Conclusion: This case highlights the importance of early recognition of AHA in patients presenting with unexplained bleeding and isolated prolonged aPTT. Timely diagnosis, along with prompt hemostatic and immunosuppressive therapy, are essential to prevent unnecessary invasive procedures and to improve outcomes in this rare but treatable condition.

Keywords: Acquired factor VIII deficiency; Autoantibodies; Autoimmunity; Blood Coagulation Disorders; Factor VIII

OPTIMIZING THE QUALITY OF LIFE IN AML: A CASE REPORT OF SUCCESSFUL TREATMENT IN A MULTIMORBID PATIENT

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Aim: Acute myeloid leukemia (AML) in older adults is often associated with poor prognosis, especially in the presence of multiple comorbidities. We present the case of a 75-year-old man with a highly complex medical history and a diagnosis of AML who, despite all odds, managed to maintain a high level of functionality and quality of life.
Case report: The patient had a history of arterial hypertension, bronchial asthma, post-traumatic stress disorder, type 2 diabetes, chronic deep vein thrombosis (DVT), hyperlipidemia, and left renal adenocarcinoma, for which a nephrectomy was performed in July 2024. He also suffered from angina pectoris, for which he received two stents and a pacemaker in 2022 due to a second-degree AV block. In June 2024, acute myeloid leukemia with dysplastic changes was diagnosed. Given his age and comorbidities, the patient was not a candidate for aggressive chemotherapy, and treatment with venetoclax and azacitidine was initiated in September 2024. This treatment protocol has been available in Croatia for this patient group since 2020. Already after the third cycle of therapy, remission of the disease was confirmed through clinical evaluation. The patient is receiving therapy through a day hospital and has not experienced complications requiring hospitalization. A urological follow-up was also performed, with no evidence of relapse or metastatic spread of the previously diagnosed renal adenocarcinoma. To date, he has received 12 cycles of therapy, is in good general condition, and has stable laboratory findings related to AML. Remission of the disease persists, as confirmed by follow-up cytological bone marrow aspiration.
Conclusion: This case illustrates how access to novel acute myeloid leukemia therapies can significantly improve survival and maintain quality of life, even in patients with multiple comorbidities. It underscores the importance of making effective treatment options more broadly available in clinical practice.

Keywords**:** Leukemia, Myeloid, Acute; Bone Marrow; Immunophenotyping; Leukopenia; Pancytopenia

FROM FATAL TO SURVIVABLE: CLOT IN TRANSIT TREATED BY MECHANICAL THROMBECTOMY

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Aim: Clot in transit (CiT) is a life-threatening condition in the setting of acute pulmonary embolism. It represents a free-floating thrombus in the right heart chambers that can potentially embolize abruptly with a fatal outcome. Management varies from anticoagulation, thrombolysis, surgical embolectomy and catheter-based interventions but the optimal approach is unclear. This report aims to present a case of massive pulmonary embolism complicated by a CiT, successfully treated with urgent mechanical thrombectomy.
Case report: A 70-year-old woman presented to the emergency department with vomiting and worsening generalized weakness, along with fatigue and exertional dyspnoea over the past two months. Her medical history included arterial hypertension, type 2 diabetes mellitus, previous pulmonary embolism and popliteal vein thrombosis. One month earlier, she had undergone surgery for obstructive biliary disease. Upon admission she was oriented, tachypnoeic and diaphoretic. Laboratory findings showed leucocytosis, renal insufficiency, metabolic acidosis and severe hyperglycaemia (29.3 mmol/L). Cardiac biomarkers were markedly elevated (high-sensitivity troponin I 646 ng/L, NT-proBNP 9108 ng/L) and D-dimer was significantly increased (11,844 µg/L FEU). Computed tomography pulmonary angiography revealed a massive pulmonary embolism with extensive filling defects and dilatation of the pulmonary trunk and right heart. Additionally, a large thrombus was seen in the right atrium, prolapsing into the right ventricle. The CiT was also seen on echocardiography, along with signs of acute pulmonary hypertension. Since the patient was in obstructive shock and thrombolysis was contraindicated, urgent mechanical thrombectomy was performed using a transfemoral approach with the Inari FlowTriever system. A large amount of thrombotic material was aspirated from the right heart and main pulmonary arteries, leading to rapid stabilization of her vital signs (110/60 mmHg without vasopressors, pulse 75/min, oxygen saturation 99%). Follow-up echocardiography showed normal right ventricular size and function, no residual thrombus, pulmonary artery pressure of 35 mmHg and preserved left ventricular ejection fraction (55 %). Her recovery was uneventful, and she was discharged in good condition on dabigatran and chronic therapy.
Conclusion: CiT is a condition with a very high mortality rate, but in this patient, early recognition and emergency mechanical thrombectomy with effective thrombus extraction saved the patient's life. This report underscores the importance of early diagnosis, hemodynamic assessment and multidisciplinary decision-making in managing massive pulmonary embolism with a CiT.

Keywords**:** Heart Atria; Heart Catheterization; Pulmonary Embolism; Thrombectomy

TIME- AND SEX-DEPENDENT PROFILES OF ACUTE INTRANASAL INSULIN DISTRIBUTION

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Aim: The intranasal insulin (INS) route enables direct delivery to the central nervous system, thereby minimising side effects and potentially enhancing cognitive function in patients with diabetes and Alzheimer's disease. However, the exact distribution of insulin within central and peripheral tissues is not yet fully understood. This study examines the time- and sex-dependent distribution and impact of INS in plasma, cerebrospinal fluid (CSF), as well as in the nasal respiratory (RE) and olfactory (OE) epithelia, olfactory bulb (OFB), hypothalamus (HPT), and hippocampus (HPC).
Materials and methods: Both female and male Wistar rats received an intranasal injection of insulin (2 IU) and were sacrificed at 3, 7.5, 15, 30, 60, and 120 minutes post-administration. Untreated animals served as controls. Assay kits measured insulin levels in plasma, CSF, RE, OE, OFB, HPT and HPC.
Results: Plasma and CSF insulin levels remained unchanged. In the RE, insulin spiked at 3 minutes and remained elevated for up to 15 minutes, after which it declined and returned to baseline for the subsequent time points. In the OE, insulin levels peaked at 3 minutes and then declined to normal levels by 30 minutes. Following administration, insulin concentrations in male rats increased sharply within 3 minutes in the OFB, HPT, and HPC. The elevation persisted for 15 minutes in the HPT and for 7.5 minutes in the OFB, whereas in the HPC, insulin levels began to decline before the 7.5-minute mark. However, in female rats, no significant increase has been observed in those regions.
Conclusions: The findings demonstrate that intranasal insulin is rapidly and efficiently distributed to the nasal epithelia in both male and female rats, underscoring the nasal mucosa's potential as an effective absorption site even at minimal doses. The absence of significant alterations in plasma and CSF insulin concentrations supports the notion that intranasal delivery primarily targets the central nervous system (CNS) while minimizing systemic exposure, thereby reducing the risk of peripheral insulin-related side effects. Moreover, in male rats, a significant increase in insulin levels was observed in the OFB, HPT, and HPC regions; however, in female rats, no such increase was detected during the observed time period.

Keywords: Administration, Intranasal; Rats, Wistar; Central Nervous System; Insulin; Sex Factors

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ACUTE LIVER INJURY WITH SUBMASSIVE NECROSIS DUE TO DRUG-INDUCED LIVER INJURY – A CASE REPORT

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Aim: The aim of this presentation is to describe a case of acute liver injury with submassive hepatic necrosis due to drug-induced liver injury (DILI), emphasizing diagnostic challenges and therapeutic approach.
Case Report: We report a 36-year-old female admitted for evaluation of acute hepatic lesions initially presented with nausea, vomiting, dark urine, and pain in the right upper quadrant. Past history included recent treatment for shoulder bursitis with over-the-counter analgesics; no history of alcohol or drug abuse. On admission, the patient was alert, afebrile, hemodynamically stable, without encephalopathy. Laboratory tests revealed severe hepatocellular injury (AST 3051 U/L, ALT 2538 U/L, GGT 320 U/L), hyperbilirubinemia (total bilirubin 153 µmol/L), coagulopathy (INR 2.31), and mild anemia. Imaging studies (ultrasound, CT, MRCP, Doppler) showed a liver of normal size and homogeneous echotexture without focal lesions, no splenomegaly, no intra- or extrahepatic biliary dilatation, no vascular thrombosis, minimal free fluid, and no significant lymphadenopathy. There was no evidence of cholestasis. Extensive infectious, autoimmune, and metabolic workup was negative. Liver biopsy demonstrated submassive necrosis of hepatocytes consistent with DILI. The patient was treated with supportive care including hepatoprotective diet, analgesics as needed, and glucocorticoids (1 mg/kg body weight). Gradual clinical and biochemical improvement was observed, with a follow-up scheduled for further outpatient evaluation.
Conclusion: This Case Report highlights the importance of continuous education and early recognition of potential detrimental side effects of drugs, considering DILI in patients presenting with acute hepatocellular injury and coagulopathy after exposure to potentially hepatotoxic medications. Early recognition, exclusion of other causes, liver biopsy, and timely supportive treatment are crucial for favourable outcomes. Multidisciplinary approach and close follow-up remain essential for recovery and for prevention of further liver damage.

Keywords**:** Corticosteroids/therapeutic use; Drug-Induced Liver Injury; Liver Biopsy; Liver Failure, Acute; Liver Necrosis

PREGNANCY COMPLICATED BY INTRAHEPATIC CHOLESTASIS SUCCESSFULLY MANAGED WITH URSODEOXYCHOLIC ACID – A CASE REPORT

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Aim: Intrahepatic cholestasis of pregnancy (ICP) is a major cause of abnormal liver function in pregnancy. It is a reversible disorder marked by intense pruritus (usually in the second or third trimester), elevated liver enzymes, increased postprandial bile acid concentrations (>11 µmol/L), and spontaneous symptom resolution after delivery. The main symptom is maternal pruritus, while the greatest concern lies in fetal risks such as spontaneous or preterm labor, intrapartum asphyxia, and intrauterine fetal demise. The pathogenesis of ICP is multifactorial, involving genetic, environmental, and hormonal factors, and hormone replacement therapy may contribute to its development. The aim of this report is to present a rare case of ICP with complete remission following treatment with ursodeoxycholic acid (UDCA).
Case report: A 34-year-old woman in the 8th week of pregnancy, conceived via in vitro fertilization, with a history of myomectomy and bilateral inguinal hernia repair in childhood, was referred due to rising liver enzymes and severe pruritus. On admission she was afebrile, without jaundice, but with multiple painless hematomas on the thighs. Laboratory tests showed markedly elevated liver enzymes (AST up to 582 U/L, ALT up to 842 U/L) and bile acids (up to 358 µmol/L) with normal bilirubin levels and an unremarkable liver and biliary ultrasound. Viral hepatitis, metabolic and autoimmune liver diseases, as well as congenital thrombophilias were excluded, and a viable intrauterine pregnancy was confirmed. The diagnosis of ICP was established and treatment with UDCA 250 mg twice daily was initiated, together with symptomatic antipruritic therapy and hepatoprotective dietary measures. Follow-up revealed a gradual decline in bile acids and liver enzymes, accompanied by resolution of pruritus and a stable obstetric course without disease progression or fetal complications.
Conclusion: This case report highlights the importance of education, early recognition, and a multidisciplinary approach in managing ICP, especially with the growing number of pregnancies achieved through assisted reproductive techniques. Although often insufficient, in this case UDCA achieved full biochemical and clinical remission, enabling a favorable obstetric and perinatal outcome.

Keywords**:** Case Report; Intrahepatic Cholestasis of Pregnancy; Pregnancy; Pruritus; Ursodeoxycholic Acid

A RARE CASE REPORT OF UROLITHIASIS PRESENTING AS AN ACUTE ABDOMEN

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Aim: Kidney stones are clusters of crystals that form from substances in urinary tract. Kidney stones are formed within the kidneys, and this is called nephrolithiasis. Urolithiasis is a condition that occurs when these stones exit the renal pelvis and move into the remainder of the urinary collecting system, which includes the ureters, bladder, and urethra. Symptoms of urolithiasis (kidney stones) include sharp pain in the back, side, lower abdomen, or groin, nausea, vomiting, and blood or pain during urination.
Case report: A 63-year-old male patient contacted the T1 emergency medical team due to acute-onset abdominal pain localized in the lower right quadrant. The pain appeared a few hours prior and is rated 10/10 on the VAS scale. The pain is described as sharp and cutting in character, with no relief in any position. The patient reports normal urination; his last bowel movement was last night. He has nausea but has not vomited. On examination, the patient appears pale, tachypnoeic, tachycardic, and hypertensive (he did not take his antihypertensive medication this morning). The body is in muscular spasm. Abdominal inspection shows hypoactive bowel sounds. There is marked tenderness in the right lower quadrant. Bilateral kidney percussion test is negative. The patient was referred to the Emergency Department (OHBP) of Dubrovnik General Hospital for further evaluation and to confirm the suspected diagnosis of appendicitis via ultrasound. The abdominal ultrasound revealed no abnormalities; all abdominal organs, including the kidneys and the remain of the urinary tract accessible to sonography, appeared normal. A subsequent CT scan demonstrated the presence of a nephrolith in the distal ureter, in the projection of the appendix. A JJ ureteral stent was placed, and antibiotic therapy was initiated. Extracorporeal shock wave lithotripsy (ESWL) is planned in the near future.
Conclusion: The presence of a nephrolith within the distal urinary tract can be an extremely painful condition and must be carefully differentiated from an acute abdomen, as it may rarely present with similar clinical features. This case illustrates an uncommon clinical presentation of distal ureteral lithiasis mimicking acute appendicitis. The aim of this case report is to highlight the importance of radiological diagnostics, which—despite a detailed medical history and thorough physical examination—revealed a condition that did not require urgent surgical intervention.

Keywords**:** Abdomen, Acute; Appendicitis; Kidney Calculi; Tomography

CEREBRAL INFARCTION IN A PATIENT WITH A HISTORY OF GANGLIOGLIOMA RESECTION: A CASE REPORT

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Aim: Highlighting of a multidisciplinary approach, including intensive care management, neurosurgical intervention, and rehabilitation, in achieving a favorable functional outcome.
Case report: Case presentation of a 20-year-old male with a history of prior ganglioglioma resection, admitted on 24.01.2024. to the Neurology Intensive Care Unit due to an acute ischemic stroke. CT angiography demonstrated an occlusion of the right middle cerebral artery. Mechanical thrombectomy was attempted multiple times without significant success, although collateral circulation was preserved. All intensive care measures, including anti-edema therapy, were instituted. Follow-up brain CT scans on 22.01 and 24.01. showed demarcation of the ischemic lesion, edema of the right hemisphere, compression of the right lateral ventricle, and progression of subfalcine herniation to the left, with the development of early uncal herniation. In agreement with the neurosurgeon, urgent decompressive craniectomy was indicated and performed on 24.01. In the following days, the patient was gradually taken off the ventilator and was successfully extubated on 30.01. Upon awakening, he followed simple commands and exhibited left-sided motor deficit. During the rest of the stay, his general condition stabilized and his neurological status gradually improved. After discharge, a left-sided spastic hemiparesis persisted. After rehabilitation and physical therapy, on 09.04.2025 the patient underwent reconstructive surgery for the cranial defect resulting from the decompressive craniectomy, with an uneventful postoperative course. At discharge, the patient was without subjective complaints, in good general condition, with a satisfactory functional outcome. On 18.07.2025, approximately 18 months after the initial stroke, the patient was readmitted due to episodes of instability, vertigo, and headaches. An emergency CT scan of the brain was performed upon hospital admission. Compared with previous scans, there is no deterioration, the findings remained unchanged. Symptoms were associated with side effects of ongoing antiepileptic therapy. During hospitalization, antiepileptic therapy was adjusted, and supportive management led to improvement in symptoms.
Conclusion: This case highlights the critical role of a multidisciplinary approach in managing complex neurovascular patients. Coordination between neurology, neurosurgery, intensive care, and rehabilitation teams was essential in achieving a favorable functional outcome, managing complications, and ensuring long-term recovery. Early recognition, timely surgical intervention, and structured rehabilitation were key factors in the patient's successful recovery.

Keywords**:** Cerebral Infarction; Intensive Care Units; Neurology; Rehabilitation; Young Adult

ACUTE GENERALIZED TONIC-CLONIC SEIZURES INDUCED BY ZOPICLONE WITHDRAWAL: A NEUROPSYCHIATRIC CASE REPORT

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Aim: Non-benzodiazepine hypnotics (Z-drugs), such as zopiclone, are widely prescribed for short-term management of insomnia due to their rapid onset and favorable pharmacokinetics. The aim of this report is to present a case highlighting the potential adverse effects associated with long-term Z-drug use. Its continued use may lead to dependence, tolerance, and withdrawal syndrome, which may manifest with severe neuropsychiatric complications, including epileptic seizures.
Case report: We present a case of a 71-year-old man who developed recurrent generalized tonic-clonic seizures following abrupt cessation of chronic high-dose zopiclone use. The patient had been self-administering zopiclone at three times the prescribed dose (22.5 mg daily) for over a year. After suddenly discontinuing the drug, he experienced progressive neurological symptoms, including somnolence, photophobia, and transient aphasia, culminating in a generalized tonic-clonic seizure. Upon emergency evaluation, neurological and psychiatric assessments initially excluded major psychopathology. However, after recurrent seizure episodes and the exclusion of vascular, infectious, and neoplastic causes via computed tomography (CT) and lumbar puncture, zopiclone withdrawal syndrome was suspected. Clinical pharmacology consultation confirmed the diagnosis, highlighting the well-documented risk of severe withdrawal symptoms, including seizures, anxiety, hyperacusis, hallucinations, and autonomic instability. The patient was stabilized with diazepam therapy and referred for psychiatric follow-up to manage withdrawal and prevent future complications.
Conclusion: This case underscores the potential for life-threatening withdrawal symptoms following abrupt discontinuation of Z-drugs, particularly in patients with prolonged and high-dose use. It highlights the necessity of cautious prescription practices, gradual dose tapering, and a multidisciplinary approach involving neurology, psychiatry, and clinical pharmacology to optimize patient safety and prevent adverse outcomes.

Keywords: Generalized tonic-clonic seizures; Hypnotic dependence; Neuropsychiatric complications; Pharmacovigilance; Zopiclone withdrawal

TREATMENT OF AN EPIDURAL ABSCESS CAUSED BY ACUTE SINUSITIS – IS SURGICAL APPROACH ALWAYS NECESSARY? – A CASE REPORT

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Aim: Acute sinusitis is an infection of the paranasal sinuses usually caused by viruses that lasts less than 12 weeks. It is prevalent in all age groups. An estimated 5-10% of viral sinusitis in children develop into bacterial infections. Uncommon and potentially fatal complications occur when the infection spreads to the periorbital region and the brain. This case report aims to describe a severe complication of acute sinusitis and how it was treated.
Case Report: The patient is a 9-year-old girl with no previous medical history. She presented with a fever of 38.2°C, cough, rhinorrhea, and severe swelling of the left eye. She was transferred from another hospital where she had been prescribed ceftriaxone and clindamycin. CT of the orbits showed preseptal orbital cellulitis of the left eye and extensive pansinusitis, which prompted endoscopic sinus drainage to be performed. Staphylococcus aureus was isolated, which required adjustment of treatment to ceftriaxone and flucloxacillin. Due to lack of improvement, a postoperative MRI was performed, which showed an intraorbital abscess and an epidural abscess in the right frontal paramedial region measuring 13x5x14 mm. The patient exhibited no neurological symptoms. The multidisciplinary team consisting of an otorhinolaryngologist, an oculoplastic surgeon, a neurosurgeon, a pediatrician and an infectologist decided the best course of action was to perform a medial and lateral orbitotomy and endoscopic orbital decompression, along with intravenous antibiotics followed by a prolonged course of oral antibiotics. The MRI performed after 4 weeks showed a significant regression of the epidural abscess to a size of 3 mm. At a follow-up examination two years later, the patient was completely free of symptoms and sequelae of the disease.
Conclusion: Although the most common treatment for abscesses larger than 10 mm is surgical drainage, sometimes treatment of the causative process – indirect drainage and appropriate antimicrobial therapy – results in regression of the abscess with lower morbidity than a surgical approach.

Keywords**:** Anti-Bacterial Agents; Epidural Abscess; Orbital Cellulitis; Sinusitis; Staphylococcus aureus

PERIOPERATIVE CHALLENGES IN OBSTRUCTIVE SIGMOID COLON ADENOCARCINOMA: A CASE REPORT

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Aim: To present the diagnostic and therapeutic challenges in a high-risk patient with obstructive sigmoid colon adenocarcinoma complicated by sepsis and multiorgan dysfunction, emphasizing the perioperative risk and importance of multidisciplinary management.
Case report: An 80-year-old patient with a history of persistent atrial fibrillation with a thrombus in the left auricle since 2017, cerebrovascular insult in 2006, and dyslipidemia presented to the Emergency Department at University Hospital Centre with mechanical ileus, bradycardia, hypotension, metabolic acidosis, hyperkalemia, and icteric skin. The first round of blood tests showed signs of acute kidney injury – elevated creatinine, urea, and lowered estimated glomerular filtration rate necessitating continuous veno-venous hemodialysis. Imaging and clinical findings were consistent with a stenotic neoplastic process in the sigmoid colon causing mechanical ileus. Computed tomography confirmed tumor in sigmoid colon and bilateral pleural effusions. Following an emergency Hartmann's procedure, the patient was admitted to the intensive care unit sedated, mechanically ventilated, and initially hemodynamically stable. Postoperatively, the patient developed hemodynamic instability due to severe bleeding, requiring urgent revision surgery with crystalloids, colloids, blood products, fibrinogen, and prothrombin complex replacement and vasopressor support. In the postoperative course, the patient was respiratory sufficient, extubated and oxygenation was continued by nasal catheter. Additional difficulties included positive blood cultures, urinary tract infection, and fungal colonization, all of which required a series of antimicrobial therapies based on microbiological results. With adequate hydration and diuretics, sufficient diuresis has been achieved, and continuous veno-venous hemodialysis was discontinued after 3 days. Follow-up computed tomography showed partial regression of pleural effusion and no signs of pneumothorax, although basal pulmonary infiltrates persisted. Despite severe comorbidities and occurred complications, gradual clinical stabilization was achieved, and the patient was discharged from the intensive care unit.
Conclusion: This case illustrates the complexity of managing malignant colon obstruction in a patient with multiple severe comorbidities. The perioperative course was marked by life-threatening complications, including postoperative hemorrhage, sepsis, and renal failure. This highlights the necessity of an individualized and multidisciplinary approach in the management of critical surgical patients.

Keywords: Acute Kidney Injury; Ileus; Sepsis; Sigmoid Neoplasms

STUCK IN TRANSIT: AN UNUSUAL ESOPHAGEAL OBSTRUCTION: A CASE REPORT

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Aim: Suicide attempts by foreign body ingestion are a rare but serious form of self-harm, particularly in individuals with underlying psychiatric conditions. This case report describes a unique instance of a suicide attempt by the ingestion of a large metallic object.**Case report:** A 21-year-old male with a documented history of mild intellectual disability and behavioral disorders was admitted to the Emergency Room following a suicide attempt. The patient had intentionally swallowed a 4-cm metal cross. The chief complaint was an inability to swallow, without fever, chest pain, and shortness of breath. Radiographic imaging confirmed the presence of a high-density foreign body lodged in the proximal third of the esophagus. Laboratory tests and coagulation parameters were within normal range. Endoscopic removal under general anesthesia was successfully completed without complication using a snare, and no oesophagal perforation was detected. The patient was discharged the same day, with a recommendation for psychiatric care.
Conclusion: This case represents an extremely rare and clinically challenging suicidal behavior. It highlights the crucial role of diagnostic and therapeutic endoscopy in managing complex oesophagal foreign bodies. The successful and non-invasive endoscopic extraction prevented more invasive surgical procedures, reinforcing the utility of this technique. This outcome further emphasizes the need for a multidisciplinary approach, combining rapid medical intervention with long-term psychiatric management to address the underlying psychological vulnerabilities and prevent future self-harm incidents.

Keywords**:** Esophagus; Foreign Bodies; Mental Disorders; Suicide

DERMART

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The *DermArt* project is an innovative initiative developed by medical students from the FOSS MEDRI association. Combining educational, scientific, and social elements, it provides students with the opportunity to collaborate with peers and professional staff, developing essential social and communication skills for their future medical careers. The main goal of *DermArt* is to train medical students to effectively transfer knowledge and engage more deeply in educational work with young people, particularly those in elementary and high school. The project introduces a dermatological approach to common skin issues and educates adolescents on proper skincare, helping them understand and manage the skin changes that occur during puberty. The project has two main components. The first takes place at the Department of Dermatovenerology, within the dermatological cosmetology unit at the University Hospital Centre Rijeka, where students gain hands-on experience under the guidance of dermatology specialists. The second component focuses on educational outreach, where students conduct interactive workshops in schools. These workshops cover the structure and function of the skin, different skin types, common changes during adolescence, and proper skincare habits, including the effects of hygiene and nutrition. In the final part, each participant undergoes a personalized facial analysis using the API 100 device, measuring hydration, skin type, acne, sun exposure effects, and sensitivity. Through these activities, students expand their dermatological knowledge while gaining experience in working with children and intergenerational teaching. They also develop soft skills such as empathy, communication, and public speaking, and have the chance to explore dermatology or deepen an existing interest, preparing them for future medical practice. As the main beneficiaries are young people facing puberty-related skin changes, *DermArt* educates them in a professional yet approachable way about their skin, routines, and facial treatments. Beyond medical knowledge, the project addresses the psychological impact of visible skin conditions, encourages open dialogue, normalizes these issues, and fosters an inclusive environment that promotes self-confidence and a positive body image.

Keywords**:** Health; Knowledge; Puberty; Skin; Students

CLOSET OF LOVE

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Closet of Love is a student-led humanitarian and sustainability initiative launched in 2022 by the students of the Faculty of Medicine at the University of Rijeka, currently coordinated by FOSS MEDRI. Rooted in sustainability, community engagement and education, the project fosters long-term behavioural change and environmental responsibility. Over a two week donation drive, students and citizens contribute gently used clothing, shoes and accessories, which are sorted into high-quality pieces for resale at the flea market, practical items for the *Depaul Homeless Shelter*, and damaged textiles for recycling. This closed-loop system reduces waste, supports vulnerable groups and funds humanitarian causes. A unique part of the project are the upcycling initiatives *No Scrub Left Behind* and *Dr. Stitch*. Medical professionals donate used scrubs that are transformed into reusable tote bags by Staša Design and embellished with a Rijeka based academic painter Mirna Sišul. Dr Stitch engages children at the Natural History Museum of Rijeka in creating handmade pencil cases and bracelets. Both initiatives embody a minimal waste philosophy, promote sustainable and raise additional funds for charity. Closet of Love challenges stereotypes surrounding second-hand clothing, raises awareness of the environmental and social impacts of fast fashion and encourages responsible consumption. Through its flea market, the project creates a closed loop of sustainability, recycling and humanitarianism, while motivating students and citizens to develop new habits and embrace a more humane way of life. Participation is inclusive, allowing support through donations, volunteering or symbolic purchases. Each year, project engages around 40 volunteers and welcomes approximately 1,000 visitors to its flea market. Over the four years, the project has raised a total of 4,000 euros and has created and sold 80 tote bags made from donated medical scrubs. Funds collected have supported: the Pediatric Oncology Department (Rijeka University Hospital), the Center supporting individuals with mobility challenges, the association *Koga Briga* and the Center for Rehabilitation *Slava Raškaj*. Closet of Love demonstrates how small, local actions can generate meaningful change by integrating education, creativity and practical solutions, while building a culture in which sustainability and compassion go hand in hand.

Keywords: Altruism; Charities; Community Participation; Recycling; Sustainable Development