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BOOK OF ABSTRACTS
КНИГА НА АПСТРАКТИ

МАКЕДОНСКО ЛЕКАРСКО ДРУШТВО
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Welcome Note

Dear esteemed colleagues and friends,

With great pleasure, I extend a warm welcome to each and every one of you to the abstract book of the 2nd International Case Report Congress, proudly organized by the Macedonian Medical Association. It is an honor to convene once again and provide a platform for medical professionals worldwide to converge, exchange insights, and illuminate the intricate tapestry of unique medical cases.

As the President of the Macedonian Medical Association, I am deeply privileged to oversee this significant gathering, where healthcare professionals from diverse backgrounds and specialties unite. The forthcoming presentations and dialogues promise to be illuminating, fostering new discoveries, and pushing the boundaries of medical knowledge ever forward.

The case reports featured within this abstract book exemplify the unwavering dedication and relentless efforts of medical professionals in enhancing patient care and outcomes. They underscore the indispensable value of personalized, holistic approaches to patient management, as well as the imperative for ongoing research and education within our field.

I wish to extend my heartfelt gratitude to all participants, esteemed speakers, and diligent organizers for their invaluable contributions to this Congress. May the insights and experiences shared during this event serve as a beacon of guidance and inspiration for all those devoted to the advancement of medicine.

With warm regards,

Prof. Dr. Goran Dimitrov
President of Macedonian Medical Association

Dr Onur Dika
President
Organizing Committee

Dear esteemed colleagues,

It is my distinct pleasure to extend a warm welcome to each of you as we convene for the 2nd International Case Report Congress. As the president of the organizing committee, I am deeply honored to play a role in orchestrating this significant event.

I am profoundly grateful to Prof. Dr. Goran Dimitrov, President of the Macedonian Medical Association, for entrusting me with the privilege to organize this congress and for his steadfast support of young medical professionals. His dedication to advancing medical knowledge is truly commendable.

I also wish to express my heartfelt appreciation to the hardworking members of the organizing committee whose tireless efforts have been instrumental in bringing this congress to fruition. Their commitment to excellence is evident in every aspect of our preparations.

Over the coming days, we have the privilege of hearing from esteemed experts in the field of case reporting. I am confident that this congress will provide an invaluable opportunity for attendees to glean insights, exchange ideas, and forge new connections that will shape the future of medical practice.

Once again, I extend a warm welcome to each of you to the 2nd International Case Report Congress. I eagerly anticipate the enriching discussions and productive collaborations that lie ahead.

Warm regards,

Reproductive Health

Pregnancy with fetal brain tumor

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Fetal intracranial tumors are exceptionally rare, occurring at an overall incidence of 0.34 per one thousand live births. As per the 2016 classification of central nervous system tumors, primitive neuroectodermal tumors (PNETs) are categorized as highly malignant embryonal tumors in WHO Group IV. This case involves a 29-year-old in her third pregnancy, with two previous uneventful term deliveries.
At 27+3 gestational weeks, she sought care at the University clinic due to fetal hydrocephalus. An ultrasound at 28 gestational weeks revealed a heterogenous, tumor-like mass measuring 70x66mm in the right brain hemisphere. The fetal head exhibited a whole dilated right ventricle (26mm posterior horn dimension) with a leftward shift of the cerebral falx. Subsequent fetal MRI demonstrated a partly solid, partly cystic tumor with a heterogenous appearance in T2 pulse sequence, extending in a frontoparietal direction. The differential diagnosis included glioblastoma.
Following comprehensive scans, the parents were informed of the potential outcomes. The newborn, unfortunately, did not survive, weighing 1700g and measuring 42 centimeters. Pathological evaluation identified a primitive neuroectodermal tumor in the right parietal lobe, accompanied by internal hydrocephalus and cerebral encephalomalacia.
Microscopic examination showcased Homer-Wright rosette formations, consisting of moderately differentiated round to oval cells with eosinophilic to amphophilic cytoplasm and hyperchromatic nuclei surrounding a central core of neurofibrillary material. Immune histochemical staining confirmed the tumor's profile, including Vimentin(+), S100(+), GFAP(+), Actin(-/+), Desmin(-), CD99(-), EMA(-), CKWS(-), Chromogranin(-), NSE(+), WT1(+), and Synaptophysin positivity in single cells with dendrites. The proliferative index stood at 2-3%.
In summary, this rare case emphasizes the challenges of antenatal PNET diagnosis, with only 18% identified before or at delivery among tumors presenting in the first year of life.

Laparoscopic treatment of adnexal torsion complicating early pregnancy

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A 34-year-old female, gravida V(16+6 weeks of gestation), presented with abdominal pain and ultrasonographic suspicion for righ-sided adnexal torsion was admitted on our university clinic. Laboratory investigations showed leukocytosis (Le=13.20x10'/l, anaemia (Hb=109g/l) and elevated C-reactive protein levels (CRP=8,40mg/l). Ultrasonography revealed a gravid uterus with a singleton fetus, an enlarged edematous right ovary (80×40mm), and a left ovary with normal morphology. The patient was prepared and underwent a laparoscopic procedure. A gravid uterus corresponding to the fourth lunar month was found on laparoscopy. The left ovary appeared normal in size and morphology for the patient's age. The right adnexa showed a completely torsioned uterine tube and an edematous and necrotic right ovary. Due to the challenging access from the gravid uterus, a step-by-step partial resection of the right ovary was performed, along with the removal of the right uterine tube. The excised tissues were sent for histopathological analysis, confirming haemorrhagic infarction in the right ovary. Postoperatively, the patient received appropriate antibiotic and gestagen therapy, pain management, thromboprophylaxis, anti-anemic and symptomatic therapy. The patient's recovery was monitored with regular laboratory assessments and imaging studies to ensure the well-being of both the mother and the fetus. Subsequent laboratory results showed improvement with stable hemostatic factors. Upon discharge, the patients continued prophylactic and symptomatic treatment. Follow-up ultrasound demonstrated normal fetal biometry and adequate amount of amniotic fluid, and a well-formed placenta.
At the latest follow-up, the patient was in stable condition (gravida V, 21 weeks of gestation) after laparoscopic surgery and was advised regular screening for anomalies, rest, and prescribed medications.
Keywords: Pregnancy, adnexal torquation, treatment

Two successful pregnancies in a complicated uncorrectable case of uterine anomaly - bicornuate uterus

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The aim of this case report is to present two successful IVF pregnancies, in a patient with congenital uterine anomaly. At the age of 15, she was operated from imperforate hymen and hematometra, after which she began to menstruate regularly. She came to us at the age of 26, after two years of marriage without conception. With ultrasound and then HSG, a bicornuate uterus was diagnosed with a complete septum to the cervix of the uterus, normal ovaries, uterine tubes that are not passable and a single cervix. An IVF stimulation protocol was initiated after which 4 embryos were obtained and one blastocyst was returned to the left horn of the uterus. The pregnancy progressed without complications with progestagens, vitamins and magnesium support, with regular screenings throughout the pregnancy. The fetus developed normally till 29 g.w., when the first contractions occurred. After two maturations with corticosteroids and tocolysis, the patient was admitted for cesarean delivery at 32.4 g.w. and gave birth to a live female fetus with BBM 1620/43 and AS 8/9. The newborn spent 18 days at the NICU without complications and was discharged with 2120 grams and 45 centimeters, in excellent condition. Six years later, on the age of 32, patient decided on a second pregnancy. The same IVF procedure was repeated with embryo transfer in the left horn of the uterus. The pregnancy was without complications, managed like the previous one, with first uterine activity appeared at 32 g.w. Patient gave birth at 34 g.w. with live female fetus with BBM 1820/45 and AS 8/9, again without complications. The aim of the paper is to show that pregnancy is possible even with uterine anomalies and reduced capacity of the uterine cavity, if the whole situation is managed well and if the patient is patient and has faith that it can happen.
Key words: Bicornuate uterus, pregnancy, prematurity, gestational week- g.w., IVF

Full-Term Pregnancy and successful Spontaneous Vaginal Delivery in a patient with Uterus Didelphys and IUD in situ

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Uterus didelphys is a rare congenital abnormality that results from the failure of the lateral fusion of the Müllerian ducts during embryogenesis. Women with this abnormality have a paired uterus with two cervices, and usually two vaginas or a longitudinal vaginal septum. Intrauterine devices (IUDs) have become one of the most frequently used forms of long-acting reversible contraception (LARC) in women of childbearing age. Methods of contraception are being designed to become increasingly reliable, however, patients still get pregnant. Here, we report a case of a 38-year-old woman, pregnancies 6, deliveries 2 (two alive, healthy newborns born to spontaneous vaginal deliveries without any compilation, and three spontaneous abortions), with a uterus didelphys and IUD in situ in the right and a viable pregnancy in the left uterus. The patient presented to our hospital for evaluation of the current pregnancy and assessment of the perinatological risk associated with the present IUD. She had a previously diagnosed congenital anomaly of the uterus of the didelphys unicollis type. On transvaginal ultrasonography both a viable pregnancy and an IUD were demonstrated. The pregnancy was closely monitored with ultrasonography, which showed fetus in the right size for the gestational age and no major fetal anomalies. The pregnancy ended with a spontaneous vaginal delivery at the gestational age of 38w5d, with the outcome of a single female newborn in a cephalic presentation.
The aim of this case report is to present a full-term pregnancy and successful spontaneous vaginal delivery with a present IUD.
Keywords: Uterus didelphys, Congenital uterine anomalies, Müllerian duct anomalies, Intrauterine contraceptive device, Pregnancy

Preserving hope: A fertility-sparing journey with Medroxyprogesterone acetate for young patients facing endometrial adenocarcinoma

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Endometrial adenocarcinoma traditionally affects postmenopausal women, but, in recent years, an increasing number of cases have been reported, in younger, premenopausal women. Research indicates that about 5-14% of all endometrial cancer cases occur in women under the age of 40, with a peak incidence during the reproductive period. Risk factors contributing to endometrial adenocarcinoma in young patients include obesity, polycystic ovary syndrome (PCOS), unopposed estrogen exposure, and hereditary conditions such as Lynch syndrome. These cases often present unique challenges due to the desire for fertility preservation. such as hormonal therapies, to address endometrial adenocarcinoma in young patients without compromising their ability to conceive.

In this presentation, we delve into the intriguing case of a 40-year-old woman seeking medical attention for menstrual irregularities, initially suspected as a post-COVID complication. To our surprise, gynecological evaluations uncovered a more critical diagnosis-endometrial adenocarcinoma. This unforeseen revelation led us to explore fertility-sparing options, opting for a treatment regimen involving tablets Medroxyprogesterone acetate of 500mg /2x1/ for one year, coupled with regular hysteroscopies every three months. This approach aims to impede endometrial proliferation and folliculogenesis while closely monitoring for the absence of atypical cells through control hysteroscopies. Following a successful therapy completion, she unexpectedly tested positive for COVID again but with milder symptoms. Despite the adversities, the patient embraced a fertility-focused approach and achieved a successful pregnancy in July 2022. The patient delivered a healthy baby via cesarean section, highlighting the collaborative efforts of the medical team to navigate through a series of challenges.

This case underscores the importance of personalized care, fertility preservation strategies, and adaptability in managing the intricate interplay of endometrial adenocarcinoma, COVID-19, and reproductive aspirations in young patients.

Keywords: endometrial adenocarcinoma, medroxyprogesterone acetate, fertility-sparing therapy, reproductive period.

A rare case of a leiomyoma with bizarre nuclei

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Leiomyoma with bizarre nuclei (LBN), also known as symplastic leiomyoma, is a histological subtype of benign leiomyoma with bizarre cells and nuclear atypia. Differentiating LBN from other benign leiomyoma subtypes, uterine smooth muscle tumors of uncertain malignant potential (STUMP), or leiomyosarcoma (LMS) can be diagnostically challenging in clinical presentation and pathologic morphological analysis. The difficulty of distinguishing LBN from other lesions, especially from LMS, and the potential of LBN for subsequent malignant transformation make LBN an important topic of research. Histopathological examination is essential for distinguishing LBN from other diseases. Pathology sampling and morphological examination remain the key of diagnosis.
In our case report we are presenting a 41 years old patient with leiomyoma with bizarre nuclei, presented with irregular uterine bleeding. On two occasions ultrasonographic diagnosis of uterine myoma has been made, with tendency of enlargement at a speed of 1 cm of the mass diameter per month. Initial ultrasound evaluation showed a mass of 54x37mm, followed by 68x53mm two months later. Myomectomy was performed and histopathological report showed well marginated mesenchymal neoplasm with mononuclear and multinuclear bizarre cells with big hyperchromic nuclei without tumor necrosis. A myomectomy was preferred for recurement , but for recurrent LBN, hysterectomy is the preferred treatment for patients without fertility requirements and myomectomy for those who want to retain fertility. Furthermore, patients with fertility requirements should be informed about the possibility of recurrence and should be closely followed up with imaging examinations.
Keywords: diagnosis, histopathology, examination, treatment.

Factor VIII Deficiency Safe Second Cesarean Section

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Hemophilia A is inherited hemorrhagic disorder resulting from a factor Factor VIII or Von Willebrand factor deficit. As a X linked disorder is rare in females and therefore there are no standardized guidelines for management of this condition during pregnancy, intrapartum and postpartum. Often it is not recognized and treated before pregnancy. And first obvious symptom is massive postpartum hemorrhage that is hard to stop.
We present a case of a successful management of the second pregnancy in patient with Factor VIII deficiency. The first pregnancy was ended with cesarean section due to obstetric indication. Preoperative analyses did not showed any coagulation discrepancies. During the first C section the patient had massive life-threatening intraoperative hemorrhage. The operators struggled to save the uterus, and patients life she received multiple transfusions, and ended up with uterine tamponade.
Before the second pregnancy and the second delivery Thrombocytopathy A was diagnosed and proactive management was undertaken. The general recommendations in the literature in this cases are administering tranexamic acid before the surgery. This was also the only recommendation by specialist in transfusion medicine. Which in this case would have been insufficient. Before the surgery conciliar opinion for proactive management was required. Before surgery adequate substitution with blood products containing Factor VIII was given and tranexamic acid.
Which resulted with not any excessive bleeding during and post operation.
Proactive interdisciplinary management and prompt anamnesis are key for successful patient treatment.
Key words: Factor VIII deficiency; Postpartum hemorrhage; cesarean section

High grade Endometrial stromal sarcoma

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Endometrial stromal tumors are a subset of uterine mesenchymal neoplasms that account for less than 10 percent of uterine sarcomas and approximately 1 percent of all uterine malignant neoplasms. High grade Endometrial stromal sarcoma is a rare gynecological disease predominantly affecting women aged 45 - 65. High grade Endometrial stromal sarcoma, despite its rarity, is notorious for its poor prognosis and low survival rate. Its early detection is complicated due to its asymptomatic presentation and ambiguous pathogenesis, leading to debates over treatment approaches.
53 years old patient presented with abdominal pain that extends to the inguinal region. Ultrasound examination showed a malignantly altered uterus with a large heterogeneous tumor formation measuring 16x22cm. Computed tomography (CT) of the abdominopelvic region showed in the projection of the uterus, a massive tumor lesion with dimensions 161x93x221mm is visualized. The tumor lesion is heterodense, because it has a necrotic component. Tumor markers in reference values. At laparotomy, the uterus and obturator lymph nodes on both sides were enlarged. Neither the adnexae nor the omentum appeared remarkable. The surgical procedures included total abdominal hysterectomy, bilateral salpingo-oophorectomy, resections of enlarged pelvic nodes. The finding in the submitted operative material corresponds to High grade Endometrial stromal sarcoma - BCOR arranged, developed on the basis of myometrial adenomyosis. The disease is in postoperative clinical UICC (8-th Edition) stage IB, at pT = 1b,pNx, pMx, pR0, pL1, pV0. The postoperative clinical course was unchanged. The patient was started on adjuvant chemotherapy
High-grade endometrial sarcomas are rare and aggressive tumors having a very poor prognosis. Early diagnosis in the initial stages is of paramount importance to increase the overall survival.
Key words: High grade Endometrial stromal sarcoma

Herlequin Ichthyosis

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Harlequin Ichthyosis (HI) is a rare congenital disorder (1/300.000) with an autosomal recessive inheritance, with the mutation of the adenosine triphosphate—binding cassette subfamily A member 12 (ABCA12) gene. The clinical manifestations include generalized hyperkeratotic plaques and deep fissures, ectropion, eclabium, and contractures. Death usually occurs due to dehydration, infection (sepsis) and restriction of breathing and the newborns rarely survive more than a few days.
26 year old patient was referred due to preterm labor at 34 weeks of gestation, after preterm premature rupture of membranes. She had two previous normal pregnancies with normal vaginal births in term. This pregnancy was routinely controlled with normal prenatal screening results. A preterm male baby was born via normal spontaneous vaginal delivery. His birth weight was 2160 gr and the length was 42 cm. His Apgar score was 5/2. On examination the newborn showed typical appearance of congenital (Harlequin) Ichthyosis fetus. The skin was thickened and fissured, he had flattened rudimentary external ears bilaterally with obliterated ear canals, bilateral ectropion, bilateral eclabium and deformed hands appearing as claws. The newborn was transferred to the Intensive Care Unit. The patient's condition deteriorated, despite the supportive care, he developed severe cardio - respiratory failure and unfortunately died on the 4th day post delivery.
The most common prenatal ultrasound findings are: a large open mouth, absence of typical ear and nasal morphology, minimal fetal movements with an abnormal position of hands and feet, hyperechogenic amniotic fluid and polyhydramnion. Prenatal testing, such as chorionic villus sampling (CVS) or amniocentesis, can be performed to analyze fetal DNA for ABCA12 gene mutations. In short, prenatal sonography and molecular diagnosis are increasingly feasible in patients with HI and are essential for giving correct genetic advice.
Keywords: ABCA12 mutation, genetic disorder, Ichthyosis

Termination of unwanted pregnancy and casual finding of H-SIL

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A 28-year-old pregnant woman, G6, P4, was referred to the hospital for termination of unwanted pregnancy by a primary care Ob & Gyn. The pregnancy was 9 gestational weeks. She was undergone a procedure for termination of the pregnancy. A week after the procedure she was admitted to the ward because of presence of residual masses in uterus cavity. The next day she was undergone a curretage, and the masses were send for histological analysis. The result from the histopathological analysis was : Decidua. Dysplasia epithelli cervicis uteri gradus mediocris et gravis. (H-SIL). For the following 4 months the patient was unreachable due her living abroad. During the fifth month she came again to the hospital for another termination of unwanted pregnancy. During the procedure for termination of the pregnancy a biopsy and curettage were performed. The material was send for histopathology analysis. HPV testing was also preformed. It came positive for HPV types 16 and 31. The new result from the histopathological analysis was : Dysplasia epithelli cervicis uteri gradus mediocris et gravis. (H-SIL). Four weeks after the termination of the pregnancy and the biopsy she was undergone a new procedure for excision of the cervical tissue. The histopathology result came with negative margins.
The patient had never been for a check-up at her Ob & Gyn, and she had never performed a PAP smear nor an HPV testing. This case shows the importance of primary screening for cervical cancer. If there wasn't the unwanted pregnancy she wouldn't come for curettage and we wouldn't discover the H-SIL.
Key words: Unwanted pregnancy, H-SIL, excision of the cervix, cervical screening.

Obstetric management after bicornuate uterus abnormality correction

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During hysteroscopy, the uterine cavity of a bicornuate uterus presents a configuration similar to a uterine septum. The laparoscopic view reveals an exceptionally wide bicornuate uterus with a central depression, almost partitioning the uterus into two distinct compartments. Unlike a uterus with a septum, external observations cannot discern the difference from a normal uterus. Surgical correction for a bicornuate uterus is typically unnecessary unless the woman experiences recurrent miscarriages or preterm deliveries. In cases necessitating intervention, a wedge resection of the uterus is performed to unify the two compartments.

This case report details the management of a patient with pregnancy complicated by a history of uterus bicornis and hysteroscopic resection of the septate uterus. The patient's obstetric history includes artificial insemination, spontaneous abortion, and a previous septate uterus resection. Ultrasound examinations during the second trimester demonstrated appropriate fetal growth and well-being. Subsequent follow-up identified the development of pregnancy-induced hypertension (PIH) and hypoproteinemia, prompting the prescription of medications, including Methyldopa and Clexane, to address these complications.

Ultimately, operative delivery via Cesarean section was performed at 37+3 weeks due to escalating concerns related to PIH and hypoproteinemia. The postoperative phase involved comprehensive care, antibiotic administration, antihypertensive measures, uterotonic therapy, thromboprophylaxis, rehydration, and symptomatic treatment. The patient's recovery progressed uneventfully, leading to her discharge with a prescribed home therapy plan. Post-discharge, the patient's follow-up included monitoring of blood parameters, continuation of antihypertensive therapy, and scheduled consultations with a gynecologist and nephrologist.

This case underscores the intricate nature of managing pregnancies in women with uterine anomalies, specifically uterus bicornis, and highlights the successful application of hysteroscopic resection in addressing septate uterus concerns. It emphasizes the pivotal role of tailored care and multidisciplinary management in achieving positive maternal and neonatal outcomes in complex obstetric scenarios.

Key words: bicornuate uterus, resection of septum, pregnancy

Ciliated labial cyst (Mullerian cyst)

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Vulvar cysts lined with ciliated epithelium are rarely documented in the literature. Based on histopathology, the cyst may be of Mullerian, paramesonephric, or urothelial origin. Literature suggests that the Mullerian cyst is the most common type. They remain asymptomatic unless they become large enough to cause heaviness or pressure on the surrounding structures. They are associated with pregnancy and exogenous progesterone use and as such, are a particularly rare finding within the pediatric population.
We describe the case of an 14 years old patient who presented with a large elongated cystic formation localized on the right labia majora, 30 cm long and filled with liquid content. The patient gives anamnestic information that the cystic formation appeared 3 years ago. There is no particular symptomatology to which she complains. It had become so large that the patient felt uncomfortable wearing jeans and bathing suit in public. The recommendation was made to excise the large cystic structure. The patient underwent surgery. After complete processing of the pathohistological and immunohistochemical examinations, the following was determined. The cut section of the specimen revealed cystic space filled with serous fluid. The wall of the cyst was lined by one layer or pseudostratified ciliated epithelium with focal squamous metaplasia. There was no significant inflammation in the cyst wall.Teratoma elements were not identified. Immunohistochemical analysis showed that the ciliated cells were positive for estrogen receptor (ER), progesterone receptor(PR), cytokeratin 7 (CK7), PAX8 and WT1 what confirms the Mullerian origin.
These cysts are typically found incidentally in young women however they may present as large masses in children. Surgical excision should be curative and allows for histopathologic examination and definitive diagnosis, while also providing significant restoration of genital appearance.
Key words: Mullerian cyst, pediatric population

Ovarian abscess after vaginal delivery

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Ovarian abscesses in pregnancy and postpartal period are extremely rare due to to the natural barriers to ascending infection. Risk factors include underlying PID, previous abdominal surgery, instrumenatal vaginal delivery (vacuum extraction, forceps).
We present a 30 year old woman (gravida 3, para 3), presented to gynecology exam 20 days after vaginal delivery due to sharp lower abdominal pain.Bimanual examination revealed adnexal tenderness on the right side, with palpable right adnexal mass. Ultrasound scan showed right sided retrouterine adnexal mass measuring 8x7cm with bizarre looking structure. Laboratory studies showed raised inflammatory markers, with raised values od D dimer and Ca 125. Vaginal swab showed no significant growth. After administration of anticoagulant therapy and antibiotics laparoscopy was preformed.
Operative findings revealed massive adhesions in abdominal cavity between intestines, parietal peritoneum, uterus and ovaries. After removing adhesions, right adnexal tumor was revealed. Right ovarium was transformed into cystic mass filled with puss. Right adnexectomy was preformed and thorough peritoneal lavage.
Post operatively was commenced intravenous combination of three antibiotics. She was discharged on postoperative day two, with a combination of two oral antibiotics prescribed for another two weeks. Pathological findings confirmed surgical diagnosis – abscessus ovarii.
First follow-up scan was preformed one month post operatively, which showed 2 simplex cyst on left ovary, measuring 5x6cm, and were treated with hormonal therapy. On a 6 weeks follow up, ultrasound scan showed a complete resolution.
This is a rare case of ovarian abscess in a short period of time after vaginal delivery (puerperium). Ovarian abscess or pelvic inflammatory disease (PID) should be considered in a differential diagnosis of abdominal pain even during pregnancy, especially in postpartal period, even though it is very rare.
Key words:ovarian abscess, postpartal, adhesions, ovarian mass

A case of necrotizing fasciitis after caesarean section

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Necrotizing fasciitis is a rare infection of the dermis and hypodermis extending along muscular fascia. It is a potentially fatale condition with estimated incidence of 0,2 to 0,4/100,000 adults.We present a case of 25-years old primigravida delivered by a caesarean section, due to relative disproportion. Operative and postoperative period went uneventfull. Antibiotic therapy(ceftriaxone), uterotonicsand thromboprofylaxis was administered. She was discharged after 4 days in good condition. Nine days later she was readmitted febrilewith black discoloration of the skin above the scar from the previous transversal laparatomy and foul-smeelling lochia.A wound swab isolated Staphylococusagalactie and the lochia swab isolated Enterococcus and E.Coli. CT scan of the abdomen as well as the front abdominal wall revealed thickened abdominal wall fascia without defects in it with air inclusions and necrosis of the subcutaneous fat tissue. The C Reactive Protein was markedly elevated with a value of 317mg/l.
Double broad spectrum antibiotic therapy was prescribed according to the antibiogram.Extensive debridement was performed by a plastic surgeon with excision of the necrotic tissue up to the level of the abdominal fascia. Local wound tretmant with silver dressings was continued.After receiving negative swab results, the wound was resutured with singleinterrupted sutures and patient was discharged in a stabile condition.
Keywords: necrotizing fasciitis, caesarean section.

Beyond the challenges: Achieving pregnancy after ten recurrent miscarriages

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This case report details the successful management of a 35-year-old woman with a history of ten recurrent spontaneous abortions attributed to a heterozygous methylenetetrahydrofolate reductase (MTHFR) mutation and Factor V Leiden mutation. Despite multiple losses, the patient achieved a viable pregnancy and delivered a healthy infant by following personalized treatment optimizing folate metabolism and reducing thrombotic risk.

The patient's journey began with a history of five consecutive Recurrent Early Pregnancy Loss (REPL) in a two year period. Hormone misbalances test, TORCH infections test and microbiological swabs were taken and were all negative. A 3D/4D ultrasound was performed and showed normal result. Hysteroscopic examination, detected Class U2 partially septate uterus and a hysteroscopic resection was done. The patient experienced another five REPL in the next two years. Following the 10th pregnancy loss, genetic testing revealed Factor V Leiden and MTHFR heterozygous mutation. Further investigation ruled out chromosomal abnormalities, indicating MTHFR mutation as the primary etiology.

Subsequent pregnancy marked by a fetal heartbeat at the 6th gestational week was immediately managed with a personalized treatment plan, high-dose folic acid (5 mg/day), low molecular weight heparin LMWH (Enoxheparin, 40mg) and continued her therapy with low dose Aspirin (100 mg/day) to mitigate thrombotic risk throughout her pregnancy.

Following treatment initiation, additionally gestational diabetes and preeclampsia were successfully managed during pregnancy, requiring an emergency caesarean section at 36 weeks of gestation because of fetal distress. The newborn had an Apgar score 8/9, weight 2540 g.

This case underscores the importance of recognizing and appropriately managing MTHFR mutations in patients with RPL while putting the spotlight on the effectiveness of tailored interventions targeting MTHFR mutations in RPL management. Further research is crucial for enhancing the understanding and management of PRL offering hope to affected couples.

Key words: Reccurent pregnancy loss (RPL), MTHFR mutation.

Successful pregnancy in a patient with Wolff-Parkinson-White syndrome

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Introduction: Wolff-Parkinson-White (WPW) syndrome is serious and relatively rare condition encountered during pregnancy, characterized by a cardiac rhythm disorder with an aberrant accessory cardiac route as its hallmark. This condition can pose a potential risk and it can be life-threatening to both the fetus and the mother, so close monitoring should be done. The sudden onsets of arrhythmias during pregnancy are triggered by a various physiological changes that can lead to a hemodynamic instability and even maternal death.

Case report: Here we present a clinical case of a 23-years old primigravida, who was transferred to our clinic from the internal medicine department, presenting a history of a previously diagnosed WPW syndrome. She had an uncomplicated course of pregnancy with two episodes of sudden tachycardia during 29th and 32nd weeks of gestation. Beta blockers and antiarrhythmic drugs were given as a regular therapy and due to the clinical history and potential risk of further complications; the patient was admitted and delivered by an elective cesarean section in 38th week of gestation.

Conclusion: Proper diagnosis and adequate management are key factor in establishing normal pregnancy course in patients with WPW syndrome. The severity of WPW syndrome during pregnancy needs accurate approach on the basis of multidisciplinary coordination between obstetricians, cardiologists and anesthesiologists.

An incidental finding of carcinoid tumor of the appendix during gynecology procedure

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Appendectomies are widely used all over the world when there are signs and symptoms suggestive of acute appendicitis and also for prophylactic resection like in our case.
Cecal appendix tumors are unusual and have a low frequency of presentation, which is reported between 0.2 and 0.5% of all digestive tract tumors. From the mentioned tumors, the carcinoid ones are the most common neoplasms of the cecal appendix and are characterized in most cases by slow growth and an asymptomatic clinical course. However, in some cases, they can present as a metastatic disease with fatal outcomes.
We present a case of a carcinoid tumor of the cecal appendix found incidental to a prophylactic appendectomy during a gynecological procedure.
A 68-year-old patient with a severe abdominal pain due to ovarian cystic tumor diagnosed on CT one month before the hysterectomy. An appendectomy was performed from abdominal surgeon due the hysterectomy because there were adhesions with the rectal serous and the cecal appendix was macroscopically dilated. The histopathological analysis identified a typical carcinoid tumor, rated as Stage IV.
Carcinoid tumors are neuroendocrine neoplasms that can be found in various locations but which are most common in the gastrointestinal tract. Involvement of the cecal appendix is not common and is usually detected incidental to prophylactic appendectomies. The prognosis and treatment of appendiceal carcinoid tumors are influenced by various factors, including tumor size and location
Key words Carcinoid tumor, NET, cecal appendix, appendectomy, hysterectomy

Antenatal diagnosis of thoracopagus conjoined twins

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Conjoined twins represent one of the rarest forms of twin gestation, which occurs due to incomplete separation of the embryonic plate after 13 days. Each type of this entity is linked to distinct levels of organ sharing, structural abnormalities, complications and difficulties concerning the potential for separation. One of the most common type of conjoined twins is thoracopagus type, where the fusion is anterior, at the chest and involves the heart. Because this situation carries high risk, early diagnosis and management of inducted abortion is extremely important. The role of ultrasound in early diagnosis and management are discussed.
A 26 years old women, primigravida, was referred to our university hospital at a 10-week gestation. Sonography was performed and two fetuses with two arms, two legs and two heads were visualized. The twins were joined at the thorax, upper abdomen and only one fetal heart was observed. On the basis of these findings, the diagnosis was made and it was decided to terminate the pregnancy. The next two days, after induction of medical abortion with prostaglandin (Mifepristone a 200mg orally in one dose and 10 tablets Misorostol a 200 µg vaginally), an abortion of the conjoined twins was achieved. After the expulsion of the twins and the placenta, transvaginal sonography was obtained and instrumental revision of the uterine cavity was indicated and later performed.
Conjoined twins are associated with a high perinatal mortality, therefore, making an early antenatal diagnosis with ultrasonographic examination of conjoined twins gives the parents a chance to elect pregnancy termination. Also, it is important to detect these cases early as termination of pregnancy is less risky in the early stages as compared to the late stages for proper management.

Medical abortion in patient with first trimestar pregnancy and fetal malformations

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This case report presents the medical abortion of a patient diagnosed with pregnancy of 12 weeks of gestation, along with malformations of the fetus. The initial ultrasound examination revealed a fetus with acrania, an anterior abdominal wall defect with a protruding hernia, and cervical spine tissue defect. A comprehensive discussion with the patient and her family led to counseling on the further course of pregnancy, including advice for chorionic biopsy and termination of pregnancy.
Fetal malformations included acrania, a condition where the skull doesn't form propertly, and defects involving the abdominal wall and cervical spine tissue. These conditions pose significant challenges in pregnancy management, emphasizing the crucial roles of timely diagnosis, thorough counseling, and appropriate medical interventions. The patient's pre-existing diagnosis of status post implantationem cochlear lateris dexter added complexity to the case, highlighting the importance of comprehensive care.
Subsequent follow-up indicated the patient, now 23 years old, undergoing chorion biopsy due to acrania at 12 weeks of gestation. Following the diagnosis, medical abortion was recommended, and the patient was transferred to the urgent gynecology department. The medical abortion procedure commenced immediately, involving mifepristone and misoprostol, leading to the expulsion of the fetus next day. The expelled products were sent to the pathology institute for examination.
Throughout hospital stay, the patient received medications including antibiotics and uterotonics.This case highlights the challenges in managing fetal malformations in pregnancy and underscores the importance of timely diagnosis, comprehensive counseling, and appropriate medical interventions in ensuring the well-being of the patient.
Key words: fetal malformations, acrania, medical abortion

Cystadenoma mucinosum in pregnant patient

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Adnexal masses complicate pregnancy between 0.05 and 2.4 per cent, with 1 to 6 per cent being malignant. During this interval, obstetric ultrasound and cesarean birth were much less common, so incidental detection of asymptomatic adnexal masses was less likely.
Pregnant patients with adnexal masses are often unaware of them until cesarean delivery or until they become symptomatic, usually postpartum. Diagnosis is made incidentally upon ultrasound examination. If there are symptoms they are usually non-specific: pain in the back, constipation, abdominal swelling, and urinary symptoms. Rearly symptoms can be due to torsion with acute abdominal pain more often in masses from 6 to 8cm in diameter. There can be elevated tumour markers, especially in germ cell and sex cord-stromal tumours.
We present a case of a 30 years old pregnant patient at term who was admitted to our institution, elective C-section was performed due to an adnexal tumour previously seen during routine ultrasound obstetrics examination as a right adnexal mass multilocular with a diameter 20x13cm. Laparotomy via midline incision was performed, after delivery of the newborn, on the right abdomen compartment enlarged torquated ovarian cyst was found with a diameter of 20x17cm, right adnexetomy was performed. Histopathology resulted in mucinous cystadenoma.
Surgycal treatement is needed in these adnexal masses.
Adnexal masses in pregnancy are rare and usually asymptomatic, there is a great discussion on how to manage those pregnancies due to the risk of torsion and malignancy risk can't be excluded with ultrasound and tumour markers which often are elevated due to pregnancy itself. Ultrasound is not of great help to prognosis malignant risk; therefore, MRI is harmful and is preferred as additional imaging. In non-pregnant patients, serum tumour markers are routinely drawn before a laparotomy for the management of a pelvic mass however, this is not recommended during pregnancy.
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Acute Pulmonary Edema During Cesarean Delivery in Healthy Pregnant Woman

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Acute pulmonary edema is a relatively uncommon cause of respiratory failure in pregnancy, with incidence of 0.08% to 1.5% of pregnancies. We report a case of non-cardiogenic pulmonary edema in a 23-year-old healthy patient. She underwent an elective cesarean delivery after non-effective induction of delivery with Oxytocin due to prolonged pregnancy (40weeks and 5day) and diminished amniotic fluid. After applying spinal anesthesia, there was a drop in the arterial pulse and tension, after which atropine sulfate 0.5 mg, Gelofusin 4%-500 ml, saline solution 500ml and ethylephrine 5 mg were administered During the operation, the patient had stable vital parameters and peripheral arterial saturation (SpO2), until the very end of the operation, when she began to complain about difficult breathing, suffocation and began to release frothy, slightly bloody mucus from the mouth. Due to a drop in SpO2 to 59%, endotracheal intubation was performed and the patient was transported to the Clinic for Surgical Diseases for further intensive care treatment. After admission, she underwent mechanical ventilation. Urgent chest X-ray was performed in addition to ARDS. ECG was within normal limits. Nine hours after admission and administered therapy, she was extubated and in stable condition. Appropriate resuscitation and multidisciplinary approach is essential and mandatory, especially in complex health-care environments and intensive care units in every maternity hospital. Acute pulmonary edema was probably due to iatrogenic fluid overload combined with effects of ethylephrine and hemodynamic changes in pregnancy.
Keywords: acute pulmonary edema, cesarean delivery, pregnancy, ethylephrine, iatrogenic fluid overload

Congenital unilateral limb deficiency in a fetus, a case report

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Upper-limb deformities are rarely isolated, more often associated with systemic syndromes, cardiopathies, complex malformations or delayed neuropsychomotor development. Vascular pathology often contributes to limb deficiency. Congenital limb deficiencies have incidence of approximately 9.7 for every 10,000 live births. The ratio of upper extremity to lower extremity involvement is 3:1.
We report a case of 39 year old patient, G1, P0, sent at the University clinic for obstetric and gynecology for a second trimester morphology scan. Ultrasound report revealed a fetus with biometry adequate for gestational age,21.1gestational weeks, unremarkable echogenicity of the placenta and amniotic fluid. On the left hand of the fetus absence of the left forearm right below the elbow and absence of the palm was noted. Other fetal organs and structures were regular, without any abnormalities. Second opinion ultrasound verified the finding. The patient and her partner were counciled for invasive prenatal procedure and informed about the prognosis of this kind of anomaly. According to the national medicolegal procedure termination of pregnancy as requested by the parents was performed. Hystopahtology report confirmed male fetus with weight of 400g, length of 28cm. The length of the left arm was 6,5cm with abscent forearm and palm whereas length of the right arm was 11,5cm with regular morphology. Other associated deformities were not identified.
Early prenatal diagnosis of limb deficiencies is nowadays mandatory using mostly ultrasound. Postnatal treatment approaches include prosthetic intervention, orthotic intervention and reconstruction surgery.
Keywords: limb deficiency, fetus

Challenges in prenatal diagnosis of agenesis of cavum septum pellucidum and septo optic dysplasia

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Agenesis of the Septum Pellucidum (ASP), a rare neurological disorder, is frequently associated with Septo-Optic Dysplasia (SOD). This condition is marked by the absence of the septum pellucidum and can include symptoms like optic nerve hypoplasia and hypopituitarism, presenting significant diagnostic challenges. This report focuses on a 25-year-old expectant mother. The initial diagnosis was uncertain, but comprehensive neurosonography eventually disclosed the nonexistence of septum pellucidum leaflets. At 22 weeks, a second ultrasound raised suspicions of corpus callosum agenesis and mild ventriculomegaly. Further advanced imaging at 35 weeks revealed an agenesis of septum pellucidum, thin corpus callosum and the presence of chiasma opticum, visualized using 3D transvaginal tomographic ultrasound imaging (TUI). This comprehensive approach underlines the need for detailed examinations in such complex cases. The mother opted against undergoing amniocentesis. The MRI was carried out, yet its interpretation was not completed. The patient successfully delivered a full-term, healthy baby. Post-delivery, the newborn underwent extensive pediatric evaluations and was referred for specialized follow-up, considering the prenatal findings. This case contributes significantly to the limited yet critical research on ASP and SOD. It highlights the difficulties in distinguishing isolated ASP from SOD based on initial symptoms and the variability in prognosis. Isolated ASP generally predicts a more favorable outcome, whereas SOD can lead to more severe conditions. ASP and SOD present intricate challenges in both diagnosis and management. Accurate identification of the cavum septum pellucidum is vital for assessing neurological development. Varied prognoses in such cases necessitate employing comprehensive diagnostic techniques, including MRI, amniocentesis, and advanced ultrasound imaging, to ensure precise diagnosis and effective management. Key words: cavum septum pellucidum, prenatal diagnosis, septo- optic dysplasia;

Delayed Ovarian Metastasis from Previous Breast Carcinoma with Persistently Normal Tumor Markers: A 20-Year Case Report

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Metastatic spread to the ovaries from breast cancer represents 3-38% of all ovarian tumors and manifests with distinct clinical features, including pseudo-Meigs syndrome and Krukenberg tumor. Diagnosing ovarian metastasis can pose difficulties since these growths often remain symptomless until they attain significant dimensions. This case is about a 60-year-old breast carcinoma survivor, who underwent mastectomy, radiotherapy, and chemotherapy two decades ago who presents at the University Clinic of Gynecology and Obstetrics with abdominal colic. Her hematological tests revealed lymphopenia, anemia, and neutrophilia, indicating systemic disturbances. Surprisingly, tumor markers such as CEA, CA-19, CA125, and HE 4 were all within normal ranges, despite the absence of evident tumor manifestation, highlighting the challenge of diagnosing based solely on abdominal pain. A diagnostic ultrasound examination revealed the presence of a tumor mass measuring 110mm in diameter on the right ovarian region, while the left ovary exhibited a lesion measuring 30mm. Additionally, there was observed a minimal amount of fluid accumulation within the Douglas space, requiring surgical intervention. Following surgical intervention, histopathological analysis revealed the presence of metastatic ovarian carcinoma involving both ovaries and the left Fallopian tube, originating from a primary breast carcinoma. This diagnostic revelation underscores the intricate nature of the disease process, highlighting the dissemination of malignant cells from the primary site to distant anatomical locations, thereby necessitating a thorough multidisciplinary approach for effective management and treatment planning.
Key words: metastatic ovarian carcinoma, abdominal colic breast cancer, diagnostic ultrasound, surgical intervention, histopathological analysis, multidisciplinary approach.

Complete Androgen Insensitivity Syndrome in Three Sisters of the Same Family: Clinical Presentation, Management, and Surgical Intervention

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Complete Androgen Insensitivity Syndrome (CAIS), or Morris Syndrome, is a rare genetic condition characterized by the inability of cells to respond to androgens, resulting in the development of a female phenotype despite the presence of a 46,XY karyotype. This report explores the unique case of three out of four sisters within a single family diagnosed with CAIS, each presenting with typical female external genitalia, absence of the 2/3 of the upper vagina, uterus, and ovaries, and the presence of testicular tissue within the inguinal canal.
The clinical manifestation of CAIS in the three sisters was consistent with the classical presentation, emphasizing the importance of a thorough understanding of the genetic and phenotypic variations associated with this syndrome. The absence of a vagina posed both functional and psychological challenges for the affected individuals, necessitating comprehensive medical intervention. To mitigate the risk of malignancy associated with the presence of testicular tissue, laparoscopic surgery was performed to remove the testes from the inguinal canal. The decision to pursue surgical intervention was guided by a multidisciplinary team of specialists.The surgical management included the Davydov procedure, a well-established technique for neovaginoplasty. This involved the creation of a neovagina using a peritoneal graft, addressing the absence of the upper 2/3 of the vaginal canal in these individuals. The procedure was successful in providing the patients with an appropriate neovagina, contributing to their overall well-being and quality of life.
This case report focuses on the complexities surrounding the diagnosis and management of CAIS, particularly within familial contexts. It underscores the significance of interdisciplinary collaboration in addressing the multifaceted challenges faced by individuals with CAIS. Further research is warranted to explore the long-term outcomes and psychosocial aspects of surgical interventions in individuals with CAIS, as well as the potential need of hormonal substitution in these patients.
Keywords: complete androgen insensitivity syndrome, Morris Syndrome, neovaginoplasty, genetic condition

Multidisciplinary Management of Hyperemesis Gravidarum with Complex Comorbidities: A Case Report of Termination in a High-Risk Pregnancy

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A 30-year-old pregnant woman presented with Hyperemesis Gravidarum ml IV(16+2) complicated by metabolic disturbances, paraplegia, tetraplegia, undetermined bilirubin metabolism disorder, care for uterine prolapse following a previous surgery, alkalosis, acute cholecystitis with gallbladder calculi, other disorders of the digestive system, hypokalemia, paroxysmal tachycardia, and high-risk pregnancy monitoring.
The patient, in her fourth pregnancy at 16+2 weeks gestation, was admitted with severe vomiting, weakness, and a complex medical history. Initial diagnosis included HG, refractory hypokalemia, metabolic alkalosis, chronic calculous cholecystitis, hyperbilirubinemia, and quadriparesis. Extensive assessments, consultations, and laboratory tests were conducted, leading to a multidisciplinary decision to terminate the pregnancy due to worsening general and neurological status, metabolic changes, hormonal imbalances, and hemostatic alterations.
A medical abortion with reduced doses of Misoprostol and a progesterone receptor antagonist (Mifepristone) was performed. The expelled fetus and placenta were sent for autopsy. Post-abortion, the patient was closely monitored in the anesthesia and intensive care unit, continuing comprehensive treatment, laboratory monitoring, and ultrasound examinations. Following improvement in her overall condition, the patient was transferred to the Urgent Gynecology department.
Continued substitution, rehydration, and monitoring were carried out until the patient's discharge in an improved general condition. Home therapy included antibiotics, supplements, antiemetics, and medications for gastrointestinal, liver, cardiovascular, and hematologic support. The patient received instructions for follow-up assessments and monitoring of hemostatic factors and D-dimers. The patient's well-being and ongoing care were emphasized, ensuring a comprehensive approach to her complex medical condition.

COVID – 19 in early pregnancy as a possible cause of upper limb anomaly

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The World Health Organization (WHO) declared coronavirus disease as a pandemic on March 11th, 2020. The risks for SARS-CoV2 virus as a viral infection in pregnancy are not yet known. Lately congenital anomalies were reported in medical literature. There are still many studies about the main question on the risk for intrauterine thrombotic events induced by maternal infection with COVID-19 during embryogenesis, which leads to increased risk of limb or digital ischemia and placental abnormalities. This shows the relationship between viral infection in pregnancy and congenital deformities. More often are upper limb reductions than lower limb reductions.

We describe a case of newborn with absence of left hand. During 4th gestational week, the mother was SARS-CoV2+. This baby was delivered in term at 40+3 gestational week with cesarean section. After delivery it was observed absence of left hand without any other visible deviations, although this absence was not noticed in prenatal screening. The other parts of left extremity were normal: shoulder, elbow. This baby was in good condition. The APGAR scores were 8 at first and 9 at fifth minute. After delivery levels of Anti-SARS-CoV2 in blood were elevated in the mother and in the newborn. The limb disorders can be longitudinal (along the long axis of the limb) or transverse (when are missing all elements below a certain level). In our case it is transverse anomaly.

The number of limb defects diagnosed with ultrasound is low (3 of 4 babies with a limb deficiency were not diagnosed in utero). These defects may be a consequence of thrombosis and necrosis of the limbs. There are some options for treatment such as: prosthetics, orthotics, surgery, and rehabilitation.

Keywords: COVID – 19, thrombosis, upper limb anomalies

Potter Syndrome with oligohydramnios

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Potter Syndrome, also known as Potter Sequence, is a rare congenital condition characterized by the absence or underdevelopment of both kidneys in a fetus, oligohydramnios, pulmonary hypoplasia and a constellation of physical abnormalities. Despite advances in prenatal screening, Potter Syndrome remains a diagnostic and management challenge due to its high mortality rate.
This case report aims to document the clinical presentation, management, and outcome of a fetus with Potter Syndrome.
Materials and Methods: Data was taken from medical records, prenatal ultrasound reports, obstetric and neonatal history in University Clinic of Gynecology & Obstetrics Skopje. Relevant literature on Potter Syndrome was also reviewed to provide context and support for the discussion.
A 30-year-old woman, gravida 3, para 2, was refered at the University clinic for a second trimester anomaly scan. Personal and obstetric history were unremarkable, 2 previous pregnancies resulted in term births. In this case prenatal ultrasound revealed olygohydramnious and bilaterally enlarged kidneys with abnormal echogenicity of the parenhyme and irregular corticomedulary differentiation. Invasive diagnostic (amniocentesis) revealed normal karyotype of a male fetus. Despite counseling about the prognosis, the parents opted to continue the pregnancy. At 32+2 weeks gestation, the mother was admitted at our clinic with anhydramnious. The labour was inducted and a male infant was delivered wia vaginal delivery. The infant had characteristic features of Potter Syndrome, hypotonia, distended abdomen, and pes equinovarus.
Despite resuscitative efforts, the baby passed away within five minutes of birth. Pathohistology report was in favour of the diagnosis. Additional findings of ductus arteriosus persistens was noted. Despite advances in prenatal screening, the prognosis for infants with Potter Syndrome remains poor, highlighting the need for continued research and support.
Key words: Potter Syndrome, Oligohydramnious

Tracing Hypoplastic Left Heart Syndrome with transposition of the great arteries: A Journey from Prenatal Diagnosis to Postnatal Management

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Hypoplastic Left Heart Syndrome (HLHS) with transposition of the great arteries represents complex congenital heart defect, requiring sophisticated prenatal diagnosis and postnatal management.
In the four-chamber view of the heart, a notably small left ventricle and an expanded right ventricle were observed, accompanied by an increased thickness in the interventricular septum. The heart's apex was composed of the right ventricle. A ventricular septal defect (VSD) was also detected. The aortic root and arch were hypoplastic and challenging to visualize. The pulmonary artery and ductal arch showed compensatory dilation. Furthermore, a transposition of the major blood vessels was seen, characterized by their parallel positioning. The management approach involved a multidisciplinary team, focusing on extensive fetal monitoring and parent counseling prenatally. Postnatally, the infant underwent sequential surgeries, integrated with comprehensive medical management.
Extended Clinical Course: Born through cesarean at 39 weeks, the infant underwent a CT angiogram and started on Prostin. Initial treatments included bilateral pulmonary artery banding and an unsuccessful attempt at stenting the ductus arteriosus. A crucial reconstruction of the aortic arch using a pericardial patch was performed. Subsequently, balloon dilation was conducted to address aortic arch gradient challenges. Even with sophisticated medical treatment, the infant encountered critical cardiac issues, ultimately leading to his passing at 8 months. This case illustrates the challenges in managing HLHS with transposition of the great arteries. It emphasizes the need for early diagnosis, precision in surgical intervention, and confronts the reality of potential adverse outcomes. This contributes vital insights into managing complex congenital heart defects.
Key words: hypoplastic left heart syndrome, transposition of the great arteries,prenatal diagnosis, surgical treatment

Case report of delayed interval delivery in twin pregnancy

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In multiple pregnancies with threatened premature delivery or preterm premature rupture of membranes of single sac, prolonging pregnancy after the delivery of the first baby may improve the chances of survival of the second baby. We report a case of quadrigeminy pregnancy after control ovarian stimulation and artificial insemination. After embrioreduction od two embryos et 8 gestational weeks, diamniotic, dichorionic pregnancy continued. At 22 gestational weeks, the patient was hospitalized with premature rupture of the first amniotic sac and premature labor and delivery of the first twin. The second twin was left in utero and management included combination of antibiotics, tocolytics and cervical cerclage. Pregnancy was continued for 54 days, with monitoring of maternal and fetal parameters, which enabled the spontaneous delivery of the second baby with improved neonatal outcomes. This case supports the prolongation of the pregnancy of the second twin.
Keywords: multiple pregnancy, delayed delivery, selective delivery

Hemoperitoneum in third trimester of pregnancy

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Hemoperitoneum is defined as a clinical state in which a certain amount of free blood collection can be detected within the peritoneal cavity. This is very rare, but still quite serious, dramatic, and life-threatening obstetric complication, which can happen during the whole course of pregnancy. The state has its own clinical characteristics, both on the maternal and fetal side. We present a case of a 22-year-old woman in her second pregnancy, having one previous birth with Cesarean section. She was in her 35th week of gestation, with no additional pregnancy complications. She arrived at our emergency obstetrics department with severe and diffuse abdominal pain and ultrasound exam showed multiple free liquid collections in both abdominal and pelvic cavities.
Highlighting the importance of proper diagnostic measures and appropriate treatment plan, which are the key elements in improvement of the perinatal outcome in these kinds of situations.
Keywords: Hemoperitoneum, Pregnancy complication, Abdominal pain, Ultrasound examination, Cesarean section

Comparison of hemopneumothorax in two polytrauma patients originating from the medical literature

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Polytrauma means severe injury caused by multiple traumatic injuries. Hemopneumothorax means the presence of hemothorax and pneumothorax in pleural space. In this research we are comparing two patients diagnosed with polytrauma associated with hemopneumothorax.
The first case report was of 19 years old male with hemopneumothorax, he was admitted to the ER 30 minutes after injury. On admission he was oriented and had an injury at the left side of the body, whereas the respiratory sounds were reduced in the right hemithorax. He had a systolic blood pressure of 100 mmHg, a heat rate of 112 beats/minute, and respiratory rate of 12 breaths\minute, PaO2 was 95% . CT showed right hemopneumothoax around the penetration site. After right poster-lateal thoracostomy the patient was transferred to thoracic surgery.
The second case report was of a 39 years old male, he was admitted to the ER 3 hours after the injury. On admission the patient was oriented. His pulse rate was 157 bpm, blood pressure was 150\95 mmHg. Blood test showed increased white blood cell count and no excessive loss of blood. A chest CT showed parenchymal lesions on the apical segments of both lungs, at the sites of penetrative lesions. Bilateral chest tube drainage was inserted. Both patients were discharged post-operatively in an overall good health condition.
Hemopneumothorax is not common, it requires attention and immediate treatment from a muldisiciplinary team. Be prepared for immediate life saving procedures, early diagnosis, rapid transportation to the relevant health care-centre, multidisciplinary approach to the required surgical procedures.
Keywords: “Polytrauma”,”Hematopneumothorax”,”Emergency”.

Rupture of a vessels on a fetal placental surface

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A 27-year-old female patient in 35 gestation week (GrII, PrI) was hospitalized in cardiovascular shock with BP 70/50 mmHg P – 110 bpm, with heteroanamnesis for congenital hemophilia, homozygous for FVLeiden and PAI – I with LMWH from the beginning of the pregnancy. The pregnancy has been properly monitored until the incident. A previous pregnancy was managed with LMWH and ended at term with spontaneous delivery. On ultrasound eutrophic fetus with positive cardiac activity, orderly fetal movements and orderly fetoplacental flow. Placenta anteriorly homogeneous, slightly thickened with subamniotic hematoma with d. 150x170 mm as well as coagulums of different dimensions that are not in communication with the bed. The Non-stress test record was silent. Vaginal findings showed PVU formed, OUE closed and no exuterine bleeding. Blood count showing anemia, with Hgb 84 g/l hemostasis findings, TT 28.5, aPTT 24, PT 10, d – dimeri 2840 was observed. The delivery was completed by emergency caesarean section, and intraoperatively a heavily bloody amniotic fluid approximately 1l and coagulum masses approximately 500g were found. Macroscopically, no signs of abruption or other visible suffering were found on the mat from the maternal side. Disruption of a small blood vessel near placental margine with active bleeding was found on the fetal side. Amniotic membranes bloody and cloudy. A live fetus was obtained with AS 6/7. Histopathological analyses showed of the placenta, amniotic sacs and umbilical cord with no specific abnormalities.
Ruptured placental vessel is a rare condition difficult to recognize. Nevertheless, in such critical cases most important is to act promptly in order to save both lives of the mother and the baby.

Cerebellar dysplasias

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A 34-year-old woman in her first pregnancy presented at 17 weeks gestation with a reassuring ultrasound showing positive fetal heart activity, normal estimated fetal weight for gestational age, and appropriate placental and amniotic fluid status. The cervix was of proper length and closed. Despite her first visit at 17 weeks, she had been monitoring her pregnancy regularly elsewhere and had undergone initial screening, which yielded normal results.

At her subsequent visit at 26 weeks, the patient reported no complaints, pain, or bleeding. She disclosed a history of well-controlled epilepsy for the past 7 years, with no seizures in the last three years. There were no significant familial medical issues, including genetic or malignant conditions. Her second-trimester screening, completed a month prior, had also been normal.

However, the ultrasound at 26 weeks revealed concerning findings. Severe ventriculomegaly and cerebellar hypoplasia were noted, prompting an immediate referral to a specialized center for additional investigations, notably fetal brain MRI. Given the severity of the diagnosis, termination of the pregnancy was discussed as an option, pending the couple's decision.

Cerebellar hypoplasia, a small cerebellum but normal in shape, can stem from various neurodevelopmental disorders. Investigations include detailed ultrasound, neurosonography, karyotyping, array, TORCH testing, and MRI after 32 weeks for migration anomalies. Follow-up entails ultrasound scans every four weeks, and delivery should be in a hospital with neonatal intensive care due to poor prognosis. Termination of pregnancy is recommended, with parental decision. Recurrence risk is 25% in Joubert syndrome but not increased in Rombencephalosynapsis.

Key words: Fetal neurosonography , Cerebellar dysplasias , Cerebellar hypoplasia ,Severe Ventriculomegaly .

Management of Wolf Parkinson White in a Pregnant Patient: A Case Report and Systematic Review of the Literature

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This research aims to describe the case of a pregnant patient with Wolf Parkinson White Syndrome and compare it with 15 other patients in the literature.
A 26-year-old patient presented at the Cardiology Clinic with palpitations. She declared a family history of cardiac diseases. On auscultation, her heartbeats were normal, rhythmic, and without pathologic tones. Main findings on ECG were sinus rhythm, normal QRS, short PQ interval, delta wave that was distinguishable, negative T wave that was persistent in V2-V5, and short P-R interval. The definitive diagnosis was made in the third trimester of pregnancy. We admitted her to the Gynecology and Obstetrics Clinic at 40+1 weeks of gestation. It was her first pregnancy.
Gynecology and Obstetrics Specialist and Cardiology Specialist decided on a C-Section.
The patient gave birth at 40+2 weeks of gestation after multidisciplinary consults. She was priorly informed about the procedure and gave consent to it.
After labor, we administered NaCl solutions, uterotonics, antibiotics, anticoagulants, analgesics, and vitamins, and the patient was discharged on the third day post-operatively, in an overall good condition. Later on, she made an appointment for electrophysiology testing and catheter ablation.
We also compared our case report with other cases found in databases as PubMed and Google Scholar.
Keywords: “Wolf Parkinson White”, “Arrhythmias”, “Pregnancy”, ”Multidisciplinar”.

The non-obstetric postnatal patient: A case report highlighting the differential diagnosis process

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Discussing the assessment, diagnosis and management of a postnatal female presenting to a busy district general hospital in London following a seizure.
A 37 year old multiparous woman presented following what was described as a general tonic clonic seizure 2 days following her second spontaneous vaginal delivery at 34 weeks gestation. Of note in her pregnancy she suffered from pre-eclampsia, gestational diabetes, hypothyroidism and insomnia managed with promethazine. She arrived via ambulance in a post-ictal state and was commenced on the PET protocol, however her blood pressure remained stable. On presentation, she was severely B12 deficient, and pancytopenic. Due to the development of concerning features, including paranoid thoughts and visual hallucinations, a MRI head and CT head were performed confirming the presence of a venous sinus
thrombosis. She was treated successfully with low molecular weight heparin and does not suffer from long term effects of the thrombosis.
The wide array of differential diagnosis considered in the case included eclampsia, infection, encephalitis including PRES and Wernickes, autoimmune conditions, metabolic conditions, pharmacological causes,
psychiatric conditions, acute stroke and venous sinus thrombosis.This highlights the importance of a lateral and holistic approach in the management of complex postnatal cases. Acute presentations postnatally are often emergencies and require urgent treatment whether they present to a small district general hospital or a tertiary centre. Quick diagnosis can prevent long term consequences and reduce related morbidity and mortality.
Patients often present to obstetricians with non-obstetric conditions due to the nature of the postnatal management pathway, and we must be prepared to safely investigate, manage, and escalate such cases with an multidisciplinary approach to ensure the involvement of various necessary teams, such as neurology, haematology and general medicine in this case.

Spontaneous resolution of pleural effusion after COVID in second trimester of pregnancy

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COVID-19 has become a worldwide pandemic. Under such circumstances pregnant women are also significantly affected. Pregnant women are at increased risk of severe illness with COVID-19. Pregnant women with COVID-19 are more likely to deliver preterm. They might also be at increased risk of problems such as stillbirth and miscarriage.

We report a case of COVID-19 infection in a pregnant 37 year old patient, gravida 2 presented in the 13th week of gestation. She reported receiving the second dose of an inactivated vaccine 18 months earlier. Our patient presented with complaints of fever, cough and dyspnea. Her PCR COVID test was positive. After 6 days she had severe pain in the left hemithorax. The patient had high laboratory inflammatory parameters. The fever and cough subsided a few days later but the pain remained for the next period. Lung ultrasound showed left pleural effusion with mild right pleural effusion. Fetal ultrasound was normal for the gestational week. The patient was treated with antibiotics and low molecular heparin. The pleural effusion was closely followed up with pulmonary ultrasound by pulmonologist for the following two months until its' complete reabsorption. The patient delivered a healthy baby at term. The delivery and postpartum period were uneventful.

Immediate diagnosis of Covid-19 during pregnancy is essential to prevent major risks to the maternal health and adverse complications to the fetus such as miscarriage, preterm birth and PPROM. Lung ultrasound (LUS) offers a convenient, inexpensive and radiation-free monitoring tool at the bedside. Lung ultrasound examination has been demonstrated to be an accurate imaging method to detect pulmonary and pleural conditions in pregnancy.

The prognosis for pregnant women with SARS-CoV-2 is good, even in the absence of specific antiviral treatment. Pleural effusion is a rare complication of COVID-19 infection, however its presence should be suspected and treated carefully.

Acute appendicitis in third trimester of pregnancy

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Acute appendicitis during pregnancy is one of the most frequent non-obstetric pathology requiring emergent surgery. The anatomic and physiologic changes of pregnancy can make the diagnosis challenging and delayed with possible risk of sepsis, preterm labor and fetal loss.
We report the case of a 31 year old woman (G1, para 0) that presented symptoms of acute abdomen in eighth month of pregnancy. Given the suspicion of acute appendicitis, the patient underwent an open surgery with transrectal explorative Lenander laparotomy which demonstrated operative finding of retrocolic abscess from empyematous appendix with perforation in Douglass pouch. Typical appendectomy, lavage and drainage was performed. Postoperatively, the patient received broad spectrum antibiotics, iv fluids, tromboprophylaxis and was released on 4th postoperative day, from the surgical department, then hospitalized in the peripartum intensive care unit, for fetal and maternal monitoring. Corticosteroid therapy for fetal lung maturation and tocolytic therapy was administered. Disruption of the wound on the anterior abdominal wall on the 10th postoperative day occurred with separation of the subcutaneous tissue that reached to the level of the fascia. Microbiological swab was positive for E.coli. Local treatment with aquacell packings was administered and gradually granulations appeared. Obstetric ultrasound, biometry, echogenicity of the placenta and amniotic fluid and Doppler of the fetoplacental unit were all adequate for gestational age. She was discharged in 34.2 gestational week and readmitted at 38 gw for delivery by caesarean section as recommended by the digestive surgeon. The caesarean section was achieved by an extraperitoneal technique. Operative and postoperative period were non remarkable, mother and newborn were discharged in a good condition.
Acute appendicitis in pregnancy demands special considerations since this is one of the most difficult conditions for both obstetricians and digestive surgeons. Therefore, multidisciplinary approach is mandatory.
Keywords: acute appendicitis, pregnancy

Subamniotic bleeding and hematoma

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A 25-year-old pregnant woman, G2, P1, was referred to the hospital because of a bloody vaginal discharge at 22 weeks of gestation by primary care Ob & Gyn.
The ultrasound examination at 22 weeks showed eutrophic fetus with normal blood flow though the umbilical cord. The fetus was doing fine and the ultrasound exam did not show any abnormalities. The placenta was located on the anterior side of the uterus with a thickening related with placental hematoma, the amniotic fluid volume was normal. The length of the cervix was 35 mm with present sludge. The blood count showed that she was severely anemic Hgb – 68, Le – 28. Smears that were taken, showed MRSA and Ureoplasma urealiticum present in vagina, cervix and urine sample. The hemostasis was irregular, PT – 17, AP – 36, TT – 39, D-dimer > 35.000. The tocography showed regular uterine activity. The patient was referred to the tertiary clinic for further evaluation and treatment. Between the two hospital admissions the patient was treated with dual antibiotic course and low molecular weight heparin.
At 24 weeks of gestation, the ultrasound showed enlargement of the subamnial hematomas, the first one was 81mm x 72mm, and the second one was 73 mm x 41mm. During a vaginal examination it was noticed that the cervix was dilated 4 cm. The patient was referred to a tertiary clinic upon the gestational age. The same day the baby has been delivered preterm and has lived for around 48 hours.
The patient herself had never performed vaginal smears for microbiology before the pregnancy, which led her to preterm delivery and neonatal death.
Key word : subamnial hematoma, risk pregnancy, MRSA, sludge.

Successful Management of Thrombocytosis in Pregnancy Following Splenectomy

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A 27-year-old woman, primagravida X, who experienced thrombocytosis which complicated her pregnancy. With a history of splenectomy due to immune thrombocytopenia, she faced unique challenges requiring multidisciplinary management. Throughout her pregnancy, she exhibited persistent thrombocytosis, necessitating close monitoring and interventions.

Initially managed with aspirin therapy, her condition evolved, and she transitioned to subcutaneous low molecular weight heparin (LMWH) due to escalating thrombotic risks. Despite challenges, including fluctuating platelet counts and elevated inflammatory markers, she successfully carried her pregnancy to term. She underwent a spontaneous vaginal delivery with an episiotomy and suturing, delivering a healthy male neonate with satisfactory Apgar scores and normal weight/length parameters.

Postpartum, the patient received appropriate therapy including antibiotics, uterotonic agents, thromboprophylaxis, and symptomatic and rehydration. A multidisciplinary consultation involving hematologists and dermatologists was conducted postpartum, resulting in tailored therapy and recommendations.

The patient had a stable early postpartum period and was discharged in good condition with home care instructions. This case highlights the importance of multidisciplinary collaboration and close monitoring in managing thrombocytosis during pregnancy and postpartum, particularly in patients with a history of splenectomy. Further research is needed to optimize management strategies and improve outcomes in similar clinical scenarios.

Fast recurrence of CIN after postoperative treatment

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Carcinoma in situ, characterized by the presence of abnormal cells confined to the site of origin, poses a unique challenge in oncological management due to its propensity for swift recurrence following operative interventions. Despite advances in surgical techniques and therapeutic modalities, the phenomenon of accelerated relapse in carcinoma in situ remains a perplexing and clinically significant concern. This abstract delves into the factors contributing to the rapid recurrence of carcinoma in situ after operative treatment, exploring the underlying molecular, cellular, and microenvironmental dynamics that foster this enigmatic phenomenon.
A 63-year-old patient was admitted to the UCG(UGAK) due to gynecological concerns, prompting an extensive evaluation and subsequent surgical intervention. Following imaging assessments (CT/MRI) and pathohistological analysis of biopsy and explorative curettage, a diagnosis of high-grade squamous intraepithelial lesion of the uterine cervix (carcinoma in situ) was established. The medical team opted for a large loop excision of the transformation zone (LLETZ). Prior to the procedure, a human papillomavirus (HPV) test revealed positivity for HPV type 56, a high-risk variant associated with a significant incidence of invasive cervical cancers.The patient responded well to the treatment; however, during regular follow-up examinations, a recurrence was detected. Subsequently, the patient is being retained for further implementation of additional therapeutic interventions.
The intricate interplay between signaling cascades and the tumor microenvironment plays a crucial role in fostering a conducive milieu for the swift reappearance of carcinoma in situ. Moreover, the impact of immune surveillance and treatment-induced alterations underscores the need for comprehensive therapeutic strategies to prevent rapid relapse.
Key words: Carcinoma in situ, operative treatment, HPV, rapid relapse, patient outcomes.

Acute Accidental Carbon Monoxide Intoxication During Late Pregnancy

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Poisonings during pregnancy can be seen in every-day obstetrics practice and according to literature most common are carbon monoxide intoxications. Although it is an uncommon event in third trimester, failing to recognize maternal carbon monoxide intoxication can have a dramatic effect on the fetus. Carbon monoxide has a unique toxicity mechanism and it causes tissue hypoxia, obstructing transport, delivery and proper utilization of oxygen. Placental carbon monoxide diffusion capacity increases with gestational age, making these kind of poisonings especially harmful in late pregnancy. This decrease in oxygen utilization cannot be compensated by the fetal cardiac output and fetal carboxyhemoglobin levels are 10-15% higher than maternal levels. All changes in the fetal metabolism can result in fetal functional changes and intrauterine fetal death. Despite maternal wellbeing, fetal morbidity and mortality rates can still be high, even more than 48 hours after the initial time of intoxication.
We present clinical case of a 40-year old primigravida, who suffered in a fire which started during the night in her building. She presented at our institution with tachycardia and tachypnea, but she was completely conscious with no additional injuries or burns. Fetal monitoring showed a non-reassuring trace, with no accelerations and multiple variable decelerations. Blood gas analyses showed carboxyhemoglobin level in a concentration of 4.1%. She was immediately admitted, treated with oxygen high flow therapy and transferred to the operative room for an emergency cesarean section. Mildly depressed and hypotonic baby girl was delivered, with an APGAR score of 6/7 and arterial umbilical pH value of 7,207.
Carbon monoxide poisonings are a serious threat for mother and fetuses during the pregnancy, leading to multiple and serious complications. All published recommendations for treating carbon monoxide poisonings during pregnancy suggest the use of hyperbaric oxygen, regardless the gestational age, but during the third trimester prompt delivery remains the gold standard for a favorable outcome.
Keywords: Carbon monoxide, intoxication, pregnancy

A case of mitotically active cellular fibroma of the ovary preoperatively misdiagnosed as uterine leimyoma

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Mitotically-active cellular fibroma (MACF) is a rare form of ovarian fibromatous tumor who show mild nuclear atypia but ≥4 mitoses/10 high-power fields. MACF represent about 10% of ovarian fibromas. These tumors are often misdiagnosed preoperatively as uterine myomas.
23 year patient admitted with low abdominal pain, discomfort and flanc pain. Due physical examination was palpated solid tumor about 9cm. Ultrasound examionation show solid tumorous mass with dimension 76x58mm with unclear distinction from uterus. CT show heterodense, mostly solid tumor formation with dimensions of 84x54x76 mm which is in direct contact with the posterior wall of the uterus. Tumor markers was in referent range. Intraoperative finding was solid adnexal mass about 8 cm, we perform right side adnexectomy. Hystopatologic findings confirmed mitotically active cellular fibromas with ≥4 mitoses/10 high-power fields. The patient was informed about the local recurrence potential of cellular fibromas and was scheduled frequent control visits after discharged from hospital.
MACF of the ovary are diagnostic challange because frequently are misdiagnosed preoperatively as uterine leiomyomas. With very low but possible potential for recurrence and malignant transformation they indicated long-term clinical follow-up for patient including image processing (echography, CT, MRI etc).
Mitotically-active cellular fibroma, uterine leiomyoma, atypia, adnexal mass.

Surgery

Bilateral near-total calcification of vas deferens in young male

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Bilateral calcification of vas deferens is an uncommon condition, particularly in young males. Only a few case reports are published for this condition in young males, and what they have in common is diabetes mellitus.
A 33-year old man presented with dull pain in the right inguinal region. The patient has had history of insulin dependent diabetes mellitus type I for thirty years. He complained of dull pain in the right inguinal region. The pain started about ten years ago, but it has grown stronger and more frequent in the last two months. CT scan was performed which confirmed the presence of calcification along almost the entire length of the vas deferens, starting from testes to the prostate with prostatic calcification. *Androflor* Screen test was made to detect the total bacterial DNA, and pathological levels of Bacteroides spp./Porphyromaonas spp./Prevotella spp. were detected and antibiotic treatment was prescribed.
Calcification of the vas deferens is relatively specific to DM and 70% of males who had vas calcification also had diabetes. There are other etiologies associated with the calcification of vas deferens such as chronic infections and inflammations, but it can also be seen as a manifestation of aging. The calcification may also be associated with infertility. Pathologically, diabetic vas deferens calcification can be differentiated from the chronic inflammatory type. Chronic inflammatory calcification is usually intraluminal which may be unilateral and segmental, while the calcification seen in diabetes is usually mural and symmetrical. Unfortunately, currently there are no available curative treatment option for this condition.
Diabetes is the primary cause of bilateral calcification of the vas deferens in young males, which can lead to infertility. Bearing this in mind, it's important to inform patients about the associated risks and advise them to take necessary precautions.
Keywords: Vas deferens, calcification, diabetes

Optimizing Nephrectomy Outcomes through 3D-Printed Anatomical Replicas

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The utilization of 3D-printed replicas of patient-specific anatomy represents a significant advancement in the field of surgical planning. This abstract discusses the methodology, benefits, and implications of employing 3D-printed models in the preoperative planning and intraoperative phases of complex surgeries.

The process begins with acquiring high-resolution images using CT or MRI. These images are then converted into a digital 3D model, which is used to produce a detailed physical replica of the patient's anatomy using 3D printing. The primary advantage of this approach is the ability to enhance the surgeon's understanding of the tumor's size, location, and relationship with adjacent structures. By physically manipulating the 3D model, surgeons can strategize the most effective surgical approaches, anticipate challenges, and avoid complications. Furthermore, these replicas can be used for patient education, improving their understanding of the procedure and setting realistic expectations.

Clinical outcomes have shown the use of 3D-printed models for surgery planning can lead to shorter operation times and reduced intraoperative blood loss. We present the case of a 58-year-old female patient requiring a nephrectomy due to a large tumor of the left kidney. A 3D-printed anatomical replica was used for preoperative planning with promising results. The postoperative histological examination revealed the renal mass was a clear cell carcinoma of the kidney. Additionally, 13 lymph nodes were extracted, none showing signs of metastatic alteration. This not only demonstrates the surgical team's thoroughness but also highlights the added value of the 3D model in enabling meticulous dissection and evaluation of surrounding lymphatic tissue.

In conclusion, the integration of 3D-printed anatomical replicas into the surgical workflow for large kidney tumors offers a tangible improvement in preoperative planning, surgical precision, and patient outcomes. As this technology becomes more accessible, it is poised to become a standard tool in the surgical treatment of renal pathologies.

Stage IV Rare Decubitus Ulcer/Wound Care Treatment

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Family physicians often care for patients with chronic wounds, and they can best serve patients if they have knowledge and proficient skills in decubitus ulcer/chronic wound care.
In the presentation plan; up-to-date information will be given on chronic wound staging of the case as the TIME principles (T: Tissue management, I: Inflammation & Infection control, M: Moisture balance, E: Epithelial/Edge advancement), The Triangle of Wound Assessment (the wound bed, the wound edge, the periwound skin), holistic approach to the wound patient. Along with sample wound photographs, practice will be made on chronic wound management.
The triangle of wound assessment was developed with wound care experts from around the world to bring a more simple and structured approach to wound management. It provides a holistic framework that guides the user systematically through each areas of the wound, to carefully assess the entire wound, while also considering the person behind the wound and the social context of that person. After assessment, it then provides a systematic approach, to go from assessment to setting management goals, to guide in optimal treatment choice.
Clinical Findings of the Patient:
Age: 76
Diabetes Mellitus +
Persistant Hypertension +
Chronic Venous Stasis
Treatment and Clinical Result:
Full-thickness tissue loss reaching subcutaneous tissues
Purulent discharge, abscess
Use of Wagner classification,
Debridement over the wound,
Eliminate the nectaric structure,
Conducting studies to prevent deep tissue damage,
Infection assessment,
Use of products containing hydrofiber, alginate, collagen, short recovery time, tissue healing, necrosis structure disappeared, healthy skin.
Keywords: decubitus ulcer, intensive wound care, chronic wounds, wound assessment

Can the combination of avascular fibula with spongious bone be a possible and proper surgical solution to fix a femoral shaft complication?

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A higher incidence of femoral pseudoarthrosis has been observed in femoral shaft fractures in recent years. We present a 51-year-old-male, that has suffered from several injuries, after falling from 10 m height. He had a fracture of the distal radius, bifocal femoral shaft fracture and a fracture of ipsilateral patella. All of them were treated surgically. First, an intramedullary nailing was put on the femoral shaft, and osteosynthetic matherial was placed on the patella (Zuggurtung). ORIF of the distal radius was performed. Almost 6 months passed, the distal femoral screws were extracted, dynamization was made, because no callus formation at the femoral shaft was present. After 8 months of several operations, non-union on the fracture site was still present. Because of the non-union, we performed revision surgery. The IM nail was extracted, proximal femur was fixed with total hip prothesis, and the femoral shaft site, LCP plate with 10 screws was placed. At the site of non-union, the bony fragments were refreshed, and we filled the bony gap with bone substitute, for better incorporation. After several months of post-op care and clinical and radiological follow up, new callus formation was present. The patient then fell again, from his own height, and he had a fracture at the level of pseudoarthrosis, also, the plate was broken. We admitted him again to the hospital. We performed another surgery, extracting the LCP plate, and then implanting a Non-Binding Bridging Periprosthetic Plate with 10 screws. With the previous consent of the patient, we took avascular fibula from a cadaver, we then used spongiosis bone, to fill the site of the bony gap.
1-year post-operative follow up was then performed. The patient now is walking without crutches, without pain.
Keywords: pseudoarthrosis, avascular fibula, femoral shaft, bifocal fracture.

Upper Renal Calyces Urothelial Carcinoma Following Pyelolithiasis

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Urothelial carcinomas (UCs) are the fourth most common tumors, but upper urinary tract tumors (UTUCs) are uncommon and account for only 5–10%. Renal stones, which are a cause of stasis-induced urothelium exposure to carcinogens in urine, further increase the risk of this carcinoma. The most common symptom of UTUCs is micro- or macroscopic haematuria (70-80%). This could be misinterpreted due to kidney stones as in the case presented. We report a 52-year-old female patient, a kindergarten teacher who has been abusing tobacco for more than 30 years and has experienced flank pain for several years diagnosed with a pyelocaliceal kidney stone with left-sided upper pole calyceal dilatation. Since the patient has an allergy to iodinated contrast, a non-contrast computed tomography (CT) scan was performed showing a renal stone along with left-sided upper calyxes' dilation with irregular inner mass. Magnetic resonance imaging (MRI) was performed to evaluate the suspicious finding showing the low signal intensity of lobulated mass with characteristics of urothelial carcinoma. Urine cytology was negative and cystoscopy was carried out to rule out a bladder urothelial carcinoma. The patient underwent a laparoscopic left radical nephroureterectomy and a histopathological assessment revealed a high-grade urothelial carcinoma in the upper renal calyces (pTa). No signs of a disease recurrence have been found during the patient's yearly CT urography and twice-yearly cystoscopies in five years follow up. With this case, we stress the importance of gaining insight into the preoperative assessment for timely diagnosing and treatment of upper urothelial carcinomas, potentially improving outcomes. When contrast injection is contraindicated in suspicious cases, magnetic resonance imaging is a reliable diagnostic method.

Keywords: pyelolithiasis, upper urothelial carcinoma, renal calyces, diagnosis, CT, MRI

Atypical Management of Ureteral Injury Following Colorectal Surgery

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Abstract
The most common injuries to the ureters occur during gynecologic, colorectal, and vascular pelvic surgeries. Nine percent of ureteral injuries result from procedures related to the colon and rectal area, such as low anterior resection (LAR) and abdominal perineal resection (APR). The most effective treatment for distal ureteral injuries is ureteroneocystostomy, either with or without a vesico-psoas hitch
We present a case of a 65-year-old female patient who was operated on for an advanced-stage colorectal tumor. In the postoperative course of the intra-abdominal drain, abundant content was obtained, which after the biochemical analysis showed that it was urine. CT urography showed leakage of contrast from the distal ureter. A second laparotomy was performed, and the left ureter was identified, which was completely transected. Still, resistance was encountered during the attempt to mobilize the bladder due to its adherence to the surrounding tissue. For this reason, we decided to create an end-to-end anastomosis by inserting a ureteral stent into the ureter. Urine leakage did not occur in the patient after surgery until the seventh day when the stent came loose and fell through the urethra. To minimize the patient's trauma, a ureterorenoscopy was performed and a ureteral stent was placed retrogradely. After this intervention, urine leakage gradually decreased until there was none at all after ten days.
In conclusion, when the recommended surgical procedure cannot be carried out due to the peritumoral inflammation damaging the bladder wall, the closest minimally invasive method should be used to restore the injured ureter's continuity.
Keywords: ureter, injury, colorectal cancer, surgery, management

Wilms tumor in 4-year-old child with consecutive thrombosis of the right renal vein

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Wilms Tumor or Nephroblastoma, named after his first describer Dr. Max Wilms, still remains one of the most ordinary renal cancers, and in fact, it represents, forth of the most diagnosed pediatric cancers worldwide. We are presenting a case report of a Wilms tumor in 4-year-old female patient. At our department, a 4-year-old female child was admitted via pediatrician, with chief medical concerns of abdominal swelling and discomfort, general weakness and urine changing. After the initial clinical exam, due to anamnesis and symptoms, computer tomography (CT) scan and laboratory investigations were obtained. CT scan revealed mass in her right kidney with dimensions 200mm x 139mm altogether with consecutive right vein's thrombosis following infiltrates and edema, in small pelvis, probably of the compression or ruptured capsule. Left kidney, ureter and bladder were normal. Because of the enlargement of the renal mass, head and body of the pancreas were compressed medially, while liver proximally. Rests of the intraabdominal organs were intact. Laboratory investigations were in referent range. An urgent indication for operative treatment was decided and a plan for total right nephrectomy was obtained. After adequate preoperative prepare, the patient was operated in GETA-general endotracheal anesthesia. Total tumornephrectomy with thrombus removal followed by lymphadenectomy was made and then the operative material was sent for histopathological verification (HP). HP investigation verified Wilms tumor followed by imunohistochemically analyzes. Throughout the development of multidisciplinary and cooperative interdisciplinary approach, survival rate has improved dramatically over the past decade. Following the next century, it is estimated that 80% of the affected children will be long-term survivors. Nowadays, target therapy is progressing towards a risk-based management based on, not only pTNM staging immunohistochemistry and histology, but also the next sequences testing for genetic markers in affected children worldwide.
Keywords: Wilms tumor, child, thrombosis, pediatric surgery, management

A case report of Ewing sarcoma (EwS) diagnosed in a 7 year-old girl

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Ewing sarcoma (EwS) represents a rare, highly malignant cancer, with most patients harboring a priori micrometastases, since, without systemic therapy, over 90% of patients die from disseminated disease. It is most commonly diagnosed in the second decade of life, however, patients have presented as early as newborn and as late as into the eighth decade, with tumors in almost every bodily location.

The incidence of Ewing sarcoma is low, accounting for approximately 1-2% of all childhood cancers, with a peak occurrence in adolescence. While the exact cause remains unknown, genetic predisposition and environmental factors may contribute to its development.

Here, we report a case of a 7 year-old girl with Ewing sarcoma on right femur . This young girl was often sick with sore throat. When she came to the hospital, the patient had pain and swelling in her rightleg .She took 3 months antibiotics without having any antibiogram. After all the tests that were made , laboratory and biochemical test, she had high results in SR,ASO, D-Dimers and Platelet count.

Then, the patient took X-ray on her upper leg, and the classic radiographic features were destructive and lucent lesions on her right femur.

Further, a two-phase skeletal scintigraphy was performed. The scintographic finding is highly likely in addition to a primary bone neoplasm of the right femur with malignant characteristics.

Imaging studies, including X-rays and MRI scans, confirmed the presence of a large, destructive lesion involving the midshaft of the right femur, suggestive of a malignant bone tumor.

Appropriate chemotherapy was prescribed and the patient tolerated the treatment well.

Differential diagnosis is haemathogenic osteomyelitis.

Keywords: Ewing sarcoma, neoplasm, chemotherapy.

Pathological femoral fracture in patient with Gaucher disease (Sphingolipidosis): a case study and review of the literature

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Gaucher disease (ICD 10: E75.2) is a rare hereditary disorder caused by lack of a lysosomal enzyme. It is a lysosomal storage disorder with defects in glucosylceramides (glucocerebrosidase). This results in glucocerebroside accumulating in the cells of the reticuloendothelial system, including the bone.
Gaucher described a form of splenic anemia in 1882 known as "primary idiopathic hypertrophy of the spleen." . Gaucher disease is caused by mutations in the GBA gene on chromosome (autosomal recessive) and affects both sexes. Incidence of disease is estimated to be 1:40000 in Europe. Generally, disease is differentiated into non-neuronopathic and neuronopathic forms.5
The 38-year-old female patient K.S. was referred to our clinic in January 2021 due to pain in the left hip for 7 months and limping with no prior injury or other traumatic event. Her left hip had limited range of motion and pain during internal and external rotation of the hip. A RTG of the pelvis and hips was ordered, and the patient was diagnosed with a pathological fracture of the left hip and secondary coxarthrosis. An MRI of the pelvis and both hips was then ordered. A subtotal hip arthroplasty was decided upon. The patient was operated under spinal anesthesia due to the possibility of anesthesiologic complications from the primary condition. A subtotal bipolar hip endoprosthesis was implanted using an anterolateral approach.
Support therapy can be used in Gaucher's disease, as well as enzyme replacement therapy. Improvements in extra skeletal findings and hematological parameters have been reported with enzyme replacement therapy.11
Even though Gaucher disease is rare, early and adequate treatment of the pathological fracture in patients can be extremely beneficial to their quality of life.
Key words: Gaucher disease, femoral fracture, subtotal hip arthroplasty

An Aggressive Neoplastic Entity: A Multidiscpilinary Aprroach for an Optimal Outcome in a Patient Diagnosed with Giant Cell Tumor (GCT) of Bone with Distal Femoral Localization

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According to the 2020 WHO classification of bone tumors, giant cell tumor of bone (GCT) is classified in the group of osteoclastic giant cell-rich tumors as either intermediate or malignant neoplasm. Based on radiographic appearance, GCTs were classified by Enneking and Campanacci in three stages - latent, active and aggressive.
A 47-year old female patient presents at the outpatient department of traumatology and orthopaedics with a chief complaint of pain in the right knee which has lasted for 6 months. On examination, she has an antalgic gait, pain on palpation, local oedema and limited range of motion in the right knee. A tumorous lesion with local infiltration of bone and soft tissue is seen at the metadyaphisis of the right femur on a previous MRI. CT-guided core biopsy was performed and histopathology results were in favour of GCT. A pre-operative transarterial embolisation (TAE) was done 5 days prior to surgical treatment. Following TAE, trepanation, curretage, biopsy, debridement, bone cement ossicular recunstruction and locking plate osteosynthesis were performed. Histopathology analysis of the operative material confirmed the pre-operative diagnosis. A therapeutic protocol with antibiotic, analgetic and thromboprophylactic drugs was prescribed. She was advised to wear a knee ankle foot orthosis (KAFO) and walk with two axillary crutches. On 2 weeks follow-up examination, the patient was pain-free, walking with cruthes, and had 90 degrees of flexion and full extension in the right knee. The patient continued her rexibilation process with further physical therapy.
GCTs most frequently occur among the ages of 20 and 40 in the distal femur (30%), proximal tibia (28%), distal radius (9%), and distal tibia (6%) with an overall good prognosis. Treatment modalities include curettage and bone grafting, extended curettage and cement filling, segmental resection and artificial prosthesis reconstruction with/without adjuvant therapy.
Key words: bone, tumor, multidisciplinary, biopsy, GCT, femur, TAE, curretage, osteosynthesis, reconstruction

Advanced Surgical Planning Utilizing 3D Printed Models for Complex Left-Sided Scimitar Vein in Total Anomalous Pulmonary Venous Return

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Scimitar syndrome,a rare congenital condition, primarily entails anomalous right pulmonary venous drainage into the inferior vena cava,often accompanied by pulmonary anomalies, abnormal systemic arterial supply to the affected lung, vascular ring formation, or complex congenital heart disease.Radiographically,the anomalous pulmonary vein manifests as a tubular structure resembling a Turkish scimitar, typically parallel to the heart border.Onset of symptoms may occur in infancy, childhood, or adulthood. Here,we present a highly uncommon case of total anomalous pulmonary venous return (TAPVR) in a two-month-old newborn, successfully treated surgically for an isolated left-sided Scimitar vein, wherein all left pulmonary veins connected to the vena porta, with the right pulmonary vein draining into a single collector leading to the dilated sinus coronarius,alongside coexisting atrial septal defect (ASD), persistent left superior vena cava, and arteria lusoria.
Diagnosis involved transthoracic echocardiography,computed tomography (CT) angiography,and selective pulmonary angiography. However,due to limitations inherent in 2D interpretation on screens, additional methods were necessary for comprehensive understanding of outer anatomical spatial relationships and intra-cardiac structures. To address this, personalized 3D heart models were generated through 3D printing techniques utilizing patient CT imaging data, with manual segmentation performed using the open-source software tool,3D Slicer.
This case represents,to our knowledge, the first documented occurrence of such a unique constellation as TAPVR.Surgical intervention included correction of the left Scimitar vein through side-to-side anastomosis to the left atrium, ligation and division of the distal portion, and closure of the ASD using an autologous pericardial patch. The patient experienced an uneventful recovery.The use of the 3D-printed model facilitated diagnosis, spatial visualization, aided in preoperative planning, and reduced operative duration.
Management of patients with this disorder is highly intricate,necessitating the involvement of a specialized team for successful treatment.The integration of 3D printing technology holds promise to revolutionize current educational and clinical practices in diagnosing and managing such patients.

Pericranial-Onlay cranioplasty technique following a decompressive hemicraniectomy

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Cranioplasty is a neuroplastic surgical technique used to repair cranial defects in order to restore functional anatomy, preventing any neurological drawbacks and taking into account the cosmetic issues. This procedure is required for patients undergoing decompressive hemicraniectomy for life-threatening conditions such as diffuse traumatic brain injury, acute subdural hematoma, intracerebral hemorrhage, and severe ischemic stroke. It involves utilizing autologous or non-autologous bone flaps, with various preservation methods such as subcutaneous abdominal tissue or cryopreservation. Decompressive craniectomy, a procedure used to alleviate intracranial pressure, involves the excision of skull segments to accommodate cerebral edema. Cranioplasty is associated with high complication rates. The timing of the cranioplasty procedure, its potential benefits and risks, should be calculated in each individual case.
A 59-year-old patient who underwent a decompressive hemicraniectomy because of diffuse traumatic brain injury and acute subdural hematoma, presents with mild right sided hemiparesis, speech disorder, episodes of neck dystonia, psycho-organic syndrome and sinking skin flap syndrome. Pericranial-onlay cranioplasty was preformed using autologous bone flap previously implanted in his abdominal pouch. The surgical procedure was uneventful with satisfactory cosmetic results and improved neurological function.
Cranioplasty after decompressive hemicraniectomy is necessary for improving neurological function of the brain and improving the aesthetic appearance of the patient. Personalized approach is used for the skull reconstruction depending on the resources of the institution and the surgical technique used by the staff.
Keywords: cranioplasty, decompressive hemicraniectomy, autologous bone graft, abdominal pouch.

Traumatic bladder injury with multifragmentary pelvic fracture- Radiological findings and Surgical treatment

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Bladder rupture often accompanies traumatic pelvic fractures. The mortality rate is very high in patients with severe multiple traumas with abdominal blunt injuries. Multiple treatment modalities are needed for treatment and recovery to save the patients live.

We present a case with traumatic bladder rupture injury with multifragmentary pelvic bone fracture and describe the radiological methods observations and the clinical results of surgical intervention for such injuries.

68-year-old man fell down approximately 2 and a half meters height and was trapped under the vehicle. Right upon admission he was hemodynamically stabilized and had undergone CT whole body scan. Two CT were made, one before and one after the operation. The CT scans showed unstable pelvic fracture with contrast which flow out of the bladder, occupying the preperitoneal cavum- Retzii and surrounds the bladder in the shape of a molar tooth. Helpful and second diagnosis method, fluoroscopy Cystography was performed and confirmed the diagnosis. After worsening the Patient condition due to increased Temperature and left inguinal pain-controlled CT was made where was seen an inguinal abscess left, complication from the ruptured urine bladder. As a consequence, antibiotic treatment was required.

After detailed diagnostic, preoperative assessment, confirmed extraperitoneal bladder rupture and multifragmentary pubic bone fracture open approach surgery was performed on the bladder rupture.

Postoperative CT scan has shown successful surgical treatment after precise and reliably diagnosis confirmed in the Imaging Procedures, and it showed that the bladder and the pubic bone fracture were healed. The patient came for a check-up one month later – urinalysis and blood analysis within normal limits.

Open surgical repair of bladder injuries should be the approach of choice in an appropriate setting on a hemodinamically stable patient.

Extraperitoneal bladder rupture, open surgical repair, polytrauma, pubic bone fracture, molar tooth sign.

Thyroid Collision Tumors: A Case Report of Coexisting Papillary and Follicular Carcinoma

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Collision tumor is a neoplastic lesion comprised of two or more distinct cell populations maintiaing distinct borders. Thyroid gland collision tumors account for less than 1% of all thyroid tumors, with most literature describing a coexistence of medullary and papillary thyroid carcinoma or metastatic tumor.
A 49-year old woman with history of nontoxic goiter controlled with levothyroxine was admitted for routine examination. On ultrasound, a 20 mm nodule suspected for malignancy was found in the left lobe of the thyroid gland, later confirmed with 99m Tc scan. FNAB was performed. Cytopathology results came back positive for follicular neoplasm (Bethesda category IV). Decision was made to treat the patient surgically. Pre-operative CT scan with contrast was performed. The nodule appeared hypo-dense with central calcification in the lower pole of the left lobe measuring 14 mm in coronary plane. The CT also revealed lymph node changes in the supraclavicular (4b) and paratracheal levels (6b). Elective total thyroidectomy was performed and the specimen was sent for histopathological evaluation. Results showed a diffuse goiter with Hashimoto thyroiditis, a 15 mm nodule of follicular carcinoma in the left lobe, and surprisingly two more foci of cancer cells were found, measuring 5 mm each, confirmed for papillary carcinoma. Post-operative diagnosis of collision tumor with follicular carcinoma (pT1b) in the left thyroid lobe and papillary microcarcinoma (pT1a) in both thyroid lobes was made. According to TNM classification, the tumor was staged as stage I (T1b, Nx, Mx). The patient was then admitted to the oncology department for radiation therapy and further evaluation.
Collision tumors of coexisting papillary and follicular thyroid carcinoma are extremely rare entity and can be easily overlooked on imaging or cytology diagnostic procedures. Therefore, comes the importance of radical surgical approach when treating patients with thyroid cancer.
Key-words: collision tumor, papillary carcinoma, follicular carcinoma, thyroid gland malignancy

Osgood - Schlatter disease in 13 y male pacient

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Osgood - Schlatter disease or osteochondrosis of the tibial tuberositas is a common cause of knee pain that predominantly targets adolescents and young athlets. It is an overused condition known as traction apophysitis of the tibial tuberosity characterised with inflammation and irritation of the growth plate after repetitive stress and strain mostly occurs at males aged between 10 and 15. First described in 1903 by American Orthopedic surgeon Robert Bayley Osgood (1873 - 1956) and Swiss surgeon Carl Bernhard Schlatter (1864 - 1934). The exact etiology is unknown, although in pathophysiology the most accepted theory is repetitive knee extensor mechanism contraction.
We present a case report of 13 years male pacient, basketball player with right knee pain exacerbated by jumping and stair climbing without any notion of specific trauma. On examination he had pain > 100 ° flexion in the anterior medial part of right knee, swelling and tenderness over the tibial tuberosity. An X ray was ordered and the radiograph showed skeleton in growth, sclerosis and fragmentation of the tibial tuberosity. MRI shows inflammatory changes near the anterior tibial tuberosity with bony fragmentation, compatible with OSD in this young patient. The differential diagnosis of OSD includes osteochondritis dissecans, Sinding - Larsen - Johansson syndrome, patella-femoral syndrome, chondromalacia patellae, avulsion fracture of the tibial tuberosity, pes anserinus bursitis, tumor and infection. Treatment is usually symptomatic designed to reduce pain and can be achieved with: Rest,Ice,Compression,Elevation; anti - inflammatory drugs; supplements: turmeric, bromelain, collagen, glucosamine, chondoitin, vit.D, vit.C, calcium, magnesium etc.; stretching, flexibility and physical therapy exercises for the thigh and leg muscles. Prognosis is good because this is a self limiting condition and in most cases resolving spontaneously with skeletal maturity.
Key words: Osgood-Schlatter disease, osteochondrosis, tibial tuberosity.

Complications of supracondylar fracture in children

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Most frequent cause of pediatric elbow injuries are represented by supracondylar fractures which usually occurs when falling with extended elbow. If not treated properly these fractures can present with many complications such as vascular, neurological, limited range of motion (ROM), bone deformity.
The patient, 7 years old, had sustained a supracondylar fracture of the left elbow after falling on the left hand with extended elbow. She was treated with closed reduction and cast immobilization. After 3 days the plaster was remodeled due to swelling. The plaster was removed after 18 days. With poor to no function of the left hand she was send to physical therapy for duration of 10 days, but she did not gain any improvement. Performed EMG testing showed acute lesion of the left forearm nerves and muscle inactivity. Extensor muscles of the left forearm were active only with electrical stimulation. In that condition, she was submitted in our Clinic were we performed surgery on the left elbow, with removing the callus formation in which we found entrapped median and ulnar nerves. We also did osteotomy of the humerus for correction of the angular deformity and fixation with K wire. The patient was put in cast immobilisation for three weeks. After the removal of the cast and K wire she was sent to intensive rehabilitation. One year after surgery she regains almost all of hand and elbow functions with satisfying range of motion. She is now able to fulfil every day activities without any help or support.
Supracondylar fractures should be treated with high vigilance according to a recommended protocol to reduce the incidence of serious complications.
Supracondylar fractures should be treated with high vigilance according to a recommended protocol to reduce the incidence of serious complications.
Key words: supracondylar fracture, ROM, contracture

Tissue plasminogen activator as an alternative to surgery in patients with pleural empyema

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Empyema is defined as a collection of pus in the pleural cavity. Throughout the years in clinical practice, empyema has been associated with elevated morbidity and mortality. Around 20% to 30% of patients affected will have complications or require further surgery in the first year after developing empyema. If we were to refer to patients who come across this condition, especially patients who are at high risk for surgery, we need to use a technique that is equally as effective as surgery, without exposing the patient to the risks that arise from it. In our case, the main agent is actilyse, also known as tPA (Tissue plasminogen activator), which affects the breakdown of fibrin in empyema and reduces viscosity, thus promoting pleural fluid drainage. We present a 65-year-old man with pleural empyema who was not a candidate for surgery due to his condition and comorbidities. The patient presents with right-sided empyema, chest pain, shortness of breath and SO2 87%. The patients commorbities include left-sided hemyplegia, HTA, atrial fibrillation and CVI, with an ejection fraction of 30% on admission.
Keywords: tPA, empyema, chest drainage.

Spontaneous Pneumomediastinum with Pneumoperitoneum, Pneumocephalus and Subcutaneous Emphysema on a Neck

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Pneumomediastinum is defined as free air within the mediastinal cavity. It can spread along tissue planes leading to the accumulation in the neck, abdominal cavity and large amounts of subcutaneous emphysema. Accumulation of air within soft tissue can be self-limiting or can lead to complications. We report 21-year-old male patient with a family history of spontaneous pneumothorax who presented with diffuse chest pain which followed “popping under the skin” and was found to have crepitus extending from his neck. He denies exercises, holding breath during movements, uses an inversion table or any Valsalva maneuvers. Radiological imaging demonstrated pneumomediastinum, pneumoperitoneum, pneumocephalusand diffuse subcutaneous emphysema extending into the neck. Hospital treatment with empiric antibiotic therapy was indicated, regarding that inflammatory parameters such as C reactive protein, sedimentation rate and white blood cells were elevated. On the fourth day of hospitalization, there was an improvement of the clinical condition as well as the control CT scan and laboratory, and the patient was discharged home. Diagnosis requires a combination of history, physical exam findings, and imaging findings. Patients with spontaneous pneumomediastinum typically experience self-limited disease, and efforts should be made to minimize low yield invasive testing. Most patients can be managed conservatively after monitoring and education about potential complications. Follow-up imaging should be performed to ensure resolution of pneumomediastinum, pneumoperitoneum, and subcutaneous emphysema.
Key words: pneumocephalus, pneumomediastinum, pneumoperitoneum, subcutaneous emphysema.

Aganglionic Megacolon Associated with Hereditary Motor and Sensory Neuropathy

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Hereditary motor and sensory neuropathies (HMSNs) are a group of clinically and genetically heterogeneous disorders primarily affecting the periphery nerve system (PNS). The diagnosis is based on the presence of lower motor neuron signs and evidence of sensory involvement. Aganglionic megacolon (AM) is a motor disorder of the colon, which is caused by the failure of neural crest cells (precursors of enteric ganglion cells) to migrate completely during intestinal development during fetal life. The resulting aganglionic segment of the colon fails to relax, causing a functional obstruction.
A 34-year-old woman was admitted to the hospital with nausea, vomiting, and a noticeably enlarged and painful stomach. For the past month, there have been multiple daily episodes of diarrheal stools, and for the past four days, there has been no wind or stool. Based on data from previous illnesses and treatments, HMSNs were appropriately managed until ten years ago, at which point a cesarean section was performed. A CT scan of the abdomen revealed colon enlargement, and laboratory results indicated increased CRP and leukocytosis. Megacolon was discovered during surgical exploration to stretch from the cecum to the first segment of the sigmoid colon, with no discernible volvulus, intussusception, or lumen blockage. An ileo-colon sigmoidal latero-lateral anastomosis was used in conjunction with a subtotal colectomy. Along with the histopathological finding, it was discovered that the excised specimen was completely lacking nerve fibers and ganglions.
The presence of aganglionic megacolon in patients with confirmed HMSNs raises the possibility that these two disorders are related to a single hereditary condition.
Keywords: megacolon, hereditary neuropathies, colectomy, surgery

Extraskeletal osteosarcoma in a 50-year-old female with an undiagnosed Paget's disease

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Paget's disease of bone (PDB) is a focal disorder of bone metabolism characterized initially by an increase in bone resorption, followed by a disorganized and excessive formation of bone, leading to pain, fractures, and deformities. The incidence of osteosarcomas complicating PDB is remarkably rare in the general population.
In this report, we present the case of a 50-year-old female patient who was presented at the clinic complaining of a growing painful mass with a diameter of approximately 3 centimetres in her left calf. An ultrasound was performed, which showed a heterogeneous but predominantly hypoechoic mass with increased vascularization, followed by an MRI. The patient was scheduled for surgery. Excision of the mass under spinal anaesthesia was performed, and the wound was closed in layers. After two weeks, the pathology evaluation presented with extraskeletal osteosarcoma. General metastasis follow-up was performed with chest and abdominal CT, which showed no abnormalities. On a bone scan with Tc99m, an increased uptake on the left iliac bone was noticed, which was highly suggestive of Paget's disease. Another surgery was performed with a wide excision of the wound as well as a biopsy of the iliac wing. The pathological specimen was free of cancerous cells, and Paget's disease was confirmed. On a 9-month follow-up examination, an ultrasound was performed, and no local recurrences were noticed.
Extraskeletal osteosarcoma accompanied by Paget's disease is a rare find. Ultrasound, MRI, and biopsy are required for the diagnosis. The accurate diagnosis of extraskeletal osteosarcoma is important as it has a different regimen of treatment with a poorer prognosis compared to primary osteosarcoma of the bone.
Keywords: Paget’s disease of bone, Osteosarcoma, Tc99m, Spinal anesthesia, Bone resorption, Fractures

Our experience with invasive skin carcinoma of the skull treated with a rotational flap

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The escalating incidence of skin malignancies, particularly in sun-exposed areas such as the head and neck, requires innovative approaches for challenging cases. Squamous cell carcinoma, though common, rarely infiltrates the skull, presenting unique challenges in treatment and reconstruction.
In this case report, we describe the management of a 77-year-old patient with recurrent invasive squamous cell carcinoma of the left temporal region extending into the skull. The patient underwent three surgeries within our institution due to squamous cell carcinoma recurrence, leading to a complex skin defect unsuitable for conventional closure methods.
Our approach involved the use of a local rotational flap, using the robust vascularity of the scalp, allowing versatile orientation relative to the defect. The operating technique consisted of a craniectomy, removal of infiltrated tissue, and affected dura, followed by plastic reconstruction of the skin with a rotational flap, preserving healthy periosteum and temporal fascia.
As the population with cutaneous neoplasms ages, the demand for expeditious and less morbid reconstructive options grows. This case underlines the effectiveness of the local rotational flap for reconstructing medium-sized complex scalp defects post-cancer resection. Our experience suggests that the rotational scalp flap is a reliable and safe choice, offering a favorable balance between surgical outcomes and patient well-being. Keywords: scalp, squamous cell carcinoma, rotation advancement flap, recurrence, invasion of dura.

A case report of post-tonsillectomy hemorrhage in a seven-year-old boy

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Tonsillectomy, with or without adenoidectomy, is one of the most routine pediatric surgeries performed around the world. Hemorrhage is one of the most common and potentially fatal complications of tonsilloadenoidectomy, posing a significant clinical challenge for otorhinolaryngologists. Young children have little respiratory and hemodynamic reserve, which increases the danger posed by complications, including hemorrhage. We present the case of a seven-year-old boy with a history of recurrent tonsillitis who experienced secondary hemorrhage following a routine bilateral cold knife tonsilloadenoidectomy. On the sixth day post-surgery, the patient presented to the emergency department of the ENT clinic due to vomiting copious amounts of blood in his sleep. Following a thorough examination upon admission, it was determined that the patient's condition necessitated immediate surgical intervention, and he was promptly taken to the operating room. Under general endotracheal anesthesia, a Crowe-Davis retractor was placed to better visualize the oropharynx. Examination revealed a blood clot in the left tonsillar fossa, with the right tonsillar fossa showing no evidence of bleeding or clots. The blood clot was removed by aspiration, and hemostasis was achieved using bipolar electrocautery. Anesthesia recovery was prompt, and no notable operative complications or abnormalities were encountered. Following the procedure, the patient remained hospitalized for three days and was discharged in good condition. This case highlights the importance of recognizing and promptly addressing secondary post-tonsillectomy hemorrhage, particularly in pediatric patients. In addition, we discuss the importance of identifying risk factors and the pivotal role they play in preventing post-tonsillectomy complications.
Keywords: tonsillectomy, recurrent tonsillitis, hemorrhage

Facial reconstruction after removal of a large skin cancer in the facial region with lipograft induced regeneration and STSG

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Fat grafting and its stem cells components have extensive clinical applications. Its use in aesthetic medicine is widely known. But the stem cells potential to differentiate into various cell types in the body is also used in regenerative medicine in the treatment of complex wounds as regenerative inductor as well as in reducing the inflammatory response.
A case of a 64-year old patient is presented with a skin cancer in the right facial region. The cancer stretched in the infraorbital, parotidomasseteric, buccal and mandibular region. Clinical examination and CT of the head revealed solid, painless, slightly mobile tumor mass that infiltrates the subcutaneous soft tissue and part of the facial muscles. A team of plastic and maxillofacial surgeons performed the operation. Tumor excision involved partial excision of the facial muscles together with part of the oral mucosa as well part of the mandibule was deperiosted during the process. Oral mucosa was directly sutured. Then lipotransfer from the anterior abdominal wall was performed. Lipograft was to differentiate into vascularized tissue. The procedure was repeated 5 days later when the defect was closed with split thickness skin graft.
Lipoinduction following lipotransfer together with split thickness skin grafts can be successfully used for reconstruction of large facial defects. Transferred fat tissue is differentiated into granulation tissue thus fulfilling the tissue gap and making the aesthetic result satisfying and superior to using skin grafts alone. There is also minimal donor side morbidity, reduction of the total operating time and less postoperative complications.

Giant Cell Tumor of Distal Femur: A Case Report for 19-year-old pregnant girl

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Giant cell tumor of bone is a rare and locally aggressive neoplasm that typically affects the epiphyses of long bones in adults. Its occurrence during pregnancy is exceedingly rare, with only a handful of cases reported in the literature. Here, we present the case of a 19-year-old pregnant girl diagnosed with a giant cell tumor of the distal femur during her second trimester.
A 6-month pregnant patient was admitted to the clinic due to a left knee fracture. In addition, she was admitted with a sore throat and a productive cough.
After the tests, it was determined that it was a giant cell tumor of the distal femur.
Because the patient is pregnant, a bone scan and CT scan are not performed because the mother's fetus will be irradiated.
Furthermore, a first degree of emergency surgery has been performed to achieve the possibility of preserving the leg but removing the tumor. Therefore, Campanacci resection arthrodesis was performed, and the patient was prepared for a cesarean delivery.
The next step is putting prosthesis on the knee.
This case highlights the challenges and complexities involved in managing giant cell tumors of bone in pregnant patients, necessitating careful consideration of both maternal and fetal factors in treatment decision-making. Multidisciplinary collaboration and individualized treatment approaches are essential for optimizing outcomes in such rare and challenging clinical scenarios.
Keywords: Giant cell tumor, pregnant patient, pathological fracture.

Dual-catheter method in the endovenous radiofrequent ablation of varicose veins of the leg

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Varicose veins in the lower extremity usually affect the great and the small saphenous veins (GSV and SSV) and their tributaries between the fascia and the skin. There are numerous anatomical variances of the superficial veins of the leg besides these two veins. The anterior accessory saphenous vein is a special anterior tributary of the great saphenous vein, draining the antero-lateral face of the thigh. Often it becomes insufficient resulting in varices with an autonomous course. Case presentation. We present a case of a 41-year-old woman whose main complaint were swelling of the feet and feeling of heaviness in her left leg. These symptoms first appeared 6 years ago during her first pregnancy and 2 years ago after her second pregnancy the symptoms worsened. On initial inspection, there were visible varices on the anterior and inner part of her left leg, most noticeable below the knee. On color Doppler duplex ultrasonography, the left GSV was dilated with reflux of blood and two dysfunctional perforators were identified (Boyd's and Dodd's perforator). The patient was scheduled to undergo endovenous radiofrequent ablation of the GSV and ligation of the Boyd's perforator with local phlebectomy. Upon surgery, an anterior accessory saphenous vein was identified with Doppler ultrasonography and two catheters for RFA were used to successfully complete the surgery in one act. Dodd's perforator was closed with RFA. Discussion. This case illustrates the correct diagnostic approach and the correct technique used to treat varicose veins of the lower limb considering their anatomical variances.
Key words: accessory veins, varices, radio frequent ablation.

Internal Medicine

Rare case report of thyroid storm in subacute thyroiditis followed by severe neutropenia as an adverse effect of thiamazole

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Subacute thyroiditis (SAT) is a thyroid disease of viral, post-viral origin or can be complication after vaccinations. Clinically it can present with or without symptoms. Very rare it can be presented with thyroid storm, condition that demands fast and appropriate therapeutic approach.
43 years old woman is presented with malaise, high temperature (39 C), palpitation, sore throat, nausea and intensive swelling. At the time of visiting she was under treatment with antibiotics and pain killers described by family physician. 15 days prior to our visit she had flu followed by high temperature (39 C). On physical examination she is upset complaining of pain in the throat and rapid breathing. Her skin is swelled especially arms with signs of shaking. ECG presented sinus tachycardia with 130 b/min. Ultrasound on thyroid gland showed inhomogeneous and enlarged parenchyma, poor Doppler vascularisation and no focal changes. On 2SWE elastography increased stiffness was measured over 150kPa. The laboratory results presented complete TSH suppression (TSH<0,001) with high levels of FT4 and FT3 (FT4= 86.8 and FT3=23.9) and negative thyroid antibodies. Due to the clinical presentation of thyroid storm (Burch HB and Wartofsky score >45), thiamazole was prescribed with other drugs. 30 days later she went to CIDFC because of new onset of high fever. With laboratory findings of neutropenia she was referred to department of Hematology where thiamazole was stopped and additional drugs were prescribed. After excluding thiamazole patient got normalised.
Antithyroid drugs are useful, effective and mostly safe therapy in hyperthyroid conditions. Adverse effects such as severe neutropenia are rare and should be taken in consideration when other hematology conditions are suspected (leukemia, lymphomas etc.)
Key words: subacute thyroiditis, thiamazole, neutropenia, thyroid storm

Case Report: Asymptomatic Stanford Type A Aortic Dissection in a 71-Year-Old Patient with Laryngeal Carcinoma

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Aortic dissection is a life-threatening condition characterized by the separation of the layers within the aortic wall. Stanford Type A dissection involves the ascending aorta and often requires immediate surgical intervention.
This report aims to describe the clinical presentation, diagnostic workup, and management of Stanford Type A aortic dissection in a complex medical setting, involving end-stage renal failure, alcoholic cirrhosis, and laryngeal carcinoma.
A 71-year-old patient with a history of laryngeal carcinoma, and operated with tracheostoma. Patient was with end-stage renal failure on hemodialysis, and alcoholic cirrhosis. Our patient was presented to the Emergency ward at the University Clinic of Cardiology with an incidental finding of aortic dissection on CT scan. After that we made echocardiography with dilatation of ascending aorta and intimal flam in aortic lumen. Aortic valve was bicuspid with moderate aortic regurgitation. We could not estimateddescending aorta because the patient had tracheostoma. Abdominal aorta was dilate with dissection and thrombose false lumen. Echocardiography showed Left ventricle dilatation and heart failure with preserved EF (54%).Clinical examination, laboratory tests, electrocardiography (ECG), we performed, but patient had had not any pain. The patient presented with weakened vesicular breathing on the right lung base and a dilated ascending aorta.. Referral to a cardiac surgeon was made; however, the patient declined the surgical intervention due to high operative risk.
Management of Stanford Type A aortic dissection in complex patients with multiple comorbidities poses significant challenges. Despite the absence of symptoms, prompt diagnosis and multidisciplinary approach are crucial. In high-risk cases where surgical intervention is not feasible, close monitoring and tailored medical therapy remain essential for optimizing patient outcomes.
Keywords: Stanford Type A aortic dissection, laryngeal carcinoma, radiation therapy, echocardiography, conservative treatment.

Challenges in a case of nontuberculous mycobacterial lung infection

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Nontuberculous mycobacteria (NTM) encompass a group of more than 170 species different from Mycobacterium tuberculosis complex. Mycobacterium avium complex (MAC) infection in humans is caused by two main species: M.avium and Mycobacterium intracellulare, often referred to as Mycobacterium avium-intracellulare (MAI). MAC is primarily a pulmonary pathogen that affects individuals who are immune compromised. Although rare in immunocompetent patients, M.intracellulare is responsible for 40% of such infections. We impart a case of 72 year old male patient with COPD and chronic respiratory insufficiency who presents with cavitary/nodular changes on CT scan and positive culture results for acid-fast bacilli (AFB) from two separate expectorated sputum samples, identified as Mycobacterium intracellulare. Patient was started on treatment with ethambutol, rifampicin and clarithromycin resulting in negativisation at follow up culture samples. There was both clinical and radiological improvement, but at the end of the 10-th month of therapy, we got positive sputum results identified again as M.intracellulare. Treatment was not discontinued, having in mind technical difficulty of substantiating resistance to applied antituberculotics at the time being. The patient was scheduled for a regular follow up visit. Our experience in this case differs not from those in other centers.

Keywords: Nontuberculous mycobacteria, mycobacterium intracellulare, antituberculous resistance

Chronic lithium toxicity

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Objective: Lithium toxicity can be acute or chronic and the effects may be disabling or life-threatening. We present a case with lithium toxicity due to chronic treatment.

A 63-year-old man was brought to the University Clinic for Toxicology in Skopje with a 2-day history of confusion, slurred speech, nausea, vomiting, loss of appetite, and weakness. His medical history included bipolar disorder, which had been diagnosed 17 years previously, and since then he has been on lithium therapy 900mg orally daily. The patient had not had regular check-ups for several years. His oral intake was markedly reduced, for the last five days. On admission, he was severely dehydrated. Vital signs included a blood pressure of 110/50 mm Hg a pulse rate of 49 beats/min, and oxygen saturation of 97%. Investigations revealed serum lithium level 3.43 (normal 0.5–1.5 mmol/L) suggesting lithium toxicity, creatinine level 168 umol/L, urea 15 mmol/L alkaline phosphatase 182 U/L calcium 2.34 mmol/L. A 12-lead electrocardiogram showed normal sinus rhythm, precordial T-wave inversions, and a prolonged QTc interval of 533 ms. After one treatment of hemodialysis lasting two and half hours, his lithium level dropped to 2,04 mmol/L and creatinine to126 µmol/L. No intracranial abnormality was seen on a computed tomography scan of the head. Further investigation revealed parathyroid hormone 170 pg/ml, ionized calcium 1.43 mmol/L. Treatment management included volume replacement for dehydration. Abdominal computed tomography was with orderly finding. All investigations were at the normal therapeutic range before discharge and sent to the psychiatrist on the eleventh day.
Conclusion: Patients on long-term lithium therapy with no regular check-ups are at high risk of developing toxicity. The toxicity was due to intravascular volume depletion, and impaired lithium excretion. The patients should be monitored frequently for all potential endocrine, renal, and neurological disorders.
Key words: lithium, toxicity, parathyroid hormone

A clinical case of a young woman diagnosed with ulcerative colitis presenting with acute pericarditis

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Ulcerative colitis is a chronic, relapsing disease of the digestive tract that is manifested by changes in the intestinal and other organ systems belonging to the group of inflammatory bowel diseases (IBD). Acute pericarditis during inflammatory bowel disease occurs very rarely, in 0.23% of all cases.
A 20-year-old female presents with symptoms of chest pain, shortness of breath, and palpitations. The onset of chest pain occurred 14 days ago, accompanied by a three-day evening fever. Additionally, five months prior, she experienced a seven-day episode of bloody stools. Furthermore, she was diagnosed with anemia three years ago but has not undergone any treatment since.
Echocardiography: Pericardial effusion with tamponade, *Chest CT:* Severe fluid collection in the pericardial space and cardiac tamponade with right ventricle collapse, Mild bilateral pleural effusion, Interlobular septal thickening in the left lower lobe *Colonoscopy:* Diffuse superficial ulceration on DC at 45 cm from AV. Imp: Ulcerative colitis – left side *Biopsy (colon):*AV 45 cm: Acute and chronic inflammation, AV 40cm: dense lymphocytic infiltrate with crypt distortion, AV 35 cm: chronic lymphocytic infiltrate with fibrosis and crypt distortion. After undergoing pericardiocentesis and pericardectomy, the patient's pericarditis was successfully treated with a combination of medications. Currently, the patient is prescribed Mesalamine 500mg*2 three times a day, and there are no reported complaints.
In foreign studies, it has been observed that pericarditis associated with inflammatory bowel disease (IBD) is predominantly linked to medication like mesalamine, sulfasalazine, and azathioprine. However, in our instance, acute pericarditis stemming from non-drug-related factors serves as the initial manifestation of ulcerative colitis.
Key word: pericarditis, Ulcerative colitis, Inflammatory Bowel Disease

Diagnosing Cystic Fibrosis in adulthood- a clinical challenge

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We present a case of Cystic Fibrosis, an autosomal recessive disorder caused by mutations in the CFTR gene, affecting various organs. While 95% are diagnosed early in the childhood, several cases are misdiagnosed and are further diagnosed later in life due to recurrent issues. In our case, a 24-year-old male with a history of chronic sinusitis, dust allergy, and recurrent respiratory infections presented to the hospital with symptoms such as a productive cough, weight loss, low oxygen saturation and frequent bowel movements. Diagnostic studies revealed bilateral bronchiectasis, mediastinal lymphadenopathy, and severe obstructive pattern (FEV1 18%). Bronchoscopy was performed, and bronchial aspirates were collected, which yielded negative findings for tuberculosis. Microbiology identified Staphylococcus aureus, prompting targeted antibiotic therapy, leading to eradication. Alpha-1 antitrypsin levels were within the normal range. Cystic Fibrosis was confirmed through a positive sweat chloride test of 80 mmol/L. The patient's treatment commenced following the guidelines for Cystic Fibrosis treatment, including bronchodilators, rhDNase, nebulized hypertonic saline, and pancreatic enzymes for pancreatic insufficiency. Patient education on therapy and breathing exercises was provided. Although pancreatic enzyme levels increased, the patient remained clinically stable with normalized daily stools and was further assessed with an ultrasound which was normal. Improvement in pulmonary symptoms was noted through arterial blood gases and pulmonary function tests. Genetic analysis post- discharge revealed the presence of a single copy of the F508del mutation and a second single copy of 3849G->A mutation in the CFTR gene. Disease progression leads to respiratory decline and chronic infections, which are the primary cause of death in 80% of patients. Effective management aims at preserving lung function through diverse interventions, emphasizing infection prevention and monitoring for complications. The patient is scheduled to undergo a combination of CFTR modulators treatment.
Keywords: Cystic Fibrosis; Bronchiectasis; GI symptoms; Sweat chloride test; F508del mutation.

Atypical presentation of femoral graft stenosis in a patient with Diabetes Melitus

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Periphery artery disease (PAD) represents a complete or partial occlusion of one or more of the peripheral arteries of the upper and lower limbs, which may lead to reduced blood flow and tissue loss. Diabetes Melitus (DM) is a major risk factor for PAD. Lower extremity artery disease (LEAD) significantly impacts morbidity and mortality in people with DM, sometimes leading to leg ulcers and amputations.
A patient came to our ambulance complaining of pain in her right heel and slight hyperemia. She is a 64 year old woman with a history of DM 2 for over 25 years, treated with insulin and oral hypoglycemic agents. Her past medical history includes bilateral femoro-popliteal bypass procedure, percutaneous transluminal coronary angioplasty to LAD, extirpation of the left VSM, history of deep vein thrombosis and superficial vein thrombosis and lateral malleolus fracture 3 months prior to the symptoms. Examination of the foot showed hyperemia, pain sensation on palpation of the heel and no palpable pulse on anterior tibial artery (ATA) and posterior tibial artery (ATP). D-dimers were 800 ng/ml. Duplex sonography (DUS) of the right leg showed occlusion on the femoral graft right after the branching with poor blood flow in distal arteries. The patient was referred to a vascular surgeon after what re-grafting of the femoral graft was performed.
The purpose of this case report is to emphasize the importance of recognizing atypical presentation of PAD in diabetic patients without intermittent claudication presented with heel pain. This is an extremely rare symptom in this condition and overlaps with calcar calcanei, partial muscle rupture, cellulitis ect. Our continuous and close monitoring with DUS following clinical examination was of vital importance to allow proper diagnosis and management, avoiding amputation. This approach in secondary prevention is a priority in our vascular US laboratory.
Key words: Diabetes Melitus, Periphery Artery Disease, Duplex sonography

Asymptomatic carcinoid of appendix: a case presentation

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Primary neoplasms of the appendix are rare with approximately 0.5%-1% of all appendectomies, with carcinoid tumors representing >50% of all appendix neoplasms. Carcinoid tumors of the appendix can be asymptomatic or can present as an acute appendicitis and be diagnosed during surgery. Appendiceal carcinoid tumors usually behave as benign tumors, but lesions larger that 2cm in diameter have the potential for malignancy and are therefore able to metastasize.
A 56-year-old asymptomatic male patient referred to the University clinic of Gastroenterohepatology for a routine screening colonoscopy. A colonoscopy was performed and a 1cm diameter hard oval tumor lesion was seen protruding from the appendix ostium. Physical examination and laboratory tests were normal. In addition, abdominal computed tomography was performed and revealed thickening in the cecum and appendix. The patient underwent laparoscopic surgery, a right hemicolectomy with ileotransverse anastomosis. The pathology report revealed a well-differentiated grade 1 carcinoid tumor (G1). The Ki-67 proliferative index revealed nuclear staining in ~2% of cells. According to the findings no further treatment was administered. Two mouth after surgery patient was symptom free in a good condition.
Carcinoid tumors of the appendix are rare, usually asymptomatic and diagnosed incidentally on histopathological examination after surgery. Therefore, it is very importance to obtaining histopathological studies of every removed appendix, because the further treatment and follow-up of the patient will depend on this pathological finding.
Key words: carcinoid, neoplasm, appendix, symptoms

Takayasu arteritis

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Takayasu Arteritis (TAK) is a large-vessel vasculitis that preferentially involves the aorta and its primary branches. It occurs most commonly in young females.
We present a 42-year-old woman with intensive postprandial abdominal pain had lost 12 kg in 1-2 months.An abdominal ultrasonography demonstrated normal findings, while gastroscopy showed chronic gastritis. Abdominal vascular ultrasound showed chronic mesenteric ischemia with stenoses over 70% in AMS and T. Celiacand AMI appears visibly dilated and CT angiography showed the same. During the period of three years, 3 invasive recanalisating procedures were performed and the quality of life was impairedwith many new symptoms like different pulse and arterial pressure on both hands and Raynaud's phenomenon, as a consequence of failing to treat the cause. After 3 years the disease was assigned a name – Takayasu arteritis, and the rheumatologhist started with antiinflamatory therapy with corticosteroids, so the health of the patient was broughtunder control, and the life became simple and easy.
Rare diseaseshappen rarely, but we always must be aware of them.
Keywords: vasculitis, mesenterial stenosis, rare.

Unusual esophageal foreign body impaction caused by a diazepam stripe

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An esophageal foreign body impaction can be caused by an impacted food bolus or foreign body that was intentionally or unintentionally swallowed by the patient. About 80 to 90% of the esophageal foreign bodies pass spontaneously within 3 to 7 days, 10 to 20% require endoscopic extraction, and only less than 1% require surgery. The most cases occur in children, psychiatric patients, prisoners and in elderly population mainly related to some esophageal pathology. Most serious foreign body-related complications are registered in cases of ingestion of sharp bodies, magnets, batteries, as well as in cases of prolonged esophageal impaction. We present a rare and unusual case of ingestion of a whole stripe of pills impacted in mid esophagus.
A forty-one-year-old male patient was referred to the University Clinic for Gastroenterohepatology on Skopje after intentional swallow of a whole stripe of diazepam. Shortly after the swallow he started complaining of chest pain and dysphagia. Initially, a fiber endoscopy was performed that could not detect the foreign body at the level of the epyfarinx and above the upper esophageal sphincter. Afterwards an urgent gastroscopy was performed that localized the pill stripe at the level of the upper esophagus, but during the examination, the stripe migrated to the level of the mid esophagus. Finally, the stripe was successfully extracted by using a biopsy forceps. After the extraction, the second look gastroscopy did not detect any pathological finding at the impaction level.
Most patients with esophageal foreign body impaction are successfully treated by endoscopic extraction, and surgical intervention is rarely required. The selected extraction technique depends on the type of the foreign body, the level of impaction and on the presence of concomitant esophageal pathology.
Key words: esophageal foreign body, esophageal stripe impaction, esophageal foreign body extraction

Wernicke encephalopathy during pregnancy: report of pregnant women

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Wernicke's encephalopathy is a rare complication of hyperemesis gravidarum. It should be diagnosed as early as possible to prevent long-term neurological sequela or death. Thiamine supplementation in pregnant women with prolonged vomiting should be initiated, especially before parenteral dextrose infusion. We presented 38 -year-old male in 16 weeks of pregnancy with hyperemesis gravidarium and vomiting more than 10 times daily, complains with headache, vertigo, photophobia, fatigue and sleepiness 4 days before consultation. The liver function test showed elevated levels of alanine transaminase (ALT, 350 U/L) and aspartate transaminase (AST, 640 U/L). Serology for viral hepatitis and autoimmune markers such as autoantibodies was in normal range, normal level of ceruloplasmin and iron was detected. Abdominal ultrasound confirms no abnormalities that explain elevated liver enzymes. Neurologist checked that the patient is stable and didn't recommend other imaging methods. After our evaluation we indicated brain MR, Wernicke encephalopathy was established diagnose and patient was hospitalized in clinic for gynecology and obstetrics. Three days after administration of thiamine, B6 and B12 in therapy patient have improvement in neurological status. Electroencephalogram (EEG) reveal normal brain impulses. Visual evokes potential (VEP) test indicates slowed down pathway of n.opticus and the other findings was normal. Gynecologist board made a decision for medical artificial abortion. In the follow up period of 2 weeks patient has improvement in neurological status and liver test function.
Key words: hyperemesis gravidarium, pregnancy, deficit of B1, neurological symptoms

A multidisciplinary approach in recurrent mucinous adenocarcinoma of the gallbladder, without calculosis

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On Dec.2022, 51-years old man, comes for a regular annual check-up at our health facility, without complaints and without symptoms, in a visibly good general state of health. History of comorbidities: Hyperlipidemia, Hepatic_steatosis, Non-smoker, No history of allergies, Vaccinated for COVID-19.
Multidisciplinary approach and management for early detection and treatment of the disease.
Ultrasound, Laboratory, ECG, X-ray, CT_contrast, surgical_treatment, chemotherapy, PET/CT.
Abdominal_echo was performed at PZU "Echomedika"-Kocani, it was found: Hepar steatosis, gall bladder septated, with a decent size. In the wall of the same, a clearly limited, hyperechoic formation was seen, on a wide base, with a volume of 3.75cm³, with discrete vascularization on Color Doppler. Abdominal_CT indicated with contrast. Lab. res.: 21.12.2022: SE-7/20; Hgb-140; TBI-11.1; Trig-1.67; sFe-22; Hol-3.5; LDL-1.7; AST-40; ALTI-55; CRP-0.6; Urea-4.4; Glik-5.9; GGT-46; create-93; HbA1C-6.0. CT with contrast: **Jan.2023** in General_Hospital-Kumanovo, does not correlate with the echo findings. A second opinion is required in Acibadem_City_Clinic-Sofia, in Feb.2023, where the CT finding is in contrast with the echo finding from our health facility. **Feb.2023** – Hospitalized and operated in Acibadem_City_Clinic-Sofia, with the operative result mucinous adenocarcinoma of the gallbladder. **Mar.2023,** 8 courses of chemotherapy with Capecitabine were appointed at the University Clinc of Oncology-Skopje. **May.2023** at the PET/CT_Scan Institute-Skopje: finding edited. **Sep.2023**: he came for examination, jaundiced, at PZU "Echomedika"-Kočani, Echographically established: Dilatation of intra and extrahepatic bile ducts, with a suspected relapse of choledochus, he was admitted to Acibadem_City_Clinic-Sofia, for endoprosthesis of the choledochus with a metal prosthesis. **Oct.2023** at Clinic for Digestive Surgery-Skopje, Whipple was operated, with hepatic bisegmentectomy. Histology obtained for Adenocarcinoma Mucinosum Recidivans Hepatis. **Nov.2023:** referred for chemotherapy in Vienna, with Prof. Dr. Christoph Zielinski. Currently stable, no MS changes
The importance of the internist approach for early detection and treatment of neoplasms.

Gastric gastrointestinal stromal tumor presenting with large abdominal mass

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Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal neoplasms of the gastrointestinal tract. They most commonly arise in the stomach (40 to 60 %) and jejunum/ileum (25-30%), while the extra gastrointestinal GISTs can arise in the retroperitoneum, mesentery, and omentum. Gastric GISTs usually present with upper abdominal pain, abdominal fullness and discomfort, or gastrointestinal bleeding and only 5% of the patients present with asymptomatic abdominal mass. Metastatic disease develops in approximately 10-20 % of the patients, mainly affecting the liver, omentum, and peritoneum, but almost never affecting the abdominal lymph nodes or extra abdominal localizations. We present an unusual case of remarkably large GIST of the stomach presenting with almost asymptomatic abdominal mass.

Seventy-one-year-old female patient was admitted to the University Clinic for Gastroenterohepatology in Skopje due to two-month history of slight abdominal discomfort and ultrasound finding of a large intrabdominal solid mass. The CT scan described a large (187cm x 145 cm x 112 cm) lobulated heterodense solid tumor most likely arising from the gastric wall, but also closely related to the splenic hilum, and the left kidney. The gastroscopy revealed a large submucosal mass infiltrating the large curve of the stomach without any gastric mucosal irregularity. The endoscopic ultrasound revealed the large mass with solid aspect presenting in the proximal corporal segment. Considering the size and the uncertain origine of the mass, a percutaneous biopsy was indicated. The histology confirmed GIST, with immunohistochemistry positive for Vimentin, CD117 и CD34, negative for S-100, CK AE1/AE3 and SMA and the Ki-67 was positive in 10-15 % of the neoplastic cells. The patients was referred for surgical treatment. The selected treatment options in GISTs depend on the tumor size, localization, extension, spread, related symptoms and molecular genotyping. The treatment options include, surveillance, surgery, neoadjuvant and adjuvant chemotherapy.

Key words: GIST, Gastric GIST, abdominal GIST

Idiopathic pulmonary hypertension - a rare disease with diagnostic and therapeutic challenge

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Discovering idiopathic pulmonary hypertension (IPH), which belongs to the first classification group of pulmonary hypertension (PH) patients, according the last ESC guidelines, is diagnostic challenge. Echocardiography has a central position as the first-line method of choice for the evaluation of any patient suspected of pulmonary hypertension. Other imaging modalities can add additional information and help determine the cause of PH. Patients diagnosed with PH should be referred to specialist centers for invasive assessment - right heart catheterization. Regardless of the pathogenesis of occurrence, PH is a progressive process which leads to right ventricular overload, hypertrophy, dilatation of the RV and developed RV failure.
A 17 year old female in 2010 presents with cough, dyspnea, fatigue and vertigo. By echocardiography and right heart catheterization a diagnosis of idiopathic pulmonary hypertension was done. Echocardiography showed only slightly enlarged dilated ventricule, hypertrophy of the free wall of the right ventricle with normal right ventricular function. Right catheterization showed systolic pressure at arteria pulmonalis (SPAP) of 38 mmHg (normal range is less than 20 mmHg). Patient was treated with symptomatic therapy and Sidenafil, Furosemid and Aspirin (100mg). The condition remains under control for 11 years, until 2021 when patient was infected with COVID, when a worsening of the condition with pronounced fatigue and dyspnea occurred. Bosantan was added in therapy. A repeated catheterization showed a SPAP of 120 mmHg. Then a trans-dermal pump with continuous Treprostinil is installed, incrising the dose every 2 weeks, after which significant clinical improvement occurred.
Conclusion. In this rare and progressive PAH disease, the overall goals of treatment are to achieve a low-risk status with good exercise capacity, good quality of life, good right ventricule function, and low risk of mortality.
Key words: pulmonary hypertension, right ventricular function, echocardiography

Langerhans cell hystiocytosis (LCH) presented with liver involvement: report of a rare case

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Langerhans cell histiocytosis (LCH) is a rare and heterogeneous histiocytic neoplasm, characterized by abnormal proliferation of Langerhans cells infiltrating various organs, occurs less frequently in adults than in children. Clinical manifestations vary depending on the affected tissues or organs. LCH patients experiencing liver involvement can exhibit hepatocellular injury. In this report, a case of 40 -year-old male admitted to the hospital for painless jaundice and headache. The liver function test indicated elevated levels of glutamyl transpeptidase (500 U/L) and alkaline phosphatase (211 U/ L), with normal levels of alanine transaminase (ALT, 236 U/L) and aspartate transaminase (AST, 84 U/L). He had no underlying diseases and no history of alcohol or drug abuse. Ceruloplasmin, iron metabolism parameters, immunoglobulin G4, and thyroid function parameters were normal. In addition, he tested negative for viral hepatitis markers and conventional autoantibodies. Brain CT, abdominal and lung CT yielded normal results. Abdominal ultrasound indicated enlarged liver and spleen. No abnormalities were identified in the portal vein, hepatic vein, and inferior vena cava. Abdominal MRI without signs of bile obstruction or PSC. The patient underwent a liver biopsy to establish the diagnosis. Histologic finding may be diverse, including lobular Langerhans cell infiltrate with mixed inflammatory background, primary biliary cholangitis-like pattern, sclerosing cholangitis-like pattern, and even cirrhosis at later stages. In our case there only inflammatory pattern was identified. Patient was treated with liver protection drug, vitamin E and ursodeoxycholic acid and in follow up period the liver function test reveal normal values an patient is in good condition.
Key words: Langerhans cell histiocytosis (LCH), hepatocellular injury, liver biopsy

Challenges in Managing Multiple Myeloma: A Comprehensive Case Study

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Multiple myeloma is a complex and often debilitating hematological malignancy affecting plasma cells. It is characterized by abnormal cell proliferation which leads to excessive protein production and bone weakness. Primarily affecting older adults, its etiology includes genetic predisposition, radiation, chemicals, and viral infections. This paper aims to address diagnostic and therapeutic challenges by presenting a case of IgG type multiple myeloma in a 73-year-old female that was treated with plasmapheresis.

A 73-year-old female diagnosed with multiple myeloma, IgG type, who presented with neurological symptoms including confusion, disorientation and dysarthria. Laboratory analysis revealed markedly elevated levels of IgG (98.5 g/L) and globulins (126.5 g/L), suggestive of disease activity and potential complications associated with hyperviscosity syndrome. Given the severity of her symptoms and the potential complications of hyperviscosity syndrome, the patient underwent two sessions of plasmapheresis as a therapeutic intervention. Subsequently, the patient was initiated on a VTD protocol. The VTD regimen aimed to suppress the proliferation of malignant plasma cells, thereby controlling disease progression and improving clinical outcomes. Following completion of the VTD protocol, the patient underwent autologous stem cell transplantation (ASCT) as a consolidation therapy to further consolidate treatment response and potentially induce remission. In the post-transplantation phase, the patient received maintenance therapy with lenalidomide, an immunomodulatory drug known to prolong treatment response and improve survival outcomes in patients with multiple myeloma. Maintenance therapy with lenalidomide aimed to sustain disease control, prevent disease relapse, and optimize long-term outcomes for the patient.

This case underscores the importance of a multidisciplinary approach to the management of multiple myeloma, incorporating various treatment modalities tailored to individual patient characteristics and disease biology. Further studies are warranted to evaluate the optimal sequencing and combination of therapies to maximize treatment efficacy and long-term outcomes in patients with multiple myeloma.

Keywords: Multiple myeloma, plasmapheresis, chemotherapy, hyperviscosity

Massive bilateral pulmonary thromboembolism after polytrauma: Diagnostic pathway and clinical management

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Pulmonary thromboembolism (PTE) presents a critical medical emergency marked by the obstruction of pulmonary arteries by thrombi, often originating from various venous sites. While deep vein thrombosis (DVT) stands as a primary source, PTE can stem from pelvic, upper extremity, or even cardiac origins, rendering its etiology diverse and multifactorial. Polytrauma, characterized by severe injuries affecting multiple body systems, creates a complex clinical scenario predisposing individuals to heightened thrombotic risk.
A 41-year-old male presented with acute chest pain localized behind the sternum, following a polytrauma incident resulting in fractures of the right arm and left leg. The patient self-administered enoxaparin 0.4 ml subcutaneously at home. Laboratory analysis unveiled elevated Troponin and d-dimer levels, prompting immediate evaluation for pulmonary embolism. Transthoracic echocardiography revealed dilated right heart cavities, a D-shaped left ventricle with reduced function, severe tricuspid regurgitation, and signs of pulmonary hypertension. Confirmation of the diagnosis was obtained through CT scan, which identified filling defects in both the right and left pulmonary arteries, with more pronounced involvement observed on the left, particularly at the segmental and subsegmental branches. Management involved anticoagulation therapy, antibiotic therapy and a calcium channel blocker, along with hemodynamic support to prevent further thromboembolic events and complications. The patient was advised to commence 15 mg of Rivaroxaban twice daily for the next 3 weeks upon discharge from the hospital, followed by 20mg of Rivaroxaban once daily thereafter. Additionally, a follow-up appointment is scheduled at the Cardiology clinic to ensure optimal management.
Conclusion: In the intricate landscape of polytrauma, where patients are predisposed to heightened thrombotic risk, early identification of PTE through imaging modalities is paramount. Anticoagulation therapy is crucial for optimizing outcomes and preventing further thromboembolic events and complications.
Keywords: Polytrauma, pulmonary thromboembolism, chest pain, computed tomography pulmonary angiography, echocardiography, anticoagulation therapy

Role of Glucagon-Like Peptide 1-Receptor Agonists in weight loss and blood glucose reduction in patients with Diabetes Mellitus type 2

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Patient M.R, 48 year old, male, diagnosed with type 2 Diabetes Mellitus 6 years ago.At the initial visit, his therapy was Tbl. Metformin a 1000 mg 2x1, Tbl Repaglinide a 2mg 3x1 His weight was 120 Kg, height 170 cm, with a BMI of 41.5 His lab values were: Fasting plasma glucose 11.1 mmol/l , HbA1C 10.2%, Cholesterol 6.2 mmol/l, Triglycerides 2.2 mmol/l, HDL 1.0 mmol/l, LDL 4.2 mmol/l

In addition to his therapy, an injectable GLP1-RA - Semaglutide (Ozempic) was added once per week. Initial dose was 0.25mg for the first month, 0.50mg for the second and 1mg after the initial doses continuously, with the advice to consume less than 1400 kcal per day

First Check-up after 3 months

The patient feels better, has been happier and people have commented about his weight loss but sometimes becomes hypoglycemic, to which, the dose of the Repaglinide was reduced to 0.5mg 3x1.
The weight has been reduced to 100 Kg, with a BMI of 34.6

New Labs: FPG 8.1 mmol/l , HbA1C 8.2%

Second Check-up after 6 months

The patient is very satisfied with his weight loss journey, determined to get to a BMI of less than 25, which is rounded to about 72 Kg. His only complaint was once again, if he has not eaten food, he becomes hypoglycemic, to which the Meglitinide was discontinued.

His current weight is 80 Kg, BMI 27.7

Labs: 5.8 FPG mmol/l, 5.0 HBA1C %, Cholesterol 5.9 mmol/l, Triglycerides 1.9 mmol/l, HDL 1.7 mmol/l, LDL 3.4 mmol/l

We can conclude that adding a GLP1-Receptor Agonist (Ozempic) helps patients in the reduction of their weight and their blood glucose, leading to a decrease of complications caused by diabetes and obesity which are hypertension, dyslipidemia, hyperglycemia, NAFLD

Keywords: Diabetes, Obesity, Glycemia, Body Mass Index, GLP1-RA, Semaglutide

Unilateral Graves' disease in a bilobar thyroid gland: A case report

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Graves' disease is an autoimmune condition which diffusely affects the thyroid gland and is the most common cause of hyperthyroidism. Unilateral affection of a bilobar thyroid gland is a very rare presentation of Graves' disease which has only been documented once in our institution. We report this exact case of unilateral Graves' disease in the right lobe of a bilobar thyroid gland.
A 19-year-old female patient with a history of Burkitt lymphoma which has been in remission since 2013 was referred by her hematologist at our thyroid department(2015) with swelling on the right side of the neck to be evaluated for a possible relapse of the malignancy. On physical examination, signs of hyperthyroidism were noted. Thyroid palpation showed enlargement of the right thyroid lobe while the findings of the left lobe were unremarkable. Thyroid ultrasound showed a diffusely enlarged, hypoechogenic and hypervascularized right lobe and slightly shrunken, isoechogenic left lobe. Thyroid scintigraphy with 99mTcO4- showed a diffusely enlarged right lobe with an increased uptake of the radioisotope. Laboratory results confirmed hyperthyroidism caused by Graves' disease - FT4>77,2(11-25pmol/L), FT3 38,6(2.8-6.5pmol/l), TSH<0.07(0.4-4.5mIU/L), TRAB 6.88 IU/L(0-1.5IU/L) and aTPO 875 kIU/L(<35kIU/L). Classification group 1 results on FNAB excluded the diagnosis of thyroid lymphoma. The patient was treated with antithyroid drugs and an euthyreotic condition was achieved.
Clinicians should be aware of this very rare form of Graves' disease when evaluating unilateral cervical masses and hyperthyroidism. Possible pathophysiological mechanisms include difference of the extracellular cleavage of the TSHR, difference in the lymphatic drainage of each thyroid lobe or is influenced by specific cytokine release.
Keywords: Graves' disease; Unilateral; Hyperthyroidism

Adult- onset Still's disease in a patient after COVID-19 infection and vaccination (case report)

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Adult- onset Still's disease (AOSD) is a rare auto-inflammatory disease of unknown etiology, characterized by prolonged fever, arthritis, characteristic rash and lymphadenopathy. Diagnosis is a clinical one and may be lengthy because it requires exclusion of infectious diseases, neoplasms, including malignant lymphomas and leukaemias, as well as other autoimmune diseases. Several different diagnostic or classification criteria have been proposed, but Yamaguchi criteria have the highest sensitivity (96.2%). Historically, glucocorticoids (GC) are considered the backbone of treatment. Methotrexate is often the first conventional disease-modifying antirheumatic drugs (DMARDs) used to spare GC. COVID-19 has some similarities with the pathogenesis of AOSD. Aside from cytokine storm, deficiency and/or failure in regulatory or anti-inflammatory mechanisms might be involved in the pathogenesis. Serum levels of IL-6 and ferritin are elevated in both- COVID-19 infection and Still's disease. There are certain studies that cast doubt on the impact of COVID-19 on the incidence of Still's disease. Cohort study, from March 2023, showing increased incidence of AOSD in patients with SARS-CoV-2 infection and/or COVID-19 vaccination. The research supports the assumption of an association between AOSD and SARS-CoV-2 infection and/or COVID-19 vaccination. Our case report described a 28-year-old, preveosly healthy male, who presented with sore throat, fever, arthritis, evanescent rash and lymphadenopathy. He was diagnosed with AOSD, based on Yamuguchi criteria, after the exclusion of other differential diagnoses. Treated with methotrexate and glucocorticoids, he achieved good response. More studies and case reports are needed to understand the full mechanism of autoimmunity caused by COVID-19. Whether SARS CoV-2 will be a significant trigger factor for AOSD, remains to be seen.
Keywords: Adult- onset Still's disease, COVID-19, SARS-CoV-2, autoinflammatory disease, vaccination

Holiday heart syndrome in a Young Male: A case report

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Holiday Heart Syndrome (HHS) is a phenomenon characterized by the development of cardiac arrhythmias, notably atrial fibrillation (AF), in individuals without pre-existing heart disease.It can arise from a combination of lifestyle factors including smoking, excessive alcohol and caffeine consumption and emotional stress, particularly in young individuals.
A 30-year-old male was presented to the emergency department with complaints of palpitations. The patient reported a history of heavy alcohol and caffeine consumption, smoking, accompanied by emotional stress during a football match. The electrocardiogram presented AF with 150 beats per minute. Upon examination, the blood pressure was 110/60 mmHg, saturation 98% and blood gas analysis: pH 7.39, Na 144mmol/L, K 3.65mmol/glucose 82mg/dl, lactate 1.45 mmol/L tHb 15.3 g/ dL. Further evaluation revealed no structural heart abnormalities but highlighted his lifestyle factors as contributing to his condition. Acute management included the i.v. administration of 200mg flecainide for rhythm control. This case highlights HHS's multifactorial nature, where previously mentioned risk factors triggered cardiac arrhythmia. AF in young patients shares same stroke risks as in adults, stressing the need to restore normal rhythm. Flecainide,a class Ic antiarrhythmic, was chosen for its efficacy in converting AF and maintaining sinus rhythm, also preventing serious complications in patients without structural heart diseases.
Addressing modifiable lifestyle factors such as smoking, alcohol consumption, caffeine intake, and stress management is crucial in preventing and managing HHS. A comprehensive approach including lifestyle modifications alongside medical therapy is essential for optimal outcomes.
Keywords: Holiday Heart Syndrome, lifestyle factors, atrial fibrillation.

A Rare Presentation of Mixed AdenoNeuroendocrine Carcinoma (MANEC) in a 66-Year-Old Male with Hemoptysis

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This case report highlights an unusual presentation of Mixed AdenoNeuroendocrine Carcinoma (MANEC) in a 66-year-old male patient. Following an upper respiratory infection treated with antibiotics, the patient presented with hemoptysis, prompting further investigation. A chest CT revealed only enlarged lymph nodes, without further abnormalities, so further investigation was required, leading to additional imaging. Abdominal CT identified a gastric tumor measuring approximately 5 cm in diameter, located on the greater curvature. The patient denied any gastric symptoms nor other abdominal complaints. Subsequently, a gastroscopy was performed that revealed a polypoid two-headed sessile formation at the greater curvature, measuring around 5 cm in diameter, situated on the greater curvature at the border with the corpus antrum. Biopsies were taken and the initial pathology report showed adenocarcinoma. The patient was scheduled for surgery but after laparotomy, the tumor was determined to be inoperable. Extensive intraoperative biopsies were taken, and the second pathology report, utilizing Chromogranin and Synaptophysin staining as well as CDX2, CK19, and Ki67 analyses, confirmed the diagnosis of Mixed AdenoNeuroendocrine Carcinoma (MANEC).
Currently, the patient is undergoing oncological treatment with chemotherapy, emphasizing the challenges in such complex malignancies. This case of an asymptomatic but advanced and inoperable gastric malignancy accents the importance of a multidisciplinary approach required for accurate diagnosis and treatment strategies in rare entities like MANEC.
Keywords: MANEC, Hemoptysis, Gastric Tumor, Gastroscopy, Biopsy, Laparoscopy, Chemotherapy, Adenocarcinoma, Neuroendocrine

The Effects of Thyroid Deficiency on Peripheral Tissues

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A young man B.B, twenty-five years old, without relevant medical history, was referred for internal medicine evaluation due to laboratory findings of hyperglycemia, dyslipidemia, and elevated levels of hepatic enzymes. He presented to the primary care physician with unexplained muscle pain, a sensation of bloating, and increased body weight.
The patient was further referred for extensive laboratory analysis, including hepatic, viral, and thyroid markers. The results confirmed hepatic lesions and dyslipidemia, revealing high creatine kinase levels, significant thyroid deficiency: TSH above 75 uIU/ml, and anti-TPO over 827 IU/mL. Viral markers were negative. Thyroid ultrasound suggested an enlarged gland with changes indicative of autoimmune etiology. Echocardiography showed no pericardial effusion. The patient was started on therapy with Levothyroxine 50 mcg 1x1 and Silymarin 2x1.
Follow-up assessments over six months showed a patient without complaints, visibly reduced body weight, and correction in laboratory parameters, achieving a euthyroid state with normal hepatic and glycemic values. Lipid parameters were normalized, except for triglyceride levels, which remained above reference limits but with a significant reduction compared to the initial examination.
The deficiency of thyroid hormones affects metabolic processes in various tissues and organs, reflected in laboratory parameters in these patients. Thyroid hypofunction leads to hyperlipidemia, inflammatory response in the liver, non-alcoholic fatty liver disease (NAFLD), insulin resistance development, and changes in skeletal muscles, as indicated by creatine kinase levels.
This case presentation highlights the tissue effects of hypothyroidism, demonstrated through the prism of laboratory parameters. Dyslipidemia, hyperglycemia, and hepatic and muscular lesions can be prominent signs in individuals with thyroid insufficiency, serving as essential indicators for detecting thyroid dysfunction. Replacement therapy corrects these laboratory parameters, but time is required for resetting metabolic processes and cellular mechanisms.
Keywords: Hypothyroidism, lipids, hepatic enzymes, glycemia

Late-Onset of Burkitt Lymphoma Following Liver Transplant

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Burkitt Lymphoma (BL) is an aggressive B-cell non-Hodgkin lymphoma, with mostly endemic occurrence in Africa. However, BL can also present itself as a part of the post-transplant lymphoproliferative disorders (PTLD); a rare, but serious complication post-transplantation related either to Epstein-Barr Virus (EBV) seropositivity, or as a side effect of the immunosuppressive drugs used to prevent graft rejection. The risk of developing non-Hodgkin Lymphoma after transplantation is increased 6-fold. Monoclonal late-onset PTLD (more than 2 years after transplantation) have worse prognosis. Since Post-solid-organ-transplant BL (PSOT-BL) is an extremely rare occurrence, presented only with isolated case reports and small-scale studies, we wanted to present our approach in the diagnosis and treatment of a patient with BL following a liver transplant.
Our patient is a 45year-old male with a long-standing history of post-hepatitis B cirrhosis, esophageal varices and splenomegaly, treated with Lamivudine and Ursodeoxycholic acid. A liver transplant and splenectomy were performed due to progressive splenomegaly and thrombocytopenia. The patient was given prophylactic and immunosuppressive therapy, including Tacrolimus and Mycophenolate-mofetil as part of the transplantation protocol. After the procedure, regular checkups were performed. Six years later, the patient was admitted with diarrhea, followed by obstipation and bloody stool. Ultrasonography, colonoscopy and abdominal CT were performed with findings of a neoplastic mass in the caecal region, as well as enlarged regional, retroperitoneal, paraaortic and paracaval lymph nodes. Further immunohistochemical staining of the bioptic material were consistent with Burkitt's lymphoma. The PET/CT showed involvement of the caecal wall (SUVmax=35.3),subdiaphragmic, peritoneal, paracaecal, prevertebral, paracaval and interaortocaval region. Bone marrow biopsy was performed, excluding bone marrow involvement. The patient was administered three cycles of immunochemotherapy (R-CHOP) with additional intrathecal Methotrexate, Cytarabine and Dexason. The immunosuppressive and antiretroviral therapy was not discontinued. The patient was discharged in good condition. The follow-up PET/CT confirmed complete remission. Keywords: Burkitt Lymphoma, BL, Post-transplant lymphoproliferative disorder, PTLD, Tacrolimus

A case report of gastric adenocarcinoma presenting with superior vena cava syndrome

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Our patient was a 41-year-old Iranian man with no history of specific diseases. The patient came to the hospital with symptoms of swelling of the face and neck, dilation of neck veins, cough, shortness of breath, orthopnea, swelling of the upper limbs, swelling around the orbit, and facial redness. The patient's symptoms developed within a week and worsened on the day of visit, and he was hospitalized with the initial diagnosis of superior vena cava syndrome. The patient's vital signs were unstable on arrival. He was treated with high-dose dexamethasone and special cardiac and pulmonary care. On examination, the patient had generalized lymphadenopathy. biopsy was performed on the patient's neck lymph nodes, the result of which was reported to be metastatic carcinoma with neuroendocrine morphological characteristic. In the patient's lab tests, white blood cells were 16,700 with 81% neutrophils, hemoglobin 13.2 and platelets 261,000. Liver enzymes were normal. In the examination of tumor markers, CA19-9 was reported above 1200.Chemotherapy drugs were started for the patient and at the same time an endoscopy evaluation was done. In the endoscopy, there was a mass in the body of stomach and the pathological result was gastric adenocarcinoma. The patient was a candidate for dialysis due to severe respiratory distress, severe pleural effusion, pericardial effusion, increased creatinine, and decreased urine volume, and the patient died due to blood pressure drop and cardiorespiratory arrest.

Key words: Superior vena cava syndrome, adenocarcinoma, gastric, lymphadenopathy

Thyroid: an unusual hiding place for sarcoidosis

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Sarcoidosis is a multisystemic inflammatory disease characterized by the presence of non- caseating granulomas. Whereas they are most likely to occur in the lungs, also the skin, joints and eyes can be affected. Thyroid involvement is rare, with prevalence of 1-4% cases reported so far. It can manifest as gradual gland enlargement, multinodular goitre and to cause hypothyroidism, hyperthyroidism or euthyroidism.
A 62-year-old male patient presented with voice changes and neck swelling on the right side, for which ultrasonography and biopsy were performed. The ultrasonography revealed a 13mm nodose formation on the left lobe of the thyroid, which formation alongside the swelling were biopsied. The neck mass histopathology results showed oedema Reinke, whereas the report for the thyroid node showed thyroid sarcoidosis. The patient was found clinically and biochemically euthyroid, alongside the negative thyroid antibodies. He was followed in the coming years and was found to have developed CKD (elevated waste products and calcium), HTA and pulmonary sarcoidosis- confirmed on X-ray, CT scan and bronchoscopy. After 13-year follow up, the patient is stable and taking his pulmonary sarcoidosis therapy. Thyroid sarcoidosis is rarely diagnosed in living patients with systemic sarcoidosis. To date, only 65 cases with systemic sarcoidosis with thyroid involvement have been reported. Some patients may experience thyroid-related symptoms, whereas others may be asymptomatic. To make the final diagnosis, besides blood tests, ultrasound and scans, a pathological examination of a tissue biopsy specimen showing non-caseating epithelioid granuloma is required. Regardless of the low prevalence of thyroid sarcoidosis, it should not be overlooked hence it is a part of a systematic disease that should not be left untreated.
Key words: thyroid sarcoidosis, systemic sarcoidosis

Double trouble – Left-sided infective endocarditis affecting both aortic and mitral valve

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Infective endocarditis (IE), with a mortality rate reaching up to 20%, is a condition that can often be misdiagnosed due to its variable clinical presentation. Patients at greatest risk are those with present heart valve disease, previous cardiac surgery, congenital disease, and intravenous drug use. Diagnosis is made using the Duke criteria.
We present a case of a 28-year-old man with symptoms starting three months before admission, that was diagnosed in our clinic with left-sided IE of both aortic and mitral valves. The transthoracic echocardiography on admission showed a dilated left ventricle (left ventricular end-diastolic dimension LVEDd 60mm) with increased volumes due to volume overload. Big and mobile vegetation was noted on the mitral valve (18x15mm) causing severe mitral regurgitation. Another large vegetation (12x5mm) was also present on the aortic valve, causing moderate aortic regurgitation. Blood culture came positive for Streptococcus viridians.
The treatment is either with aggressive antibiotic therapy or surgery. Indications for early surgery are heart failure symptoms, left-sided IE caused by Staphylococcus aureus (S. aureus) or another high-resistant microorganism, persistent bacteriemia or fever despite antibiotic therapy, recurrent emboli, and mobile vegetation bigger than 10mm. The patient was immediately referred for surgical replacement of both valves.
Keywords: infective endocarditis, Streptococcus viridians, surgical valve replacement

Introducing a 32-year-old female patient with POEMS syndrome

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A 32-year-old female patient with a history of hypothyroidism who started complaining of pelvic pain about a year ago. His pain was bilateral, but it was more severe on the right side, the patient also complained of feeling weak in the lower limbs. She has a history of vitiligo after pregnancy 6 years ago. In addition to vitiligo, the patient has had painful skin lesions in the form of purulent and hemorrhagic folliculitis in the upper limbs and lumbar region. Associated symptoms include loss of appetite, weight loss of about 6 kg in the last 6 months, night sweats, bone pain, feeling of muscle weakness, and lameness of the right leg. The patient's menstrual period has been irregular. In the examination she was alert and oriented. The described skin lesions were evident. The patient's vital signs were normal. Heart and lung examinations were normal. Muscle forces of the upper and lower limbs on both sides were decreased. DTR of upper and lower limbs is reduced. In the initial tests she has hemoglobin: 8, leukocytosis and thrombocytosis with ESR 98. Creatinine was 0.6; calcium 10.1 and INR 1.5 were reported monoclonal gammopathy was reported in serum protein electrophoresis and consistent with plasma cell neoplasm in bone marrow biopsy. Hepatosplenomegaly was reported in ultrasound. In MRI, periosteal reaction was reported in the anterior surface of the sacrum and bilateral iliac. Finally, with the diagnosis of multiple myeloma in BMA/B, the patient underwent chemotherapy with Velcade, zomata, dexamethasone chemotherapy regimen, and due to polyneuropathy, organomegaly, hypothyroidism, multiple myeloma, and skin lesions, the diagnosis of POEMS syndrome was confirmed for the patient.
Key words:
Polyneuropathy, organomegaly, endocrinopathy, Multiple myeloma, vitiligo

Myocardial infarction triggered by bee sting – Kounis syndrome

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One of the most common causes for morbidity and mortality in the world is acute myocardial infarction (AMI). Various factors contribute for myocardial infarction to be so prevalent. Kounis syndrome is condition where the acute myocardial infarction is caused by an allergic reaction of the patient to food, drugs, substances, insect venom etc.
62 year old patient comes to the emergency room with dyspnea, redness on his face and fatigue. He was complaining that he had a bee stings shortly before the symptoms started. From comorbidities, that patient has diabetes mellitus type 2. He is somker, he has no allergies to drugs and food but he was alergic to bee stings in the past. The patient recieved corticosteroid, antihistaminic and oxygen therapy and few minutes after that he started complaining on severe chest pain. STEMI was confirmed in this patient right after performing the ECG. The patient was transported to the nearest cardiovascular center where he underwent coronarography. 95% stenosis and intramural thrombus in the left anterior descendent coronary artery (LAD) were evidenced during the coronarography. Stenting was performed and the patient continued with the necessary cardiovaslucar care. The day after the coronarography, echocardiography was performed and the ejection fraction of the left ventricle was 45% with hypokinesion of the apex of the septum, apex of lateral and posterior wall.
Kounis syndrome even though it is something that is rarely mentioned, it is not so rare. It is potentially deadly condition and it is very important to recognize it and treat it appropriately. Doctors should put Kounis syndrome in the differential diagnosis in appropriate patiens and they should always exclude it before they start the treatment.
Key words: Acute myocardial infarction, Kounis syndrome, allergic reaction to bee sting.

Possible acquired 5q deletion in patient with heterozygous thalassemia

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A 55-year old woman with a heterozygous form of beta thalassemia needed red blood cells transfusion for symptomatic anemia. Blood analysis showed very low Hgb, low red blood cell count,normal count of leukocytes and platelets, MCV 84, elevated SeFe levels, elevated LDH, normal levels of vitamin B12 and elevated ferritin levels. The peripheral blood smear revealed normal number of differentiated leukocytes. Hystopatological analysis of the bone marrow aspirate indicated slightly unevenly increased cells, mild megaloblastic maturation of the erythroid lineage cells, slightly increased number of the lymphocyte population with expression of CD 20+, CD 3+, polulation was CD 34 – and CD 117 + , findings in addition to refractory anemia (RA). The molecular findings of the bone marrow aspirate pointed absence of deletions and duplications in the chromosomal regions: chr3, 7q, 11q, 12p, chr17, chr19, 20q and chrY, absence of JAK2 V617F mutation and possible 5q deletion (on the edge of detection). Myelodisplastic syndrome(MDS) with 5q deletion is a rare type of MDS. The revised international prognostic scoring system (R-IPSS) is the most common toll used to predict long term outcome in the patiens with MDS. Results showed low risk, based on the risk of mortality and transformation to acute myeloid leukemia (AML). To establish a definitive diagnosis of MDS with 5q deletion, cytogenetic analysis is essential diagnostic toll. As we are waiting for the results of the cytogenetic analysis, treatment option is chelated iron 350g once a day.
Key words: heterozygous thalassemia, 5q deletion, MDS, cytogenetic chromosomal analysis.

Opioid overdose or other somatic comorbidity - fatal case

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The aim of this case presentation is to emphasize the diagnostic challenges that the clinicians encounter when dealing with a comatose patient and the importance of keeping a broad differential diagnostic panel in mind.
Case report: A 47-year-old female patient, was brought by ambulance to the University Clinic for Toxicology in Skopje. On admission, she was comatose (GCS=5), with miotic isochoric pupils, blood pressure was 90/60 mmHg, with oxygen saturation from 85 up to 92%. The obtained data from family indicated that the patient was with opioid use disorder on methadone maintenance therapy. Recently, the patient has consumed large amounts of alcohol . The family's suspicion was that perhaps the new condition was caused by excessive intake of alcohol or methadone or both. In the meantime, the result of alcoholemia showed 67.0 mg/dL (value <100mg/dL-low level) and the toxicological screening in urine sample for tetrahydrocannabinol, opiates, tramadol, amphetamine, 3,4-methyl-enedioxy-methamphetamine, cocaine, benzodiazepines, buprenorphine was negative with mildly elevated methadone values (the patient was on methadone substitute the last 7 years). Second day on physical examination a brisk response to deep tendon reflexes of the left side of the body with apparent right hemiplegia was noted. Computed tomography of the brain was performed immediately and showed an ischemic stroke with a compressive effect on the left lateral chamber. Although it was immediately started with an aggressive treatment, after 11 days the condition of the patient deteriorated and resulted in death.
Conclusion: The notable opioid prevalence,mandates that physicians maintain a high index of suspicion when dealing with a comatose patient, especially if the patient has any known history of opioid abuse. Healthcare professionals should be aware that a comatose state in a patient could be caused by either non-toxicological trigger or by toxic causes.
Key words: alcohol, methadone, ischemic stroke, coma

Challenges and opportunities in diagnosing and treating roemheld syndrome, why it is overlooked in clinical practice? A case presentation and resident point of view

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Roemheld (Gastrocardiac) syndrome, is a rare condition which pathophysiological mechanisms are not fully understood. The most accepted mechanism is the involvement of the stomach which can trigger palpitations by stimulating heart muscles, while also activating the vagus nerve and slowing down the heart rate.
Male at age 32, presented at the clinic with palpitations, shortness of breath, and flatulence, 30 minutes before the examination and it's the fourth event repeated in the past month, but tonight with prolonged duration about approximately 2 minutes. ECG showed a sinus rhythm with 94 bpm, blood pressure 126/84 mmHg. High sensitive troponin, d-dimers and CBC were examined, findings all at the normal range. Ultrasound of the heart was also performed without any abnormalities. After all, patient was assigned for holter ecg for 24 hours, which was interpreted as sinus rhythm at the monitoring period with a PVC burden accounted for 5.9% (5174 beats), mostly single monomorphic and some couplets and 2 cycles of bigeminia. Registered were also 1805 (2,1%) SVES and a supraventricular run of more than 5 complexes with a rate of 150 bpm.
After all cardiac examination were done the patient was sent to gastroenterologist, who prescribed the combination of butyric acid, bifidobacterium and fructooligosaccharides. According to the subjective symptoms, patient reduced significantly palpitations after three months with a significant reduction of the ectopic ventricular and supraventricular beats.
In patients where are excluded structural and functional cardiac abnormalities, Rhoemheld syndrome should be considered.
Key words: Gastrocardiac syndrome, extrasystoles, supraventricular tachycardia, vagus nerve, palpitations

Scrofuloderma - a rare but serious diagnostic challenge

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Scrofuloderma is an extrapulmonary form of tuberculosis (TB) that affects the skin and is statistically belons to rare forms of tuberculosis. It is caused by the direct spread of infection from an adjacent endogenous tuberculous focus (usually from an underlying tuberculous lymphadenitis). In this case report, we present an 80-year-old patient with scrophuloderma who was initially examined at the Clinic for Rheumatology and the Clinic for Hematology, observed for lymphoma. Due to changes in the skin of the neck, which date back several months, the patient was referred to the outpatient department of the Institute for Pulmonary Diseases and Tuberculosis. Physical examination revealed multiple tumor formations on the left side of the neck, and a swab was taken from the fistulized one. An ultrasound examination and a CT scan of the neck region revealed several pathologically changed lymph nodes, the largest of which was 17 mm in diameter. Microbiological analyzes of the swab sample did not identify acid-fast bacilli (AFB) by fluorescence microscopy, but liquid and solid culture gave a positive result and identification of Mycobacterium tuberculosis (MTB). After the surgical removal of one of the lymph nodes, the pathohistological findings showed features of chronic granulomatous inflammation, and microbiological analyzes confirmed the tuberculous process in the excised lymph node (smear positive fluorescence microscopy for AFB, Loewenstein-Jensen culture isolate, with chromatography identification positive for MTB, and GeneXpert MTB/Rif positive result for MTB - rifampicin sensitive). After the diagnosis, an intensive phase of antituberculous therapy - consisting of 4 first-line drugs - was initiated. With regular therapy, an excellent response was achieved with regression of the enlarged lymph nodes on follow-up (clinically, with ultrasound and CT scan examination), and clinically improved general health condition of the patient.
Keywords: tuberculosis, scrofuloderma, antituberculotics

Severe systemic toxicity after intravenous administration of metamizole and ceftriaxone in a splenectomised patient-case report

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Drug-induced toxicity can have a mild to severe clinical presentation as a life-threatening condition. We presented a case with a general vasculitis and severe multi-organ failure in a splenectomised middle-aged woman, which developed after ceftriaxone and metamizole parenteral administration. A middle-aged woman was treated with IV metamizole and ceftriaxone for a fever and soar throat in a local hospital. She had a post traumatic splenectomy 5 years ago. After metamizole, during ceftriaxone administration she felt burning in her face with maculo-papulose rash which started to conflate, spread to whole body and intensively darkened. She was transferred to the University Toxicology Clinic with a hypotension, hypoxemia, generalized necrotic vasculitis with predominant facial distribution. There was increased values for CRP (250 mg/l), WBC (27x10^9/l) and LDH (1867 U/l) during hospitalisation. She also presented anaemia (Er 2.6x10^12/l, Hgb 88 g/l, Hct 0.24), polyserositis-ascites, pleural effusion and mild pericarditis (high sensitive troponin 107 ng/l), acute pancreatitis (amylase 1048 U/l, lipase 881 U/l), hepatomegaly, acute kidney injury (BUN 36.5 mmol/l, creatinine 528 µmol/l, oliguria), disseminated intravascular coagulation (Plt 23x10^^{9}/l, DD 7658ng/ml, PT 56 sec, aPTT 120 sec), vitreous haemorrhage of the right eye and rhabdomyolysis, CPK 428U/l. Microbiological findings were negative. Immunoserology showed positive p-ANCA. The acute renal failure, ascites and pleural effusions resolved under methylprednisolone, meropenem, LMWH, haemodialysis and symptomatic therapy, with normalization of laboratory parameters. A skin biopsy finding was inconclusive. After 25 days, rheumatologist recommended mycophenolate mofetil PO. She was asymptomatic with prednisolone and mycophenolate mofetil therapy during following two years and maintained stable after their discontinuation.
Drug-induced toxicity have potential to induce a severe multiorgan failure with life-threatening complications. Splenectomy may be studied as a potentially risk factor for immunomodulated response to drugs and drugs interactions, especially during infections.
Key words: drug-toxicity, vasculitis, p-ANCA, multiorgan failure

Pediatrics

Congenital syphilis

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Syphilis is a sexually transmitted bacterial infection that in many cases is asymptomatic or unrecognized. According to WHO data, every year about 1 million pregnant women are infected with syphilis. 67% of pregnant women infected with syphilis are untreated or inadequately treated, lot of them end up as fetal death, neonatal death, preterm birth or with clinical signs of congenital syphilis. 70% of syphilitic children are born without symptoms.
Male newborn was born spontaneously at 38 gestational week, with body weight 2470 g and Apgar score 7/8. It was first irregularly controlled pregnancy of the mother, with meconial amniotic fluid and high-risk epidemiological survey. On delivery the newborn was with visible changes on the skin, hands and feet, with respiratory distress. It was isolated on suspicion of congenital syphilis, investigations were performed according to protocol. The obtained results showed high inflammatory parameters with thrombocytopenia and mildly elevated liver function tests with direct bilirubin. Serological studies showed RPR 1: 64, aHCV HIV, HBS Ag with negative finding, PCR - treponema pallidum DNA present, TPHA Titar 1:2560 (1:80). On chest X-ray - finding of massive consolidation. Ophthalmological examination in addition to chorioretinitis. The mother had an elevated antibody titer. The third-generation cephalosporin therapy and oxygen support was immediately started. After 72 hours of birth, in stable condition, the newborn was transferred to the Clinic for Children's Diseases
Congenital syphilis is on the rise, but it can be prevented by changing the behavior and regular controls during pregnancy. Sexually transmitted infections represent a burden on the budget and public health even in highly developed countries.
Key words : sexyally transmitted infections , syphilis congenital

Lung apscess as a complication of pneumonia in 18-month-old child

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Pulmonary abscess is a lung infection which destroys the lung parenchyma leading to cavitations and central necrosis in localized areas. It can be primary or secondary.
We present the case of an 18-mounth-old male child admitted to our clinic with high fever and dyspnea. Laboratory tests revealed elevated inflammatory biomarkers. Before the admission a bronchoscopy was conducted because of a suspected foreign body aspiration; which resulted as negative. After being hospitalized, despite the prescribed antibiotic therapy, a CT scan of the lungs and an ultrasonography of the pleura were performed resulting in a pleural effusion and bloodcoulture was negative. An indication was given to place a thoracic drain to the pediatric surgery. The child was transferred to our clinic.After conducting microbiological, pathohistological and biochemical analysis of the punctate, which were with negative findings. After seven days an X ray was carried out, which made an indication to remove the thoracic drain. The next day the health condition worsened caused by dyspnea. The X-ray of the lungs results revealed a partial pneumothorax on the left side. The child was again transferred to pediatric surgery, where a CT scan of the lungs was performed resulting in empyema and an abscess of the left lung. Open thoratocomy and decortication was performed.After the surgeal intervention,the condition improved.
Radiological methods play a key role in a making the diagnosis.Appropriate antibiotic therapy provides an excellent recovery outcome.
Keywords: pulmonary abscess, pulmonary CT scan

Managing Anemia in a Patient with Sotos Syndrome in Primary Care

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The aim of this case report is to demonstrate the benefits of antianemic drugs containing iron, vitamin B12, folic acid, and vitamin C, compared to drugs containing only iron (administered concurrently with vitamin C). Additionally, it aims to illustrate the role of the general practitioner in the treatment and management of a patient with Sotos Syndrome.
A two-year-old female patient diagnosed with Sotos Syndrome and persistent anemia presents to the office accompanied by her mother and grandmother due to loss of appetite. Physical examination reveals typical features of Sotos Syndrome including gigantism, macrocephaly, a prominent forehead, and an elongated face, as well as pale discoloration of the skin. Systemic assessment shows normal results. The patient was born via Cesarean section at 39 weeks gestation with APGAR scores of 7/8/8. The patient's mother also has Sotos Syndrome. The patient still lacks independent walking ability and exhibits delayed speech development relative to her age. She resides in a household with six individuals and a low socioeconomic status. Our office has been managing her care since she was three months old, when a severe anemia with a hemoglobin level of 84 g/L was detected. Initially, treatment comprised dextriferron drugs and vitamin C. However, due to unsatisfactory results after three months, we transitioned to ferrous bisglycinate chelate therapy, containing iron, folic acid, and vitamin B12. Three months into this regimen, a notable improvement was observed, with hemoglobin levels rising to 104 g/L. Our persistent efforts to facilitate effective communication and provide guidance on proper nutrition have played a crucial role in attaining these favorable results.
Keywords: Sotos Syndrome, anemia, antianemic drugs.

Case report: Exercise induced hematuria

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Exercise-induced hematuria is a benign condition in which blood appears in the urine after some type of physical activity. The incidence is 1.3 in 1000 children[1].
Retrospectively we studied the case of a three-year-old male patient presenting with hematuria. Three months before, the patient had a polytrauma caused in a car accident. After he was stable, he was treated with aggressive physical therapy.
The reason for hospitalization was presence of blood in the urine, which appeared a few days after physical therapy and retreated spontaneously after 2-3 days several times. We obtained a finding of high values of protein, creatinine and blood in the urine. The SDS PAGE test confirmed non-selective glomerular proteinuria and hematuria with a high concentration of albumin, transferrin and IgG fraction. The values of the 24 hour- proteinuria test were slightly higher. We also isolated ESBL-positive Klebsiella Pnenumoniae. The cyanide-nitroprusside reaction, the abdominal CT and UT ultrasonography were without any pathological signs. After a few days of rest at the hospital, a urine sample was sent for evaluation at the Institute for pathology to examine the morphology of the red blood cells, but no presence of blood elements was found. The patient was treated with venous antibiotics and proper hydration.
After the therapy and some rest, we observed a correction in the values of specific serum and urine markers and absence of hematuria. After being discharged from the hospital, the patient's urine was examined twice a week (once after exercise and once after rest) and the findings confirmed the association between physical activity and blood presence in the urine. In cases where there isn't any local trauma, exercise-induced hematuria usually resolves within 24-72 hours of rest after the physical event. In those cases, no specific treatment is necessary.[2]
Keywords: macroscopic hematuria in children, exercise-induced hematuria

Wilson's disease: Case report of a 11- year old child with rare mutation in ATP7B gene.

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Wilson disease is a rare autosomal recessive disorder with a reported prevalence of 1:30,000– 50,000. WD is caused by a mutation in the efflux copper transporter ATP7B, which leads to toxic accumulation of copper in several organs, particularly in the liver.
This case aims to highlight the clinical, laboratory, and genetic characteristics of this disease in the pediatric population and emphasize the importance of proper diagnosis and management, for a positive health outcome.
This case report represents the actual scenario of an 11-year-old child who was admitted to our clinic complaining of recurring abdominal pain that was present for more than 2 months, along with dysuria and nausea. The used diagnostic methods in this case were extended laboratory investigations, microbiological analysis of urine and stool, abdominal ultrasound, and computed tomography of the abdomen *(CT).* In addition, genetic testing for Wilson's disease including WES, became part of the diagnostic approach.
The isolated genetic assessment was insufficient because this type of genetic variation did not include the most common known mutations. The diagnosis was confirmed by genetic analysis that included whole exome sequency.
Pathogenic mutations on the ATP7B gene prevent copper excretion leading to copper overload in hepatocytes, the release of excess copper into the circulation, and secondary pathological accumulation in tissues, particularly in the liver and central nervous system. If left undiagnosed, both liver and neurological dysfunctions are irreversible.
Keywords**:** *ATP7B* gene, Ceruloplasmin, Wilson disease

Unmasking Hidden Causes: Pica-Related Total Right Lung Atelectasis in a Pediatric Patient

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Atelectasis can affect individuals of all ages, while it presents unique challenges in the pediatric population. On the other hand, "pica" is common in children, characterized by the persistent ingestion of non-nutritive substances and it is frequently linked to nutritional deficiencies, like iron deficiency anemia.
A nearly two-year-old male child with clearly noticeable pale skin discoloration, along with slight difficulty breathing and cough, was admitted to the hospital. Upon auscultation, the right lung revealed a weak to undetectable breathing, indicating a potential presence of pneumonia in the right lung. The mother did not initially provide information regarding suffocation or any suspicion of a foreign body aspiration. At chest radiograph finding a complete right hemithorax atelectasis with ipsilateral mediastinal shifting and left lung herniation was seen. Laboratory revealed the presence of leukocytosis, elevated inflammatory markers, and a severe iron deficiency anemia. At CT scan in the lumen of the right main bronchus in the proximal part, a heterodensity of about 1 cm in length was observed without a clear distinction between the wall as well as the surrounding structures. During a subsequent conversation about the child's behavior, it was revealed that the child recently exhibited a behavior of eating pieces of a sponge. With flexible bronchoscopy a foreign body in yellow color was visualized in the right main bronchus, witch completely obstructed the lumen of the right bronchus. The entire foreign body of a piece of yellow-colored sponge with a length of about 2 cm was extracted from the primary right bronchus with rigid bronchoscope.
After foreign body extraction a full right lung reaxpancion at the control x-ray was seen. A follow-up appointment to assess lung function and monitor the anemia was scheduled following the hospital discharge.
Conclusion: Diagnosing and managing lung atelectasis in children requires prompt recognition and appropriate management to prevent complications.
Key word: Atelectasis, Pica, Foreign body aspiration, Anemia

Coinfections of Mycoplasma pneumonia with Influenza virus

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Co-infections with common bacterial respiratory pathogens and germs viruses are well-known causes of high morbidity with increasing hospital admission and more severe symptoms due to synergistic interactions among viruses, bacteria and the human host. However, in the literature relatively little is known about the interactions between atypical bacteria and Influenza viruses. We present the case of simultaneous infection with Influenza viruses and Mycoplasma pneumonia. 14 year old boy was referred to our clinic with a three days fever and persistent dry cough that has lasted for more than a week, and followed by shortness of breath in the last couple of days. His physical findings were consistent with pneumonia, confirmed by the bilateral paracardial pulmonary consolidation seen in the chest radiography. Laboratory studies showed mildly increased inflammatory markers. The serological analyses showed a positive IgM for Influenza A, B and Mycoplasma pneumonia. Treatment was carried out with parenteral antibiotics therapy with a third-generation cephalosporin and an oral Macrolide. The fever lasted for 48 hours, on the 4-th day the patients physical condition gradually improved. The cough subsided on the 10-th day stay. The patient recorded a slow regression of the pulmonary findings but his control chest x-ray was normal. This case highlights the possibility of a mixed respiratory infection in patients that present with a persistent cough accompanied with high fever and shortness of breath, which should always give high suspicion for atypical pathogenic agent complicated with virus infection.
Key words: child, pneumonia, co-infection, mycoplasma pneumoniae

The struggle against Covid-19 persists

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University Children's Hospital Campus Mother Theresa

It has been almost one year since it was announced by the World Health Organisation (WHO) that the COVID-19 pandemic is over, but is it over? Nowadays, we are facing many comorbidities and complications, not only in adults but in pediatric patients. Since the beginning of the pandemic worldwide, we have been facing a growing prevalence of many diseases. Pancreatitis is an inflammatory disease of the pancreas, considered very uncommon in pediatric patients. But since the beginning of the pandemic, acute, recurrent and chronic forms of this pathology have been increasingly diagnosed in pediatric patients. The pathophysiology has been proposed, and it involves the expression of angiotensin-converting enzyme 2 (ACE2) in both exocrine glands and islet cells of the pancreas and the affinity of SARS–CoV2 to ACE2.

This report is about five a 5-year-old boy who has been hospitalized at the Intensive Care Unit since November last year (2023). The patient was transferred from the department of gastroenterohepatology in a severe condition with desaturation up to 60%, febrile with perioral cyanosis in unconsciousness, anisocoria present. During the stay, the patient is unconscious and in highly severe general condition with hypothermia, Kussmaul breathing, macrohematuria, an appearance of hemorrhagic syndrome, and sepsis. There has been realised set of biochemical analyses, computed tomography of the head, abdomen and chest, electroencephalogram, and lumbar puncture. According to the results of the realized analyses the patient is diagnosed with acute pancreatitis, non-infective gastroenteritis and as a complication coma cerebri.

The patient has been multidisciplinary taken care of at the Intensive care unit and is all vital functions of the patient are currently monitored, expecting improvement of his condition and adjustment of the therapy.

Keywords: acute pancreatitis, post-COVID complication, coma cerebri

Neonatal cholestasis as the presenting feature in cystic fibrosis

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We present a premature male newborn, 23 days old, born at 30+1/7 gestational weeks, is the second twin from a second high-risk twin pregnancy (during the 22nd gestational week, the first twin's amniotic fluid ruptured). He was referred to the University Children's Clinic due to neonatal cholestasis. On physical examination, icteric discoloration of the skin and sclera was observed. Standard biochemical analyses revealed hyperbilirubinemia of the direct type, hypoproteinemia, hypoalbuminemia, and anemia, prompting a range of investigations according to the protocol for cholestasis (including metabolic screening, TORCH, ceruplosamine, all yielding negative findings), and magnetic cholangiopancreatography due to prolonged cholestatic jaundice. During the stay, a result obtained from neonatal screening of two drops of blood showed elevated IRT values. Subsequent genetic molecular analysis revealed the F508 del/G542X genotype, inherited by one copy from the mother and one from the father, confirming the diagnosis of a double heterozygote suffering from cystic fibrosis. Pancreatic enzyme replacement therapy, fat-soluble vitaminas, hepatoprotective therapywere initiated and antibioticinhalationsdue to a primary infection with Pseudomonas aeruginosa. Nutrition was provided with a hydrolyzate formula, and parenteral antibiotic therapy was introduced based on results obtained from tracheal aspirate analysis. Regular control examinations are conducted every month, showing progress in body weight, and oral antibiotic therapy was introduced depending on positive results obtained from tracheal aspirate analysis
Keywords: Cystic fibrosis; cholestatic jaundice; newborn screening; immunoreactive trypsinogen (IRT); genetic analysis

Pneumonia with bilateral atelectasis in children

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This case report aims to explore the clinical characteristics, treatment, and prognosis of Mycoplasma pneumonia complicated with atelectasis in children.
Profound laboratory, microbiological and radiology investigations were performed in order to diagnose and treat the condition. The patient was treated with parenteral antibiotics, corticosteroid and inhalator therapy as well as manual thoracic percussion.
After 10 days of hospital treatment of the patient, his physical, auscultator and radiology findings were resolved and he was discharged. Follow-up was continued in the next month after dismissing and he recovered completely.
Atelectasis is often serious complication of pneumonia in children, especially when Mycoplasma pneumoniae is isolated. Therefore early diagnosis and treatment of atelectasis and long-term follow-up on respiratory function and structure is necessary to prevent further complications.
Keywords: Atelectasis, pediatrics, pneumonia, Mycoplasma pneumoniae, complications

Benign Episodic Unilateral Mydriasis (BEUM) in a 12 year old girl

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BEUM linkage with the migraine complex is widely described in literature.The true etiology remains enigma,although few mechanisms are suggested.Unilateral mydriasis on the other hand, is always a warning sign for the clinicians.
A 12 year old girl was urgently brought to the Pediatric department, with anamnesis of severe headache, vomiting,irregular speech and weakness of the left extremities.Symptoms started 3 hours earlier, without a known provocative factor.She had previous headache episodes (1-2 per year), only accompanied by vomiting.She had no recent sickness or head trauma. Both parents suffer from headaches.The examination revealed upset, aware and well oriented patient,responsive to orders.She was tachycardic,normotensive, with regular breathing sound on auscultation and soft abdomen palpatory.Neurologicaly, the patient was dysartric,with left mydriatic pupil, unresponsive to light.The right pupil showed proper light response and size.Cough and gag reflexes were preserved.There was a decreased muscle strength of the left upper extremity and the left half of the face, while the left leg and the right extremities were functional (muscle strength and sensibility).She reacted appropriately to pain stimulus while providing a venous access.Meningeal signs were negative.20 minutes later there was a complete spontaneous recovery of the speech, the muscle strength of the face and the left arm. Laboratory findings including:blood count,glucose, enzymes, electrolytes, CRP,urea,creatinine,lipids were in referent ranges, except slightly lower level of magnesium.Basic haemostasis (PT,APTT,TT and d dimers) also showed referent range values.On CT scan there was an age appropriate brain volume and structure.No focal, mass lesions and hemorrhage were detected.Ophtalmological examination did not reveal deviations.The patient was treated with i.v Glucosaline,single dose of i.v famotidine and paracetamol,with good response.Magnesium was oraly suplemented. She was observed for 48 hours maintaining normal neurological status.
Besides the complete reversibility of the condition,further investigations will be considered such as MRI of brain and neck with angiography.
Key words: mydriasis, headache

Neonate with air leak syndrome

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Air leak syndrome is an extra-alveolar accumulation of air, most often resulting from an alveolar rupture with air trapping in the extra pulmonary spaceis and is clinically manifested as pneumothorax, pneumomediastinum, subcutaneous emphysema, pneumopericardium and pneumoperitoneum. Pulmonary air leak is noticed more frequently in the neonatal period than at any other time of life. Risk factors of air leak sy occurrence are prematurity, respiratory distress, meconium aspiration, and sepsis.

We present case of a premature neonate with respiratory distress and neonatal sepsis as a risk factors for air leak syndrome manifested with pneumothorax, pneumomediastinum and subcutaneous emphysema. The neonate was put on non-invasive mechanical ventilation because of the clinical and radiology signs of respiratory distress. Due to worsening of the condition with dyspnea and decreased saturation, chest X -ray was performed, where air leak syndrome was noted (pneumothorax and pneumomediastinum) and thoracic drain was placed and the neonate was put on invasive ventilation.

Diaphragmatic hernia was also considered as a differential diagnosis, but after performing additional imaging diagnostics (intestinal passage and CT of the chest) it was excluded. Because of clinical and laboratory sings of neonatal sepsis the newborn was put on empiric antibiotic therapy.

Timely diagnosis and appropriate therapy of the pneumothorax with thoracal drenage placeing, could improve the treatment and outcomes of air leak syndrome in neonates with respiratory distress.

Key words: neonate, air leak syndrome, pneumothorax, pneumomediastinum

Meconium ileus as an early manifestation of cystic fibrosis

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A three-day-old newborn, delivered via cesarean section at 36 weeks gestation, weighing 2180 grams and measuring 46cm in length, presented with symptoms of meconium ileus and was referred to the Children's Surgery Clinic. A supraumbilical transverse exploratory laparotomy was performed, during which part of the ileum was resected, and a bipolar ileostomy was created.During the stay, neonatal screening was performed, showing a normal IRT value.Due to suspicion of Cystic Fibrosis, the infant was transferred to the Cystic Fibrosis department. Following a brief stay due to respiratory insufficiency, the infant was moved to an intensive care and therapy unit and put on invasive mechanical ventilation. Subsequent genetic testing revealed a genotype of F508del/G542X, with one copy inherited from each parent, confirming the patient as double heterozygous for Cystic Fibrosis. Pancreatic enzyme replacement and fat-solubile vitamin therapy were initiated. Given the diagnosis and lack of weight gain progress, a protein hydrolyzate diet was introduced. After conducting regular tracheal aspiratcontrolsand identifyinga positiveisolate for primary Pseudomonas aeruginosa infection, regular inhaled antibiotic therapy was incorporated into the treatment regimen following a protocol. The patient underwent multiple hospitalizations with a multidisciplinary approach. At seven months of age, the child was readmitted to the Children's Surgery Clinic for small intestine ileostomy occlusion. Regular monthly check-ups were conducted, noting improvements in weight gain, and oral therapy adjustments were made based on routine tracheal aspirate controls. At one year of age, the child remains in stable general condition with satisfactory weight gain and appropriate growth and development.
Key words: meconium ileus, cystic fibrosis, ileostomy, genetic analysis

Case report of Transposition of Great Arteries

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Transposition of the great arteries (TGA) is a rare congenital cardiac defect. Main pulmonary artery and aorta – are switched in position, or "transposed", thus creating two parallel circuits incompatible with life.
Male newborn, delivered by Sectio Caesarea, in 41 week with birth weight 3750g, birth length 52cm, APGAR 8/9 (1min/5min). Anamnestically, regularly monitored pregnancy, mother with some risen temperature in the 3rd month, treated with paracetamol, and a urinary infection in the 4th month, treated with an antibiotic. Prenatally, immediately before delivery, a suspicion of TGA was raised during an ultrasound examination. Immediately after birth, the newborn with saturation 60 – 89 - 67%, cyanosis, good tonus, chest - orderly, cardiac action rhythmic, no murmur heard, abdomen at chest level, soft on palpation. Immediately undergo primary resuscitation according to protocol and echocardiographic examination with findings: 4 cavities, IVS, DV, LV-hypertrophy. Based on pulmonary artery and aorta transposition, and their parallel position, d-TGA diagnosis confirmed. Aortic arch is not observed from subcostal position. PDAs and FOA. Newborn was immediately transferred to the Pediatric Cardiac Surgery Center "Acibadem Sistina", where the above diagnosis was confirmed. Administration of Prostaglandin started. After 7 days, an ASO (Arterial Switch Operation) procedure was performed, closing the ASD and PDA. Intervention with an orderly course. In the following days, the newborn is hemodynamically and respiratory stable. On the control echocardiography, the blood vessels at the base, with a neat arrangement and size, IAS – a small residual defect in the region of the Fossa Ovalis. Aortic arch with orderly flow. After 30 days, the newborn was discharged.
Early diagnosis of TGA is very important in newborns. Symptoms are usually noticed during pregnancy, immediately after birth or within a few weeks of birth. Without timely treatment, serious complications or death can occur.

Right lung hypoplasia and dextroposition of the heart

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Lung hypoplasia is a rare developmental disorder with variable amounts of bronchial tree, pulmonary parenchyma and supporting vasculature. It can be associated with dextrocardia due to shifting of the heart to occupy the space left by the underdeveloped lung. We report a case of isolated right-sided lung hypoplasia with dextroposition of the heart without situs inversus. A child from regularly controlled high-risk twin pregnancy, born in 32 gestational week. After birth was on oxygen therapy with nasal cannulas for 3 weeks. CT of the lungs with angiography was performed with the finding of dextroposition of the heart with left aortic arch and small ASD. Right lung hypoplasia, right lower lobe parenchyma was visualized within associated small right pulmonary vein and a diminutive but present right pulmonary artery. Child was up till now relatively healthy in terms of respiratory difficulties. It was admitted to our hospital because of bronchitis probably triggered by infection. On admission, 16 months old girl, afebrile, vitals were stable, on lung auscultation vesicular breathing, weakened on the right, with a slightly prolonged expiration and crackles on both sides. Heart sounds were appreciated on the right side of the chest wall. There was no murmur, thrill or heave. From the performed investigations: elevated inflammatory markers, low serum IgA and IgG values, bacteriologically negative tracheal aspirate, microscopically seen mucus and leukocyte predominance. Chest X-ray hyperinflation without signs of parenchymal consolidation. Heart and mediastinum on the right with dextroposition of the heart. After admission, was on parenteral antibiotic, inhalations with ipratropium bromide and we have observed good clinical response. Caution and vigilance need to be taken in patient with similar symptoms as any chest infections can be life threatening.
Key words: child, dextropostion of the heart, right lung hypoplasia.

The unbreakable will of an extremely premature infant with RDSy and postnatal humerus fracture

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Prematurity remains a global health problem, particular for those born extremely premature. It's a leading cause of infant morbidity and mortality. Survivors are predisposed to complications such as BPD, CLD, HIC, ROP. Furthermore, they are more vulnerable to bone fracture than term infants for numerous reasons, directly or indirectly related to prematurity. In addition, prematurity is associated with learning and motor disabilities, and with visual and hearing impairment, contributing to approximately half of disabilities in children.
A male premature newborn , 26 GW, BW 1100 gr, Apgar 2/4/5 from a 28-year-old mother, second pregnancy, temporal fetal position, delivered through caesarean section. These parameters along with the initial physical examination revealed respiratory distress with irregular respirations, HR-68/min, cyanosis, swelling and ecchymosis on the right upper arm. Samples for laboratory examinations were taken. This clinical course, accompanied by chest X-ray and arm X-ray findings, as well as gas analysis values help establish the clinical diagnosis which goes in addition to RDSy and diaphyseal fracture of humerus. The newborn was intubated, Curosurf was applied endotracheally and placed on SIMV. The arm was treated conservatively with immobilization. Ultrasound examination of CNS revealed HIG gr I-II. The newborn received double antibiotic and antifungal therapy, amp. Konakion and a preload with methylxanthines. After five days, the newborn's condition improved, so the ventilator assistance was discontinued and it was put on nCPAP for the next few days followed by HFNC. On the 31st day of birth, the newborn was already oxygen independent and the fracture was completely recovered, without any neurovascular disorder. We have also implemented Kangaroo care, as a means of promoting maternal-infant bonding and breastfeeding.
Conclusion: Ultimately, since therapy and medical care continue to evolve, the outcomes of VLBW infants are improving, and that has markedly improved survival rates.
Key words: premature newborn, RDSy, diaphyseal fracture of humerus

Intra-abdominal Tuberculous Lymphadenopathy in thirteen years old child

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Tuberculosis (TB) is the most common infectious preventable disease related with high mortality worldwide. After the Covid19 pandemia we have an increased number of children with pulmonary but also with extrapulmonary forms of TB. EPTB is more difficult to diagnose in children especially the intra -abdominal form. Abdominal TB may occur in various forms, as tuberculous lymphadenopathy or peritoneal, gastrointestinal or visceral TB. We present a rare case of 13 years old child with intra-abdominal tuberculous mesenteric lymphadenopathy. The child was hospitalized, following a period of two months of weight loss, with fever, vomiting, malaise and anemia, that did not improve with therapy. Large spectrum of biochemical investigations was done, ultrasound of abdomen, neck and inguinal region, Xray, CT lung and abdomen with contrast, consultations with pediatric hematologist, gastroenterologist, pulmonologist and pediatric surgeon, malignancy was excluded. After getting positive result of Quantiferon and PPD5 (Mantoux test**)** it was suggested from the surgeon not to perform biopsy of the lymph nodes, because of the high risks from complication, so we began with specific antituberculotic drugs to treat intra-abdominal tuberculous lymphadenitis. Tuberculous lymphadenitis can be a diagnostic and therapeutic challenge in children. Treatment with four drug anti tuberculosis regimen was started for two months, then a two-drug regime was continued for 4 months. The child had regular controls, with significant improvement of the intra-abdominal changes in the control CT scan that was performed.

Keyword: Abdominal tuberculosis, child, mesenteric lymphadenitis

Pleuropneumonia with pleural abscess in seven years old child

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A seven-year-old male child was admitted in our university clinic at the Department of Pulmoalergology due to fever, cough, breathing difficulties, and chest pain. Upon admission, we conducted a biochemical analysis revealing elevated inflammatory markers. Chest X-rays and a chest CT scan were performed, indicating pleural effusion. A consultation with a pediatric surgeon led to thoracocentesis, and the pleural fluid was sent for analysis. Result from analysis showed elevated neutrophil granulocytes and lactate dehydrogenase (LDH) with negative microbiological analysis. The child received antibiotic therapy with meropenem and amikacin, along with symptomatic and oxygen therapy. Vital parameters were closely monitored. Laboratory analyses showed decreased levels of proteins and albumins, and hypoproteinemia was addressed. During hospitalization about 550 mL of fluid was evacuated from the thoracic drain. Despite treatment with antipyretics for persistent fever, hemoculture yielded negative results. The PPD test for tuberculosis was also negative. On the second day of hospitalization, the child developed abdominal pain, distension, and diarrhea. A consultation with a gastroenterohepatologist, along with ultrasound investigation, revealed ascites. Coproculture and rotavirus tests were negative, and hypokalemia was corrected with potassium chloride infusion.
As the child's condition worsened with ongoing respiratory difficulties, a pediatric surgeon was consulted again. A chest CT scan with contrast revealed residual pleural effusion and atelectasis in the middle and lower right lobe of the lung. The child was transferred to the Clinic for Pediatric Surgery and underwent surgery for a pleural abscess. Following the procedure, the child's condition stabilized.
Key words: pleuropneumonia, difficulties with breathing, thoracocentesis

Pulmonary arteriovenous malformation: a rare cause of cyanosis in a child

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Pulmonary arteriovenous malformations are rare, abnormal low resistance vascular structures that connect a pulmonary artery to a pulmonary vein, thereby bypassing the normal pulmonary capillary bed and resulting in an intrapulmonary right-to-left shunt. We report a 11 -year - old boy who presented with fatigue, cyanosis since the age of 10. Computed tomography pulmonary angiogram showed a large pulmonary arteriovenous malformation (PAVMs) at the left and right lung. Most of the multiple arteriovenous malformations were occluded with Amplatzer vascular plug. He is now still cyanotic, with blood oxygen saturation of 88%. A 11 -year -old boy presented with fatigue, decreased exercise tolerance and cyanosis occurring 10 months before the diagnosis. There was no chest pain, palpitations, or neurological symptoms. On the skin on the hands and legs, 5 vascular stigmata-hemangiomas were seen. He was cyanotic with pulse oximetry of 75% on room air. Complete blood count revealed polycythemia. Chest radiograph showed a homogeneous soft tissue mass of the both lungs. Transthoracic echocardiography showed normal cardiac structures with no evidence of pulmonary hypertension. Computed tomography pulmonary angiogram showed a large pulmonary arteriovenous malformation of the right and left lung. Transcatheter pulmonary angiogram was perform twice and showed a large arteriovenous malformation in the both lungs with a feeding vessel bigger of 2 mm and few small left lung arteriovenous malformations with feeding vessels of 2 mm each. Most of the arteriovenous malformations was occluded with Amplatzer vascular plug .The percutaneous pulse oximetry saturation had risen from 75% to 88% immediately, on room air.
DISCUSSION: Pulmonary arteriovenous malformations are rare, occurring in 2-3 per 100,000 population. Chest radiography detects 98% of arteriovenous malformations, however pulmonary angiography is still the gold standard. The preferred treatment of choice is transcatheter occlusion of the feeding artery.
Keywords: arteriovenous malformation, cyanosis, pulmonary arteriovenous malformation, pulmonary vascular anomaly

2,5-year-old male child with Atrioventricular nodal reentry tachycardia- evaluation, diagnosis, and management

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Atrioventricular nodal reentrant tachycardia (AVNRT) is a type of paroxysmal supraventricular tachycardia that results due to the presence of a re-entry circuit within or adjacent to the AV node. Symptoms are: dizziness, syncopa, shortness of breath, intermittent palpitation, pain/discomfort in the neck, pain/discomfort in chest, anxiety, polyuria. The diagnosis of AVNRT requires visualization of an electrocardiogram (ECG). In most cases, an ECG will show heart rate between 140 and 280 beats per minute (bpm), and in the absence of aberrant conduction, a QRS complex of fewer than 120 milliseconds. A 2,5 year old child was admitted to the emergency department with anxiety, shortness of breath and chest discomfort. ECG showed high heart rate-290 beats per minute and narrow QRS complex. Echocardiography showed normal heart structures. 24 hour ECG holter was also normal. Inflammatory markers and thyroid status were in referent range. Initially an attempt with vagal maneuvers was made in order to slow down the heart rate, without success. The child was treated with i.v. bolus of antiarrhythmic drug -Amiodarone, with good responses and convertion to normal sinus rhythm. After five days inpatient, the child was discharge with recommendation for regular daily therapy with Amiodarone. In the following period, the child experience several AVNRT attacks, all treated inpatient. During this period Metoprolol was introduced in the treatment. Metoprolol was a good choice because it shortened long attacks, but short attacks were still present. Consequently, radiofrequency ablation was considered as a logical next step. It was performed in Milano-Italy. AVNRT is usually benign and sometimes self limited condition., However life threatening consequences can occur. That's why it shoud be promptly recognized on the ECG trace and treated vigorously.
Key words: AVNRT, pediatric, ECK, radiofrequency ablation

Complicated lung abscess with pleural empyema in a female toddler

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A lung abscess is a lung infection that leads to the destruction of the lung parenchyma, resulting in the formation of a puss-filled cavity with central necrosis. A 2-year-old girl was admitted to our clinic with fever, tachypnea, productive cough, and normal saturation. The blood tests showed leukocytosis with neutrophilia, high C-reactive protein, and procalcitonin within septic values. The blood culture was negative. Chest CT revealed a cystic, oval, and delineated lesion of 4.3x3.6 cm in the right upper lobe with proximal atelectasis, and pleural effusion in the lung base. The differential diagnosis included abscess, echinococcal cyst, and less probably a bronchogenic cyst. The hydatid serology turned negative. A double antibiotic therapy consisting of carbapenem and aminoglycoside was initiated. Over the following days, the child was clinically stable with a decrease in inflammatory panel. However, on the 9th day, there was a marked deterioration of the condition with high fever, tachypnea, dyspnea, and an increase in inflammatory markers, with chest x-ray finding of a perforated abscess. She was transferred to the pediatric surgery clinic where a chest drain was inserted and serous fluid evacuated. Due to a positive blood culture for methicillin-resistant coagulase-negative Staphylococcus aureus, vancomycin was also added to the treatment. As the follow-up chest x-ray and CT showed no improvement, the toddler was transferred to Pirogov Hospital in Sofia, Bulgaria where video-assisted thoracoscopic surgery (VATS) lung decortication and abscess evacuation were performed. The postoperative pneumothorax and bronchopleural fistula were managed by chest drainage and bronchoscopic artificial occlusion of the right upper lobe bronchus, respectively. Further medical treatment included meropenem, vancomycin, and fluconazole. Afterward, she was afebrile, with a gradual improvement of pulmonary status.VATS can be safely used as a first-line management for empyema. Children with lung abscesses, both primary and secondary, have a significantly better prognosis than adults with the same condition.
Keywords: child, empyema, lung abscess, VATS

Rheumatic fever with cardiac complications

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Rheumatic fever is a systemic inflammatory disease caused by sensitization to group A beta hemolytic streptococcus, due to frequent streptococcal infections of the upper respiratory tract. It occurs most often in children from 5 to 15 years of age. Clinical manifestations: fever, polyarthritis, chorea minor (Sydenham's chorea), erythema migrans and the most severe manifestation is carditis.
A 10-year-old patient two weeks before hospitalization with a headache in the occipital and frontal region, ten days before admission with epistaxis at night, after which the child woke up very agitated with uncontrolled movement and without expressive speech. Four months ago, the patient suffered from an upper respiratory infection. Hospitalized in the department of neurology due to symptoms of chorea. The initial laboratory investigations, CT and MRI of the head, as well as the performed echocardiography with an orderly finding. He was placed on therapy with a third-generation cephalosporin and corticoid therapy due to neurological symptomatology, after which the withdrawal of the symptoms was achieved. On the thirteenth day of the hospitalization, a cardiological assessment was performed again, during which a cardiological involvement was determined with the finding of mitral and aortic insufficiency, and the child was transferred to the cardiology department. Continued oral penicillin therapy, oral corticosteroid per protocol and gastroprotective. Discharged in good general condition with a recommendation to continue therapy according to the protocol for rheumatic fever with cardiac involvement and regular controls. At the next control with an improvement in the cardiac findings.
A rare manifestation of rheumatic fever in which first there are neurological symptoms and symptoms of cardiac involvement.
Keywords: Chorea minor, MV insufficiency, aortic valve insufficiency

Exchange transfusion for treatment of severe bilirubinemia in a rare case of hemolytic disease of the newborn caused by minor blood group incompatibility

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Hemolytic disease of the newborn (HDN) is a neonatal emergency that needs to be diagnosed and treated promptly in order to avoid the potential complications of severe hyperbilirubinemia. The alloimmune hemolysis is caused by presence of maternal antibodies against the fetal erythrocyte antigens. Rh blood group incompatibility is the major cause of HDN followed by ABO incompatibility which is usually characterized with less severe presentation. In rare cases HDN can be triggered by minor blood group incompatibilities such as Kell, Kidd, Duffu, or MNSs system antigens or other Rh antigens (c, C, E, e). Intensive phototherapy, intravenous immunoglobulin and exchange transfusion (ET) are the treatment regimens for severe hyperbilirubinemia from HDN. ET is an invasive procedure requiring central lines and has potentially severe side effects, thus it is reserved for infants whose bilirubin levels continue to rise to exchange levels.

A 20-hours old, term newborn was admitted for early-onset of neonatal jaundice. Physically, intensive yellow skin discoloration and normal neurologic findings were present. Hemoglobin was 131 g/L and total serum bilirubin was 521 µmoll/L. Blood group was AB Rh+ (Phenotype D/d, C/c), Direct antiglobulin test (DAT) was positive and anti-c antibodies were detected both in the serum and on the surface of RBC. Despite the conservative treatment (intense phototherapy, immunoglobulin and albumen transfusion) exchange transfusion was indicated due to the very high bilirubinemia. Double volume exchange transfusion with AB Rh+, c-antigen negative blood was performed through umbilical catheter. There was a notable decrease of total bilirubin after the procedure.

Hemolytic disease of the newborn caused by minor blood group incompatibilities is often underreported and misdiagnosed. The purpose of this case report is to emphasize the importance of early recognition and acute treatment, which is crucial for proper management of this condition.

Key words: hemolytic anemia, hyperbilirubinemia, alloimmunization, exchange transfusion

Right hilar and mediastinal lymphadenopathy

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Tuberculosis (TB) is caused by a bacterium called *Mycobacterium tuberculosis*. The bacteria usually attack the lungs, but TB bacteria can attack any part of the body such as the kidney, spine, and brain. We report a case of isolated hilar and mediastinal lymphadenopathy with parenchymal consolidation due to tuberculosis. A child from regularly controlled pregnancy, born in 37 gestational week. From four months, every month with hospitalizations due to lower- respiratory infections. The BCG mark was positive. Child was admitted to our hospital because of pneumonia probably triggered by infection. On admission, 7 months old boy, afebrile, vitals were stable, on lung auscultation vesicular breathing, with a slightly prolonged expiration and crackles on both sides. From the performed investigations: elevated inflammatory markers, bacteriologically negative tracheal aspirate. Chest X-ray right middle lobe with signs of parenchymal consolidation. After admission, was on parenteral antibiotic, inhalations with ipratropium bromide without good clinical response. Diagnostic bronchoscopy was performed with a finding in addition to a specific tuberculosis process. Thorax CT scan was performed: colliquative lymph nodes right paratracheal up to 15mm, right hilar up to 6mm and subcarinal up to 7mm, postcontrast with characteristic hypervascular peripheral ring. On the right in the middle and basal parts, extensive zones of consolidation are present. Left lung with normal transparency on CT. Conclusion- Hilar and mediastinal lymphadenopathy with parenchymal consolidation on the right middle lobe. GeneXpert MTV/RIF were positive. Infant was immediately transferred to tuberculosis ward for continuing treatment.
Key words: infant, lymphadenopathy, tuberculosis.

Legionnaires' disease in a 4-year-old child

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Legionella pneumophila is an intracellular pathogenic gram-negative aerobic bacterium that causes severe pneumonia called Legionnaires' disease. The diagnosis is based on non-specific laboratory findings, specific tests (urine antigen test, sputum cultures, DFA, serological tests, PCR) and chest x-ray. We present a case of a 4-year-old male child presenting to our clinic with fever, prolonged cough, dyspnea, and hyposaturation. The physical findings indicated a massive pneumonic finding and broncho-obstruction, and the chest x-ray showed consolidation on the right in the projection of the middle lobe. The laboratory tests were with moderately increased inflammatory markers. The patient was treated with IV cephalosporin antibiotic, inhaled bronchodilator therapy and under oxygen support. Legionella pneumophila PCR test was confirmed on day 6 when a macrolide antibiotic was added to the therapy. After 10 days of therapy, his condition improved, the laboratory parameters were normalized, and the control chest x-ray on day 14 was normal. Legionnaires' disease can have clinical symptoms and laboratory abnormalities that suggest Legionella pneumophila pathogen, but none of the clinical signs is sufficient to distinguish legionella pneumonia from other respiratory pathogens. The combination of tests increases the probability of confirming the diagnosis and correct treatment.

Key words: children, Legionnaires' disease, specific tests

Otorhinolaryngological treatment in a patient with Smith–Magenis syndrome: a case report

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Upper respiratory tract disorders are common in children with developmental delay. A boy with intellectual disability and delayed speech was initially evaluated at the age of 5 years due to difficulty breathing through the nose, snoring, and recurrent suppurative otitis. He underwent tonsilloadenoidectomy and ventilation tube placement in the bilateral ears, which resulted in speech and behavioral improvement. However, after several months, speech and social regression occurred. At the age of 9 years, he was diagnosed with Smith–Magenis syndrome. Despite treatment, his upper airway symptoms frequently recurred, with progressive hearing loss bilaterally. This further impeded his speech development and adversely affected his social and intellectual rehabilitation. In children with developmental delay, regardless of whether the underlying disease has been diagnosed or not, improving upper airway function through timely evaluation, diagnosis, and treatment of upper respiratory tract disorders and regular hearing monitoring are vital for timely rehabilitation.
Key words: Smith-Magenis syndrome , intellectual disability, hearing loss, tonsilloadenoidectomy

Lobar pneumonia caused by Streptococcus pneumoniae

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Lobar pneumonia is an acute exudative inflammation of an entire lobe. It is characterized by a uniform consolidation of the lung parenchyma within the affected lobe. The most common causative agent is Streptococcus pneumoniae.
This case report aims to present the clinical presentation, diagnosis and the latest treatment recommendations of this type of pneumonia, which in recent decades due to the widespread and early use of antibiotics is quite rare compared to the past.
The case report targets 5-year-old child who saught examination due to high fever, dry cough followed by chest pain and vomiting, which were preceded by upper respiratory symptoms for several days. Laboratory analyses, X-ray of lungs, microbiological analyzes (tracheal aspirate, blood culture, urine culture) and molecular PCR tests for several causative agents were carried out.
Laboratory tests showed highly elevated inflammatory markers. A chest X-ray showed uniform consolidation of the entire right upper lobe. PCR and microbiological tests of the tracheal aspirate proved the presence of Streptococcus pneumoniae. Considering the findings from the previous examinations, a diagnosis of Lobar pneumonia caused by Streptococcus pneumonie was made. The child was treated with dual parenteral antibiotic therapy, corticosteroid, and inhalation therapy, followed by a complete resolution of the process.
Starting antibiotic therapy as soon as possible prevents complications and leads to complete recovery. For this purpose, a quick and accurate diagnosis is crucial.
Keywords: lobar pneumonia, Streptococcus pneumoniae, pneumonia in children

Postinfectious Glomerulonephritis Associated with Pneumonia

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Postinfectious glomerulonephritis is an acute disease that occurs after various infectious agents. The most common cause of the disease is group A beta-hemolytic streptococcus, less common pathogens are nonstreptococcal bacteria, viruses, parasites, rickettsiae, and fungi. Here we present a 10-year-old female with co-occurence of lobar pneumonia and acute glomerulonephritis. A 10-year-old female child was admitted to our hospital because of fever, vomiting, and dehydration. The disease started 3 days before admission with a high fever of up to 40 C, repeated vomiting, hematemesis, malaise, and refusal of food and liquids. On admission, the child was highly febrile, pale, malaise, and severely dehydrated with hyperemic tonsils. Chest auscultation showed attenuated sounds on the right side mid to upper parts. No wheezing or crackles. She had no visible edemas and she had normal blood pressure. Laboratory examinations revealed elevated inflammatory markers WBC=35.81/mm3, CRP= 299 mg/l, mild anemia Hgb 98 g/l, elevated degradation products urea=22.5 mmol/l, serum creatinine=184 µmol/l (eGFR=27.9 ml/min/1.73m2). Electrolytes and hepatic probes were normal. Serological data showed elevated anti-streptolysin O and hypocomplementemia (ASO=631.8 U/ml; C3= 0.34g/l). Macroscopic urine analysis showed gross hematuria, 3+ proteins, and 2+ leukocyte esterase. Chest radiography and CT revealed pneumonia in the upper and middle lobes of the right lung. Microbiological sputum culture was negative but indirect immunofluorescence assay confirmed IgM antibodies for Mycoplasma pneumoniae. A kidney biopsy was not performed due to the fast normalizing of complement levels during the hospitalization. She was immediately placed on a diet with restriction of salt and treated with third-generation cephalosporin and azithromycin. The child's condition improved fast. Her kidney injury self-resolved, and after two weeks of antibiotic therapy chest radiography was normal. One-month follow-up in the outpatient clinic, serum creatinine was 43.6 µmol/l, and her urine analysis showed 4-5 RBC/hpf and proteinuria within the normal range.

Postinfectious glomerulonephritis associated with pneumonia occurs early in the onset of respiratory infection and distinguishes it from the common post-streptococcal glomerulonephritis 2 to 6 weeks after a streptococcal infection. We present a case of co-occurrence of pneumonia and acute glomerulonephritis that is rarely reported in the literature and presents a diagnostic challenge to prove.

Key words: Mycoplasma, Pneumonia, Postinfectious Glomerulonephritis

Differential diagnostic approach to Pleural effusion

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Pleural effusion is a rarer condition in routine medical practice and can be caused by many different underlying diseases. Accurate differential diagnosis is essential because the treatment and prognosis of pleural effusion largely depends on the causing agent. The hospitalized patient is a four-year-old girl with dispnea, cough and pulmonary auscultation finding of silent breathing on the left side. She was relatively healthy child with congenital gnathopalatoschisis corrected at the age of 1.5 years. The initial laboratory was with accelerated sedimentation and insignificantly elevated inflammatory markers .The X ray showed complete shadowing of the left lung while the echo sonography of the pleura had a finding of effusion on the left side. She was placed on double antibiotic therapy (cephalosporin and aminoglycoside antibiotic) systemic corticosteroid. Biochemical, microbiological, serological investigations were performed.
Exploratory bronchoscopy was performed to rule out a foreign body and BAL samples were taken. Contrast-enhanced CT of the lungs showed a massive effusion on the left and atelectasis of the lower lobe, without enlarged hilar and mediastinal lymph nodes. Differential diagnosis excluded malignancy, echinococcosis, abscess, cardiomyopathy. All microbiological findings were negative, as well as the initial investigations for TBC (gene expert from BAL, direct microscopy). After the therapy, there was a significant withdrawal of the auscultatory findings with a still present difference in breathing. After the positive result of QuantiFERON, the child was referred for further treatment at the tuberculosis department. Pleural effusions in children are a real diagnostic challenge, specifically in our case, despite the negative anamnestic information about contact with person infected with Tuberculosis, presence of BSG mark and negative initial investigations for TBC, should be not excluded the possibility of specific process

An unusual foreign body in a child's respiratory tract

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Inhaled foreign bodies are a very serious problem in pediatric pulmonology. They are often the cause of problems with the lower respiratory tract, especially in young children. The purpose of this study is to present a rare case, with a neglected, inhaled foreign body (metal chain length 18.5 cm).
We present to you 2.5 yr. a male child, admitted to the Institution due to prolonged productive cough, three months ago. High temperature two weeks ago, difficult breathing a few days before admission. There was no history of foreign body inhalation. On admission, the child was febrile, pale, adynamic, had shortness of breath and cough with purulent expectoration. Decreased breath sounds on both sides of the chest. X-ray of the chest in two directions direct radiological sign of an inhaled foreign body (metal chain, "riding" the tracheal carina).
A rigid bronchoscopy was performed. An abundant, muco-purulent secretion was detected in the entire trachea and the two main bronchi. After flushing with saline, the metal chain was removed with an optical instrument together with a bronchoscope. Tracheal mucosa and both main bronchi were very inflamed, granulated, edematous, and the distal bronchial tree was mildly inflamed. After discharge, the child never showed up for follow-up.
A combination of natural curiosity, lack of posterior teeth, inadequate swallowing control, and the startle response allows foreign bodies to enter the larynx. The size and variety of objects that can pass through the vocal cords is staggering.
KEY WORDS: metal necklace, rigid bronchoscopy, extirpation

RSV pneumonia with atelectasis

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Respiratory syncytial virus is the most important viral pathogen in infants and children up to 2 years of age, as it requires hospitalization due to lung infection as a cause of severe illness. The purpose of this case is to reaffirm the importance of the virus that causes complications such as emphysema, pleural effusion, lobar or bronchopneumonia, and atelectasis. We present a 16-month-old child who comes to our clinic with symptoms of prolonged cough, tachydyspnea, tachycardia. Physical findings were consistent with pneumonia and broncho-obstruction. The laboratory studies showed moderately increased inflammatory markers. There were deviations in the immunological analyzes with slightly reduced values of the IgA class. X-ray of the lungs showed the presence of left-sided lung consolidation with atelectasis. He received parenteral rehydration therapy with a third-generation cephalosporin, an inhaled bronchodilator and a short-term systemic corticosteroid. Molecular PCR respiratory panel was positive for RSV. Control radiography showed improvement but with still present lung infiltrates. A slow regression of the auscultatory pulmonary findings was observed during the screening. The treatment lasted 14 days, with several follow-up controls after discharge from the clinic. RSV infection in infants and younger children can be manifested by a severe clinical picture and a longer period of treatment, such as our case with atelectasis. The slow regression of the auscultatory and X-ray findings are characteristic in such cases. For the RSV virus, there is convincing evidence from numerous cohort studies that it is a significant and independent risk factor for later repetitive wheezing in the first ten years of life in children.
Keywords children, RSV infection, pneumonia, atelectasis

Hydropneumothorax due to ruptured pulmonary hydatid cyst in a child

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A previously healthy 7-year-old male child was admitted to the outpatient clinic with one-month history of fever, chest pain, shortness of breath and cough. On physical examination diminished breath sounds with fine crackles were heard over the left chest. Chest x-ray revealed homogenous opacity in the left hemithorax in addition to massive hidropneumothorax. The child was referred to University Clinic for Pediatric Surgery and 500 ml serous fluid was evacuated from the left pleural space. Bacterial, cytological and biochemical examination of fluid samples were unspecified.
After 11 days, the patient was referred from Pediatric Surgery to the Pediatric Clinic for further treatment. On auscultation diminishes breath sounds were present at the left lung base. Information was obtained that the patient had three unvaccinated dogs against Echinococcus granulosus. Laboratory exams showed elevated total serum immunoglobulin E level and detection of Echinococcus granulosus antibodies. Chest computer tomography scan revealed three pulmonary cystic masses compatible with hydatid disease. The child was again referred to the Pediatric Surgery Clinic. A left anterolateral thoracotomy in the fifth intercostal space was made and multiple pleural adhesions and thickening as well as pleuro-pericardial adhesions were seen. Aspiration, cystectomy, pericysts resection with suturing of the left lung segments were performed. The histopathological findings confirmed the diagnosis of pulmonary hydatid cysts. After surgical intervention, there was a rapid clinical recovery.
Conclusions: The hydatid cyst with pleural complications is unusual disorder in childhood. Early surgical intervention is mandatory for ruptured or multiple cysts and maximum lung parenchyma preservation is recommended. After surgery, a long follow-up is required to avoid appearance of new and growing hydatid cysts. Dog vaccination against Echinococcus granulosus is cost-effective prevention strategy.
Keywords: hydropneumothorax, hydatid cyst, child

Imaging Medicine

Aggressive Vertebral Hemangioma

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Aggressive vertebral hemangioma is a rare type of hemangioma that can occur in the vertebral bodies. They are characterized by aggressive behavior with extra-osseous expansion and expansion in paraspinal and epidural spaces. The result can be compressive fractures of the vertebral body, compressive myelopathy and acute neurological deficit.
We present a case of a 23 years old female patient, whose symptoms started 3 weeks before the examination, with walking difficulty and acute pain in the lower back irradiating across both legs. The physical exam demonstrated reduced sensibility in the lower part of the body and heightened patellar reflex in both legs. MRI exam of the spine was performed which demonstrated that the vertebral body of Th5 was with changed structure with thickened trabeculae that were of high signal on T2 and low signal on T1, also the osseous margins were expanded and an extra-osseous soft tissue component was present which extended in the epidural space that resulted in compressive myelopathy of the thoracic segment of the spinal cord. On the post contrast sequences the extra-osseous soft tissue component showed uniform enhancement of the signal. The working diagnosis of the radiology report was aggressive vertebral hemangioma. The treatment included endovascular procedure with embolization of the tumor to prevent hemorrhage, which was followed by surgery that included laminectomy of Th5, excision of the tumor and local hemostasis. The pathology report that followed, confirmed the diagnosis. After the recovery period, a follow up MRI exam was performed which showed residual tumor. The patient was referred for radiotherapy.
With this case we demonstrate a rare type of vertebral hemangioma, which was diagnosed and treated in time due to fast MRI findings and effective use of interventional radiological methods.
Keywords: *aggressive vertebral hemangioma, MRI of the spine, endovascular embolization*

Lymphoid Interstitial Pneumonia

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This study explores the distinctive imaging features of Lymphoid Interstitial Pneumonia (LIP) through a comprehensive HRCT analysis. Highlighting the role of HRCT in diagnosis, the report emphasizes key patterns crucial for recognizing and intervening in LIP cases.
In a 47-year-old male with non-specific respiratory symptoms, inconclusive clinical and laboratory data prompted HRCT, revealing diffuse mid to lower lobe-predominant changes. Noteworthy findings included bronchovascular bundle thickening, interstitial thickening along lymph channels, variable-sized pulmonary nodules, ground-glass changes, and scattered thin-walled cysts adjacent to vessels, leading to a precise LIP diagnosis.
HRCT showcased characteristic LIP features—diffuse mid to lower lobe-predominant changes, bronchovascular bundle thickening, interstitial thickening along lymph channels, variable-sized pulmonary nodules, ground-glass changes, and distinctive thin-walled cysts near vessels. Mediastinal lymphadenopathy further validated the specificity of LIP findings**.**
The study discusses the distinctive nature of LIP's imaging findings, particularly scattered thin-walled cysts and mediastinal lymphadenopathy, setting it apart from other lung pathologies. Radiologic-pathologic correlation aids in understanding LIP's complex features.
This case underscores the crucial role of HRCT in diagnosing LIP accurately and differentiating it from other interstitial lung diseases. A nuanced understanding of HRCT findings serves as a cornerstone in navigating the complexities of LIP, guiding clinicians toward optimal patient management.
Keywords: lymphoid interstitial pneumonia (LIP), high resolution CT (HRCT), thin-walled cysts, ground glass changes.
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Spontaneous proximal ureteral rupture

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Spontaneous ureteral rupture is a rare condition and it can be defined as an extravasation of urine from the ureter which occurs without trauma or iatrogenic manipulation of the ureter. Often it occurs secondary to ureterolithiasis with urinary tract obstruction, which results in increased intraluminal pressure and subsequent rupture. Even more rare, is when it happens without a prior complication just like our case. Our patient, an 82 year old male, was examined in different hospitals before arriving at us with abdominal meteorism, pain on the left side and on the blood tests, high inflammation and degenerative products were detected. After performing a CT scan with IV contrast, a ureteral rupture in the proximal part of the ureter was found, including a urinoma (which is a complication from the ureteral rupture, with urine collections usually found in the retroperitoneum, most commonly in the perirenal space). After this the patient was referred to the urological department for further examinations and treatment, where nephrectomy was performed.
Keywords: rupture, spontaneous, ureter, CT scan, urinary extravasation

Interrupted Inferior Vena Cava Syndrome: A Rare Anomaly Presenting with Lower Limb Swelling

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Interrupted Inferior Vena Cava (IVC) Syndrome, a rare congenital anomaly, poses diagnostic and management challenges. This case study details a 46-year-old male presenting with chest pain, exertional left arm pain, lower limb swelling, and abdominal discomfort. Contrast-enhanced CT and CT angiography revealed a suprarenal IVC interruption with azygos vein continuation and collateral venous network. Timely recognition of such anomalies is crucial, highlighting the importance of interdisciplinary collaboration and potential surgical interventions for optimal patient care.
Interrupted Inferior Vena Cava Syndrome, an exceptionally rare congenital anomaly, demands a nuanced approach for accurate diagnosis and effective management. This case study contributes to the literature by detailing a patient's clinical history, imaging findings, and management approach. Recognition is essential, particularly when symptoms include lower limb swelling and abdominal discomfort, as illustrated in this case. Advanced imaging, specifically CT angiography, plays a key role in the diagnostic journey. The case report delves into the embryological basis, clinical implications, and collaborative efforts required for managing interrupted IVC. A 46-year-old male presented with chest pain, exertional left arm pain, lower limb swelling, and abdominal discomfort. Contrast-enhanced CT angiography revealed a suprarenal IVC interruption with azygos vein continuation and a complex collateral venous network.
Proximal abdominal scans lacked IVC images, but dilation of azygos and hemi-azygos veins, thickening of diaphragmatic crura, and collateral vessels suggested azygous continuation with IVC interruption. Management options, including surgery, were discussed, with follow-up involving clinical assessment and monitoring for complications.
Recognizing Interrupted IVC Syndrome is crucial in unexplained lower limb swelling. This case underscores the significance of interdisciplinary collaboration for accurate diagnosis and optimal patient management.
Keywords: Interrupted Inferior Vena Cava, Vascular Anomalies, CT Angiography, Case Study, Vascular Surgery.

Radiology Case Study - Right-Sided Aortic Arch: An Anomalous Vascular Configuration

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Right-sided aortic arch (RAA) is a rare anatomical variant, often discovered incidentally during imaging studies. We present a comprehensive case study of a 77-year-old male with an asymptomatic RAA, emphasizing the crucial role of multimodal imaging in accurate diagnosis. This report explores the imaging findings, potential clinical implications, and the significance of identifying such anomalies for patient management.
Right-sided aortic arch (RAA) is an uncommon congenital anomaly characterized by the aorta's deviation to the right of the trachea. While often asymptomatic, its recognition is vital for understanding associated vascular anomalies and potential clinical implications. This case study delves into the imaging nuances, embryological basis, and clinical considerations associated with RAA with mirror image branching of the arch vessels, contributing valuable insights to the existing medical literature. Multidetector computed tomography (MDCT) revealed a right-sided aortic arch with mirror-image branching of the arch vessels. The arch descended on the right side of the trachea, forming a vascular ring.The anomalous arrangement of the left common carotid artery originating from a left brachiocephalic trunk together with the left subclavian artery.Diagnosis: Right-sided aortic arch with mirror-image branching.
The embryological basis of RAA involves intricate processes leading to abnormal arch regression and persistence of the right dorsal aorta. The clinical significance lies in potential complications, including tracheal compression and vascular ring formation. Accurate diagnosis through advanced imaging allows for informed decision-making and appropriate patient management. Right-sided aortic arch is a rare anatomical variant that warrants attention due to its potential clinical implications. Awareness of such anomalies and their associated vascular configurations is essential for providing optimal patient care. This case contributes to the limited literature on RAA, emphasizing the importance of thorough imaging in unraveling complex vascular variations.
Key words: Right-sided aortic arch,multidetector computed tomography,diagnosis.

Unraveling Diagnostic Complexities through CT Mastery in a Compelling Medical Case

IVANA HARBOV, Maja Jakimovska

CT (computed tomography), an ultimate invention in imaging methods, has turned diagnostics upside down by making use of its deep penetration X-rays and digital X-ray picture processing. This article gives a complete comprehension of how CT shapes the diagnosis of complicated diseases and showcases a case study that summarizes its significance in diagnosing the symptoms and thus treating the patients accordingly. The aforementioned case study involves a 23-year-old woman, S.F. who had sharp abdominal pain with the strongest feeling in the right lower quadrant accompanied by self-induced vomiting and an elevated body temperature. Three weeks into postpartum, gynecological examinations ruled out obstetrical causes. The initial ultrasound report showed that the patient had gallstones and a little uninhabited fluid in the peritoneum. Besides, a striking ultrasound scan was confirmed by the contrast-enhanced CT that showed decisive features. Only after the CT scan appeared that we could recognize the liver hypoperfusion of the arterial phase, the thrombosis of the portal vein, and the distal thrombosis of the superior mesenteric vein. Besides that, the pancreas shows the edema of uneven margin and non-encapsulated hypodense segments. A thrombosis of the vena lienalis and an obstruction of the inferior vena cava by thrombosis were also detected in the patient. The hospitalization plan emerged, and the patient was receiving treatment for acute pancreatitis, focal thrombosis, and ascites with infusion solutions, antibiotics, and low molecular weight heparin. Continuous monitoring revealed a therapeutic effect, with the patient responding satisfactorily to treatment. This case highlights the intricate diagnostic capabilities of CT, showcasing its ability to unveil subtle abnormalities crucial for accurate diagnosis and optimal patient management.
Keywords: Computed Tomography, medical diagnostics, imaging technology, X-ray, crosssectional images, non-invasiveness, case study, focal thrombosis, contrast-enhanced CT.

The development of mucinous carcinoma in the internal parasternal region of the breast, which was preceded by a trauma

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Mucinous carcinoma of the breast is one of the rarest forms of intramammary carcinoma,which is appearance in a place that was preceded by a trauma. A 75 years old female patient with total left mastectomy aa18 that received hormonal and chemotherapy. She had a trauma aa13 in the MM parts of the right breast, that 3 months till the evaluation, a fibrous subcutaneous change of the tissue persisted with diameter of 10mm. In the last 3 months, this tissue change started to grow rapidly as well as to cause discomfort to the patient. After a mammography being made, a round partially lobular dense change is noted in the MM parts of the right breast, with 44mmx36mm dimensions. This change of tissue is not noted from the mammography evidence made in 2020. On the ultrasound, on the other hand, there is a hypo to heteroechogenic lobular change with partial dorsal attenuation with solid-cystic component of the parenchyma of the tumor change with noted vascularizationBI-RADS4.The patient is directed for a core biopsy. The results from the core biopsy shown a occurrence of fragments from mammary fibrocollagenous stroma in which accumulations of malignant mammocytes were found, irregulary arranged in a form of nests, beaches of micropapillary formations in mucin lakes. The diagnosis from the results indicated a mucinous invasive carcinoma. Discussion:There are many papers written that can show correlation on the occurrence of mucinous carcinoma in the place which was preceded by a trauma**,** but not a study that shows a connection. Our case is one of those papers that accepts the thesis that a mucinous breast carcinoma can occur in the place which was preceded by a trauma. The mucinous type of carcinoma on the right breast is not correlated with the type of carcinoma in the left part aa18.

Acute Eosinophilic Pneumonia: A Radiological Exploration in a 37-Year-Old Patient

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This case report delves into the clinical and imaging features of Acute Eosinophilic Pneumonia (AEP) in a 37-year-old administrative worker. The patient was presented with a persistent and productive cough, fatigue, and peripheral eosinophilia. The diagnostic journey, including chest radiography, HRCT imaging, and broncho-alveolar lavage, aimed to unravel the unique aspects of AEP in this specific presentation.

Hypoxemia and diffuse alveolar opacities on chest radiography and HRCT marked the clinical presentation. Broncho-alveolar lavage fluid analysis revealed a remarkably high eosinophil count, confirming the eosinophilic nature of the pneumonia.

HRCT imaging unveiled bilateral ground-glass areas, interlobular septal thickening, broncho-vascular bundle thickening, and ill-defined centri-lobular nodules. Zonal distribution analysis showcased a random apico-basal pattern, predominantly affecting the lower lobes.

Prompt initiation of corticosteroid therapy led to a rapid and complete response, with no relapse after discontinuation. The patient's clinical symptoms improved significantly, aligning with the expected therapeutic response in AEP.

This case report underscores the specific HRCT manifestations of AEP in a 37-year-old patient, contributing valuable insights to the understanding of this eosinophilic lung disease. The rapid and favorable response to corticosteroids further supports the accurate diagnosis of AEP.

Acute Eosinophilic Pneumonia in this 37-year-old patient demonstrates distinct radiological patterns crucial for diagnosis. The case report enhances awareness among clinicians and radiologists, emphasizing the significance of recognizing AEP in the spectrum of acute respiratory illnesses.

Keywords: Acute Eosinophilic Pneumonia (AEP), case report, eosinophilic broncho-alveolar lavage, HRCT imaging, zonal distribution.

Right breast abscess, caused by Staphylococcus aureus, mimicking inflammatory carcinoma

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A 78-year-old diabetic, insulin-dependent woman presents for examination due to severe redness of the right breast with the appearance of an orange, a solid change in the right breast, as well as an indented nipple. There was a previous incident of scalding with hot liquid. The patient also received antibiotic therapy. A large dense mass with surrounding fibrous elements is seen on the mammogram. On ultrasound, a heteroechoic oval mass with a size of 4cm was seen. Diff Dg: finding is in favor of inflammatory carcinoma, breast abscess. After the aspiration biopsy, an abscess was diagnosed and the causative agent staphylococcus aureus was isolated. Although the patient was advised for surgical treatment of the abscess, she decided only to evacuate the purulent contents.
Breast abscesses in elderly women with diabetes and with causative agent Staphylococcus aureus are encountered in medical practice. But it should also be emphasized that there are studies that prove a connection between breast abscess and cribriform breast cancer. From here, surgical treatment with further pathohistological evaluation is required.

Prenatal Diagnosis and Surgical Management of Tetralogy of Fallot: A Case Report Emphasizing Fetal Echocardiography Expertise and Surgical Efficacy

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Tetralogy of Fallot (ToF), accounting for about 8% of congenital heart defects, is a significant pediatric cardiac anomaly. It's characterized by right ventricular outflow tract obstruction, misaligned ventricular septal defect (VSD), overriding aorta, and right ventricular hypertrophy (RVH). The severity of outflow tract obstruction largely dictates its clinical manifestations.
This report details the prenatal diagnosis of ToF in the third trimester of a first-time pregnant woman, whose pregnancy was under regular observation, with all antenatal screenings showing normal results. The initial examination at our institution showed the aorta extending over the ventricular septum, connecting both the right and left ventricles. Color Doppler imaging revealed blood flow from both ventricles into the aorta. Measurements indicated the aortic valve's diameter as 8.8 mm (Z-score 3.54), and the peak flow speed was 120 cm/s. Additionally, a stenosis in the pulmonary artery was noted, where the pulmonary valve measured 4.3mm in diameter (Z-score -3.86) and had a maximum flow speed of 160cm/s. The patient underwent ToF surgical correction using extracorporeal circulation. The procedure involved VSD closure with a Dacron patch and widening the stenosed pulmonary artery with a pericardial patch. Post-surgery, no complications were reported.
The diagnosis of Tetralogy of Fallot highlights the need for specialized expertise in fetal echocardiography. Effective management of heart defects such as ToF requires vigilant prenatal screening, particularly during second-trimester anomaly scans. The successful surgical outcome in this case highlights the need for continued enhancements in the diagnostic and treatment strategies for complex congenital heart conditions.
Keywords: Tetralogy of Fallot, prenatal diagnosis,fetal echocardiography, surgical management

Respiratory infection of a patient with Kartagener Sy

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We have a patient, 41 years old, who came to the doctor because of an elevated temperature of 39.8, dry cough and malaise. Clinically conscious, febrile, contactable, oriented in time and space, dyspneic, heart action 108(/min), TA110/80 mmHg. From the clinical tests,and the complete laboratory that we made we found elevated values of: CRP 21..52...9.2mg/L, D-dimer=602..977..613ng/L, ALT=71U/L, LDH=531…467U/L. A PCR smear for lower and upper respiratory pathogens was taken and Pseudomonas Aeruginosa and Influenza B were detected. From the microbiological analysis of sputum, the oropharyngeal flora was present and Pseudomonas Aeruginosa was detected. A CT scan of the Thorax was performed, which shows extensive varicose bronchiectasis with thickened walls, in places filled with mucus planus. Zones of hypo and hyperperfusion are monitored bilaterally. Dextrocardia. Situs inversus of proximal abdomen.From past diseases there are: Bronchiechtasie infl bill. Kartegener Sy. Sinusitis maxillaris, Dextrocardio et situs viscerum inversus totalis, TBC pulmonum, HTA. O2sat=86.6…91.4…86.5…89.7The patient was placed on appropriate antibiotic therapy after an antibiogram for Pseudomonas, as well as antiviral therapy with Tamiflu for Influenza, to which he had a good response with an improvement in general condition and a decrease in elevated inflammatory markers. Other therapy was given: Spray Fluticasone, Tiotropium bromide, Salbutamol (as needed); Tbl. Decortin H, Tbl. Pantoprazole I oxygen therapy at home with an oxygen flow of 3L/min for more than 16 hours a day.

Key words: Kartagener Sy, Bronchiechtasie, Sinutis maxillaries, Situs viscerum inversus totalis, Febris, Wet and productive cough, too much mucus.

Incidentally Diagnosed Large Asymptomatic Morgagni Hernia in Adult Male Patient

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Congenital diaphragmatic hernias are rare congenital defects resulting in abdominal organ protrusion into the thoracic cavity; they mainly present with pulmonary or gastrointestinal symptoms. Although congenital and discovered in utero or in early childhood, they can be asymptomatic for a long time and even remain asymptomatic despite the growing hernia sac dimensions and the hernia sac contents.
A 58-year-old patient presented to the outpatient clinic for a consultative medical check-up in December 2021. The patient's medical history revealed hypertension and cholelithiasis. Previously, the patient had a computerised tomography (CT) scan of the thorax and abdomen in April 2019 during the COVID-19 pandemic, due to a positive SARS- CoV-2 test. A chest X-ray had not been performed since in the time of the COVID-19 pandemic as the main diagnostic tool for confirmation or exclusion of 'ground-glass' pulmonary opacity was the chest CT scan. Pulmonary abnormalities in terms of a COVID-19 complication were excluded with the scan and an incidental finding of diaphragmatic Morgagni hernia was confirmed. The patient rejected the surgery that was offered at that point, due to absence of any symptoms (pulmonary and gastrointestinal) related to the condition. A repeat CT scan was ordered to evaluate the hernia progression in December 2021 (20 months after initial diagnosis). It revealed enlargement of the hernia sac in comparison to the previous CT scan, with interposed hepatic flexure and part of the transverse colon as well as the mesenteric fat tissue exerting significant compression of the mediastinal structures backwards and to the left. Again, a laparoscopic hernia repair with dual mesh was advised to the patient and again, it was rejected due to a lack of symptoms.
Keywords: Morgagni hernia, diaphfragmatic hernia, hernia repair, Morgagni hernia in adult

Navigating ALCA-R Complexity: Clinical Presentation, Imaging, and Management

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This case study explores the diagnostic challenges and management of Aberrant Left Coronary Artery Arising from the Right Coronary Sinus (ALCA-R), a rare coronary anomaly. Through advanced cardiac imaging, including coronary angiography and CT coronary angiography, the report highlights the importance of accurate diagnosis in a 69-year-old male with recurrent chest pain during exercise.

ALCA-R, though less common, presents unique diagnostic challenges and is considered more perilous than its counterpart. With a prevalence of approximately 0.15%, ALCA-R exhibits diverse anatomical variations, emphasizing the role of advanced cardiac imaging in classification and management decisions.

A 69-year-old male with recurrent chest pain during exercise underwent coronary angiography and CT coronary angiography, revealing an ALCA-R with a sub-pulmonic subtype. The anomalous artery traversed the right ventricular outflow tract, pulmonary infundibulum, and interventricular septum.

Recognition of ALCA-R's clinical implications is crucial, especially in patients with recurrent chest pain during exertion. Classified by course, ALCA-R includes categories like inter-arterial, intra-myocardial, retro-aortic, and anterior. Accurate diagnosis through advanced imaging guides intervention and risk assessment.

A multidisciplinary team evaluated the patient, including cardiologists and cardiac surgeons. Treatment options, including potential surgical correction, were discussed based on specific anatomical considerations identified through imaging.

This case study provides insights into the clinical and imaging aspects of ALCA-R, emphasizing the importance of accurate diagnosis and interdisciplinary collaboration for optimal patient care. The goal is to enhance awareness and proactive management of rare coronary anomalies.

Aberrant Left Coronary Artery, ALCA-R, sub-pulmonic type, Coronary Anomalies, Coronary CT Angiography.

Breast Hamartoma with Coexistent DCIS: Radiological Challenges

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This article explores the diagnostic complexity of a 53-year-old woman with palpable breast abnormalities, uncovering a dual narrative of hamartoma and coexisting ductal carcinoma in situ (DCIS). Radiological insights into these lesions highlight the challenges in accurate diagnosis.

Introduction: Breast hamartomas, presenting as a "breast within a breast" on mammograms, pose diagnostic challenges. In this case, a unique scenario emerges as a breast hamartoma coexists with cancer, emphasizing the complexity faced by radiologists in such diagnostic journeys. A 53-year-old woman with palpable breast abnormalities undergoes mammography, revealing a well-circumscribed mass with a "breast within a breast" appearance, characteristic of a hamartoma. However, suspicious features of malignant microcalcification within the hamartoma suggest coexisting cancer, showcasing the intricate interplay of benign and malignant elements. Ultrasound struggles to delineate the lesion's margins due to its normal breast tissue resemblance. Mammography displays the classic "breast in breast" appearance of the hamartoma, with additional features of microcalcification raising concerns of malignancy. Integrating imaging findings with pathology is crucial in discerning the complex interplay between benign and malignant elements. The diagnostic landscape reveals a breast hamartoma on the left side, intricately intertwined with cancerous components, highlighting the challenges in discerning dual pathology within breast lesions. This case illuminates the diagnostic intricacies associated with breast lesions, showcasing the coexistence of a benign hamartoma and cancerous elements. Accurate diagnosis demands a nuanced understanding of imaging findings and collaborative efforts between radiologists and pathologists. The diagnostic journey underscores the complexity of breast lesions, where a hamartoma conceals malignant elements. Advanced imaging is crucial for navigating this intricacy, and multidisciplinary collaboration is paramount for accurate diagnosis and tailored management.

Keywords: Breast hamartoma, Ductal carcinoma in situ (DCIS), Mammography.

Varia

Topiramate in prophylactic treatment of migraine

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Migraine is a primary headache that occurs in attacks that last from 4 to 72 hours, with a different frequency from only a few during a lifetime, to several during a week or a month. It occurs most often between the ages of 22 and 55, more often in women. Precipitating or trigger factors are the reason for the onset of migraine attacks. These include hormonal factors, meteorological factors, consumption of certain types of food, sleep problems, intense physical activity or fatigue. Migraine treatment includes treatment of an acute attack and prophylactic therapy. Prophylactic treatment is used when attacks are very frequent, last very long and acute treatment is unsuccessful or has side effects. The aim of prophylaxis is to reduce the number of migraine attacks.
We present 35-year-old female patient with a long history of typical migraine attacks. In the last 3 months occur very often, they last more than 48 hours and the therapy for an acute attack has no effect. Topiramate therapy was introduced with low doses, with a gradually increase to 100 mg per day divided into two doses over a period of 6 months. After 6 months of therapy, the frequency of migraine attacks decreased significantly.
The aim of prophylactic therapy is to reduce the number of migraine attacks. Topiramate, as an anticonvulsant drug, reduces cortical hyperexcitability, that is, it increases the threshold of irritation for the beginning of an attack, which reduces the number of attacks and has proven to be an effective drug for the prevention of migraine attacks.

Lipschütz ulcer: a rare report of an adult case

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Acute genital ulcers, also known as "Lipschütz ulcers", are a rare, self-limiting, non-sexually transmitted condition characterized by the sudden onset of vulvar edema along with painful necrotic ulcerations of the vulva or lower vagina. We aim to describe a peculiar case of an adult female with an episode of a Lipschütz ulcer.
A 30-year-old woman was reffered to our clinic with painful vulvar ulcers suddenly onset a couple of days before. The patient reported high fever over the past days (up to 38 °C), malaise, mild headache and small oral aphthae. The patient had no relevant medical history, nor recurrent buccal or genital apotheosis. She didn't receive any regular medication. She was a virgin, and any external, physical or sexual trauma to the vulva has been excluded. The clinical observation marked edema of the labia majora and a single round, very painful ulcer with a fibrin base and grayish hue halo on the right side of the vulva. Blood count, viral, parasitic and treponemal serologies as well as samples for further microbiological explorations have been performed, and all returned negative. Performed explorations only showed an isolated inflammatory syndrome (CRP up to 88 mg/L). Negative Pathergy test and the absence of any other related symptoms allowed us to exclude the Behçhet syndrome. In light of these results, the clinical presentation, the physical appearance of the ulcer, and the exclusion of other relevant etiologies, a diagnosis of Lipschütz ulcer was recommended.
The presence of an erosion or ulcer in genitalia often suggests a sexually transmitted infection. However, it is important to take a broader approach and also consider non-venereal causes. Lipschütz ulcers have been considered an uncommon and probably underdiagnosed entity. Therefore, it is crucial to recognise and include them in the differential diagnosis of vulvar ulcerations.
Keywords: Lipschütz ulcer, genital ulcer, ulcus vulvae acutum

Cerebral infarction due to thrombosis mistaken as dissociative motor disorder

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Patient history: female patient 33 years old, with sudden loss of consciousness previous day, inability to talk and right-sided motor weakness. Emergency unit doctors found TA-110/70 mmHg, HR= 74/min, glycemia 7,1mmol/L, oxygen saturation- 96%. During several hours of neurologic symptoms were fluctuating with improvement of the motor deficit and speech ability. Computerized tomography (CT) was described without any changes so patient was dismissed with Dg: F44.4 (dissociative motor disorder) Hemiparesis lat.dex (susp. functionalis) and ordered to do electroencephalography, laboratory test and psychiatrist consultation.
The next day psychiatrist was consulted, and motor deficit as light right-sided hemiparesis was obvious with right sided drooping mouth, loss of nasolabial fold, with dysarthria (slurred speech). She presented worries about her somatic illness. Electroencephalography was performed that revealed groups and intervals of slow waves over the left frontal-temporal regions. The patient was urgently referred to a neurologist for further investigation and treatment.
Initial CT exhibited only mild hypodensity in the left basal ganglia and the left perisylvian region.
MRI performed the following day shows a hypointense signal in T1, hyperintense signal in T2, and FLAIR pulse sequences involving the left caudate nucleus, left lentiform nucleus, part of the left frontal, left temporal and left insular lobe. A marked diffusion restriction with low ADC map values exists in the same areas. Findings are consistent with acute ischemic stroke in the left MCA territory.
Such cases need to be urgently treated by neurologists and the fluctuating symptoms need to be followed over time. Knowledge about biological markers and neuroimaging is necessary for psychiatrists and close cooperation with neurologists is needed.
After performing another CT with angiography with marked hypodense lesions, the patient was admitted and treated at the neurology clinic and dismissed fully recovered.

Malingering disease or depression

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Malingering is the intentional fabrication or exaggeration of symptoms for material gain. Malingering is estimated to be present in up to 8% of all medical and psychiatric cases. A 35 year old female came to the psychiatric department with multiple complaints—vomiting, fits, stomach ache, weaknesse, can't breathe, she felt very bad and she said she was going to die. Previously, she went to a dermatologist to seek help for her dermatitis. They were given therapy she used for years and nothing changed. After that, she went to an intern medicine specialist who examined her and told her that there were no pathological findings. We discovered that their relations were strained after conducting a detailed examination and gathering data from her and her family. Her husband wants to tell her that he likes to divorce, but she consistently gets sick help from doctors. Before two years, she was treated for depression at the psychiatric department with numerous visits, and premorbidly she had histrionic traits. The 35 year old patient says that she is very bad and she wants to stay at the hospital for treatment. Anxiolytics, antidepressants, antiemetics were ineffective. A seemingly paradoxical procedure was then tried. She wanted to stay longer, but after 14 days, was discharged. Malingering was ruled and was a recognizable goal for the production of symptoms.She consciously avoided conversation with her husband, knowing that he was looking for a divorce by staying in the hospital. Although the syndrome has been reported predominantly in psychopathic males, there are also reports in females. The production of symptoms was deliberate. Patients who exaggerate, feign, or induce physical illness are a great challenge to their physicians. Trained to trust their patients' self-reports, even competent and conscientious physicians can fall victim to these deceptions. Keywords: malingering, psychiatric, symptoms, department, antidepressants

Papilophlebitis

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We present a rare case of a A 32-years old man complains of photopsia, atypical orbital pain and slightly blurred vision in the right eye. His uncorrected visual acuity was 1.0 Snellen decimal units in both eyes. During the ophthalmological examination with a biomicroscope, the anterior segment was found to be normal in both eyes, while the right fundus revealed: optic disk edema, papilla with unclear borders nasally and surrounding flame shape hemorrhages, dilated and tortuous venous blood vessels. Past medical and family history is negative. The optical coherence tomography finding revealed edema of the right papilla, while the macula was normal. Biochemical and autoimmune markers were normal, except for FGB-455GIA, ITGB3-T156C, MTHFR-A1298C, MTR-A2756G, MTRR-A66G, PAI-1 heterozygous mutations.
Ophthalmoscopic findings resolved completely after 4 months treatment with intravitreal application of anti VEGF (Vascular endothelial growth factor) (Avastin), parabulbar application of corticosteroids (amp Kenalog), topical drops of carbonic anhydrase inhibitors (brinzolamide) and systemic non-steroidal anti-inflammatory/antithrombotic and vitamin therapy. Although genetic analyses confirmed mutations of thrombophilia genes, due to their heterozygosity, their impact as etiologic factor cannot be established with certainty. Intravitreal anti-VEGF and corticosteroids remain the mainstream treatment of this condition in preserving good visual acuity and prevention of late neovascular complications. Keywords: papillophlebitis, corticosteroids, antiVEGF

Bilateral papilloedema in idiopathic intracranial hypertension

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Idiopathic intracranial hypertension (IHH) is a rare occurrence in young, physically fit patients and a diagnosis of exclusion in most patients presenting with signs and symptoms of elevated intracranial pressure. Here we describe a case of a young woman with bilateral papilloedema, who presented with a history of headache, blurred vision, and photopsia. Ophthalmological examination revealed bilateral papilloedema. The visual field showed peripheral vision loss. On the post-contrast series on MRI scan, narrowing of the left transversus sinus is observed, which supports the diagnosis of idiopathic intracranial hypertension. Consultation with a neurosurgeon was suggested to the patient. Although a rare disease, IIH should be suspected in patients with headache especially if the headache is persistent and other causes of headache have been ruled out.
Keywords: acetazolamide; idiopathic intracranial hypertension; pseudotumor cerebri.

Acromegaly -when worsening of one condition leads us to diagnose of another

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Acromegaly, is a rare disease, caused by pituitary adenoma, characterized with excessive secretion of growth hormone and insulin-like growth factor. The aim of this case report was to raise awareness of this disease, importance of early diagnosis to reduce comorbidities and improve the patient's quality of life.
A 40-year-old female, with positive family history of diabetes in both parents, was diagnosed with type 2 diabetes. Initially, she was treated with metformin 1gram twice a day, achieving satisfactory glycemic control. Also, she underwent a left-sided ovariectomy due to stage IA adenocarcinoma, without adjuvant therapy. After the procedure, glycemic control worsened, which led to insulin therapy. After two months on insulin therapy, (FPG 19, 21, 17mmol/l, PPG 20.4, 21.9mmol/l, HbA1c 11.5, 12.87 %) she reports joint pain, periocular swelling, swelling of the feet and ankles, increased shoes size and amenorrhea. Endocrinologist was consulted with additional hormone analyses. Elevated GH (>40 ng/ml) and IGF (382 ng/ml) were obtained. MRI of the pituitary gland identified macroadenoma, measuring 34mmx24mm. Endoscopic transsphenoidal surgery was performed with partial resection of the tumor. Ophthalmological and cardiac evaluations were normal. After surgery, GH level was 27.9, 22.5ng/ml and IGF-1 was 677, 501ng/ml. The patient started therapy with octreotide acetate 20mg every 28 days. Satisfactory glycoregulation was achieved.
Acromegaly screening is essential in patients with sleep apnea, hypertension, uncontrolled type 2 diabetes, arthropathy and carpal tunnel syndrome. Treatment involves GH and IGF-1 level control, symptom management, and improved QOL. Acromegaly is linked to increased mortality, primarily due to malignant, cardiovascular and respiratory diseases. Periodic mammography and colonoscopy are recommended for potential reproductive tract neoplasms.
Person-centered care approach, heightened acromegaly awareness, systematic screening and early diagnosis, interprofessional team strategy and patient education are imperative to mitigate associated morbidity and improve QOL.
Key words: Acromegaly, diabetes mellitus, growth hormone, insulin – like growth factor -1, quality of life.

Multidisciplinary Approach and Treatment of Disorganized Schizophrenia / Hebephrenia

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Hebephrenia is a chronic process disorder of the schizophrenic spectrum, characterized by disorganized speech and behavior, inappropriate emotional expression, discordant mood, flattened affect or facial expressions that do not correspondent with the situation, stereotyped answers, associative looseness, preservation, reduction in the overall functioning, lack of impulse control, and bizarre behaviors. Hebephrenia has an early onset, development in the adolescent period as well as rapid progress and integrity deteriorations of each segment of a person`s life. The purpose of this case report is to present all available therapeutic methods for improving the overall functioning of the patients: CBT, applied sociotherapeutic techniques, supported employment, and psychoeducation. Second in-hospital treatment of a male patient M.E, aged 29, at the University Clinic of Psychiatry – Skopje, due to prolonged psychotic symptomatology and behavioral changes. The patient has been diagnosed with F20.1 according to ICD-10, since he was an adolescent. Main presenting symptoms: Positive: hallucinatory experiences, disorganized speech, bizarre thoughts and behaviors, and, Negative: affective coldness, long-term lack of initiative and interest, passive dependence on his mother. At the Clinic, the patient was admitted for daily in-hospital treatment, followed up with a clinically directed psychiatric interview, social history, and PANSS and BPRS scales taken during admission and a month later. The patient was treated with combined pharmacological and psychosocial treatment, both individually and in a group, with daily monitoring of his condition by all members of the team, particularly emphasizing the psychosocial support of the patient. After a month, there was a reduction in the psychotic symptomatology, increased self-esteem, improved communication with the family and other people, improved social skills, increased independence, and improved overall functioning**.** A timely and correct diagnosis is the key to the multidisciplinary approach that will contribute to the growth of the patient's self-esteem, improving his communication skills, social interactions, daily skills, and overall independence and functionality.

Keywords: multidisciplinary approach, schizophrenia, psychiatric rehabilitation, social skills, cognitive-behavioral therapy.

Thrombosis of cerebral venous sinuses as a complication in inflammatory bowel disease

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Cerebral venous sinus thrombosis (CVST) is a severe complication of inflammatory bowel disease (IBD), including ulcerative colitis (UC) and Crohn's disease (CD). UC, a subtype of IBD, presents diverse neurological manifestations, with increased thrombotic complications. A 56-year-old male with concomitant UC was diagnosed with cerebral venous thrombosis (CVT) after presenting with epileptic seizures and right-sided extremity weakness.
Methods: Neuroimaging assessments, MRI, and MRV, confirmed the diagnosis.
Results: MRI revealed thrombotic masses in the transverse sinus, extending into the right sigmoid sinus. A small hypersignal change in the right temporo-occipital region lacked pathological contrast accumulation, indicating hemorrhage. Ischemic alterations in the left cerebellum were attributed to sagittal sinus thrombosis. MRI venography showed hypointense filling defects within the lumens of the superior sagittal sinus, inferior sagittal sinus, as well as the right sigmoid and right transverse sinuses.
UC is associated with an increased risk of deep venous thrombosis and pulmonary thromboembolism. CVT, though rare, occurs in both UC and CD cases. Proposed mechanisms for UC-related thrombosis include hyper-coagulation, hypo-fibrinolysis, platelet abnormalities, endothelial dysfunction, and immunological issues. Considering IBD as a potential cause of CVT is crucial for early diagnosis and management, improving the typically poor prognosis. Prophylactic anti-coagulation should be considered, especially during severe IBD flares.
Key words: stroke, inflammatory bowel disease, ulcerative colitis, cerebral venous sinus thrombosis.

ANTI-VEGF in the treatment of neovascular glaucoma in a patient with proliferative diabetic retinopathy

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Monitoring the regression of neovascularization and the effect on IOP reduction as a result of intravitreal administration of an anti-VEGF preparation. We present a 62-year-old patient with bilateral proliferative diabetic retinopathy and neovascular glaucoma in the right eye. Clinical investigations were performed: best-corrected visual acuity of both eyes was determined, IOP measurement, examination of the structures of the anterior eye segment on a biomicroscope with a photo display of the eye for monitoring, analysis and evaluation of neovascularization of the iris. Posterior segment examination with 78D and 90D magnifier. After 3 consecutive applications of Anti-VEGF in a period of 10 months from the start of the treatment, followed by a biomicroscope with photo display, regression and stagnation of the neovascularization of the iris was determined, as well as a significant drop in IOP from 38mmHg to 18mmHg. Anti-VEGF preparations are today considered as the first line of treatment in inhibiting proangiogenic factors and slowing down further progression, as well as partial or complete regression of newly formed blood vessels as a consequence of the angiogenesis process.
Key words: Anti-VEGF, proliferative diabetic retinopathy, neovascular glaucoma, Ranibizumab, Bevacizumab, Aflibercept, Faricimab,

Spastic quadriparesis as a reason for deep vein thrombosis

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This case involves a 42-year-old male, obese, smoker, hospitalized for a month at a neurology clinic due to sudden onset of weakness and tingling in arms and legs, difficulty in movement. Quadriparesis spasticity was diagnosed because of cervical canal stenosis. The treatment was continued at home, immobile for another month when appeared painful swelling on his left lower leg. Diagnostic in the transfusion department was done, he denies comorbidities and previous occurrence of thrombosis. Physical findings on inspection, swelling of the left lower leg and foot was observed, firm swelling on palpation, without signs of hyperemia. Doppler ultrasonography deep veins CFK, SFV, VP incompressible, non-flowing, filled with thrombotic masses in addition to DVT, D-Dimer 8470. The presence of mutations in thrombophilia genes is excluded. The patient was put on LMWH in the first 3 weeks and then on DOAK (Rivaroxaban 20mg daily) for the next 6 months. After 3 months from the start of therapy, symptomatology withdraws on the limb, d-Dimer 3700, Doppler CFK, SFV compressible in the upper third, remain unchanged. Control examination after 6 months from the start of therapy, d-dimer normalized, doppler US showed a compressible and recanalized VP, and the rest of the findings remained unchanged. Treatment is continued with Rivaroxaban 20mg daily and recommendation for moderate physical activity.
In summary, the cause of DVT in the patient is not thrombophilia but hemodynamic changes (stasis, reduced flow), because of long-term immobilization contributed by the risk factors of obesity and smoking.

Atypical foveal hypoplasia

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We present a case of a 36-year-old female with isolated bilateral foveal hypoplasia, a rarity in clinical practice. Despite lacking relevant medical or familial history, the patient exhibited no foveal pit on spectral-domain optical coherence tomography (OCT) scans, indicating structural abnormalities within the macular region. Notably, the patient maintained a best corrected visual acuity (BCVA) of 1.0 in both eyes, defying conventional expectations regarding visual impairment associated with severe foveal hypoplasia.
Foveal hypoplasia is defined as underdevelopment of the foveal region. The main finding is often the lack of the foveal pit, but the most important for the achieved visual acuity is cones maturation in the outer retinal layer. Foveal development starts early in the 25th gestation week, and continues after birth. The main components of the foveola are Muller cells and cones. Muller cells inhibit the astrocyte migration, and astrocytes are blood vessels inducing cells. The result is the foveal avascular zone, free of astrocytes and blood vessels. Rods are also absent in the foveolar region.
The purpose of this case report is to provide a comprehensive overview of foveal hypoplasia, including its clinical presentation, imaging characteristics, and impact on visual acuity. Through this report, we aim to enhance the understanding of the developmental process of foveal hypoplasia and the anatomical changes that occur in the retina.

Disseminated Demyelination Changes on Brain Magnetic Resonance Imaging (MRI) Linked with Patent Foramen Ovale (PFO) and the Crucial Role of Symptom Detection

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Demyelinating lesions represent areas of damage within the brain and spinal cord. Often a result of immune system-mediated attacks, secondary to an infection, ischemic events, metabolic disturbance, hereditary conditions or toxin exposure. Optimal method for detecting such lesions is via brain MRI. Case description: A 32-year-old female patient was hospitalized due to sudden onset of dizziness, headache, vomiting and right-sided hemiparesis; reported history of hormonal contraceptive usage up to six months prior, smoker, with positive family history of cardiovascular diseases. Biochemical blood analyses, hormonal, inflammatory and immunological markers normal, excluding elevated anti-TPO antibody titer (>1300). Brain computer tomography interpreted as unremarkable. Brain MRI with intravenous contrast described nodular demyelinating changes in left segment of the pons, right thalamus, left cerebellar hemisphere and vermis, of a subacute chronic character - interpreted as ADEM. Recommended corticosteroid therapy with gradual dose reduction. Cytochemical analysis and electrophoresis of CSF revealed no evidence of immune activity in CNS, virologic serology for neurotropic viruses negative except for elevated Rubella IgG titer. Over the following months, almost complete resolution of symptoms followed, apart from persistent migraine and altered sensation in left leg. Investigations including evoked potentials (VEP, SEP, BAEP), carotid doppler, antinuclear antibodies, anti-Aquaporin 4 antibodies and anti MOG indicated negative result. Thrombophilia factors with detected heterozygous C677T and MTHFR gene mutation. Follow-up brain MRI after 4 months indicated complete regression of focal changes in the right thalamus and cerebellum. Cardiological evaluation revealed right-to-left shunt with approximately 30 bubbles detected on transcranial doppler – positive test for PFO. Echocardiography and Holter ECG demonstrated no abnormalities. Performed operative closure of PFO with intracardiac prosthesis and placed on aspirin 100mg. Following the intervention, migraine intensity and frequency decreased, although paresthesia in the left leg persisted, leading to Duloxetine 60mg/day prescription for symptom management. Keywords: Patent foramen ovale, Demyelinating lesion

Diagnostic crossover from Anorexia Nervosa – Restrictive Type to Anorexia Nervosa – Binge/Purge Type, risk factors and treatment challenges

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Anorexia Nervosa (AN), a complex disorder marked by self-induced starvation and an intense fear of gaining weight, manifests in two primary subtypes: restricting (AN-R) and binge/purge (AN-BP) [3]. Longitudinal studies report high incidence of diagnostic transition from AN-R to AN-BP type [5] [4] distinguished by binge eating or purging behaviours, self-induced vomiting or misuse of laxatives, diuretics, or enemas which is associated with more complicated clinical presentation, a longer duration and worse outcome of illness, higher prevalence of psychiatric and somatic comorbidities such as behavioural impulsivity, mood liability, suicidality, depression, and diminished quality of life [1] [2]. This transition is often influenced by a range of social and psychological factors, including depression, trauma, family dynamics, and substance abuse. This case aims to illustrate the complex clinical presentation and the effectiveness of a multidisciplinary treatment approach of a AN-BP, in a female adolescent patient in a psychiatric day hospital setting. A 22-year-old female, A.R., with no previous psychiatric intervention, was hospitalized for the first time at the Day Hospital of the University Clinic of Psychiatry in Skopje. Referred by an internist for electrolyte imbalance, secondary amenorrhea, and anaemia, A.R. presented with severe underweight, deteriorated physical appearance, and reported a significant weight loss due to chronic self-starvation, bingeing, purging, and psychological distress. Over the course of 4 months of day hospital stay she was treated with a multidisciplinary approach including psychotropic medication (antidepressant and adjuvant antipsychotic), as well as individual and psychotherapeutic interventions, and family education leading to noteworthy improvements in her physical health, psychological state, and overall functioning. This case highlights the efficacy of a multidisciplinary treatment approach in AN, demonstrating significant improvements in both physical health and psychological well-being, emphasizing the importance of timely diagnosis and holistic care in complex eating disorders which are one of the more frequent factors for morbidity – especially in adolescent females.

Key words: eating disorder, anorexia, risk factors, bingeing, purging, multidisciplinary

Complex care of complex cases: Treatment challenges of co-occurring Gender Identity Disorder and Borderline Personality Disorder in adolescence.

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Gender Identity Disorder (GID) is characterized by a profound incongruence between one's experienced gender and the gender assigned at birth, leading to significant distress [4]. Individuals with GID often present with psychiatric comorbidities such as depression, anxiety, substance abuse, suicidality and personality disorders, notably Borderline Personality Disorder (BPD) [3]. This case report explores the diagnostic and therapeutic challenges encountered in managing an 18-year-old man with concurrent GID and BPD, admitted to a Day hospital setting. The aim of this case report is to highlight the diagnostic and treatment challenges posed by the co-occurrence of gender dysphoria and borderline personality disorder in an 18-year-old man, hospitalized in a Day hospital setting and seeks to contribute to a deeper understanding of their potential reciprocal influence, the implications for psychiatric comorbidity assessment, and the impact on clinical management strategies. The case involves a third hospitalization of an 18-year-old biologically male patient at the University Clinic of Psychiatry Day Hospital, presenting with gender incongruence, dysphoric mood, impulsivity, self-harm, suicidality, and impaired social functioning. With a history of psychiatric symptoms following complex childhood trauma, diagnosis in compliance to ICD – 10, was established through structured psychiatric interview and psychodiagnostic assessment, leading to a multidisciplinary treatment approach combining psychopharmacology (antipsychotic, antidepressive, anxiolytic and mood stabilizing medication) and psycho-social interventions.The patient's hospital course during the past 3 months was marked by periods of clinical improvement and exacerbation, underscoring the challenges in managing such complex cases. The interplay between GID and BPD symptoms presents significant diagnostic and treatment challenges, necessitating a comprehensive clinical approach. Effective assessment of psychiatric comorbidities is crucial in gender dysphoric adolescents, particularly when considering interventions like hormone therapies or gender-reassignment surgery [1]. Psychiatric comorbidities, such as BPD, can significantly impact the psychosocial adjustment of patients pre- and post-transition, highlighting the importance of a thorough and careful approach to treatment planning [2].

Key words: gender identity disorder, personality disorders, adolescent

An Unusual Location And Dermoscopy Finding Of a Pilar Sheath Acanthoma

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Pilar sheath acanthoma is a rare, benign follicular hamartoma. They frequently present as an asymptomatic, flesh-colored papule with a central opening typically appearing on the upper lip of elderly patients although isolated cases have been reported on the forehead, cheek and postauricular area. Five neoplasams may arise from the infundibular part of the pilar apparatus. These include: pilar sheath acanthoma, dilated pore, inverted follicular keratosis, trichilemmoma, and the tumor of follicular infundibulum. We represent the case of a 55 years old, male patient, who came for consultation on nodular, keloid-appearing lesion on the upper leg, size of the lesion was 20x30 mm. It started developing five months prior the exam, at first as a small ulcer, patient did not report any previous injury at the site. The dermoscopic images revealed dotted and thin hairpin-like vessels on the periphery, polymorphous vessels including linear curved, rosetts, white circles with yellow center, and on nonpolarised mode, rainbow appearance. These dermoscopic features are non-specific and may also be observed in malignant tumors. Differential diagnosis included squamous cell carcinoma, inverted follicular keratosis and melanoma. An excision was performed and sent for routine H and E staining, which revealed distended, cystic, follicular structures, filled with keratin debris, part of them ruptured as well as abound inflammatory infiltrate, consistent with a pilar sheath acanthoma. In addition to being diagnostic, the excision was also curative, and no further treatment was required. More reports are needed to define the typical features of pilar sheath acanthoma in order to differentiate this benign tumor from other malignant tumors just by dermoscopy and thus to avoid unnecessary excisions in the future.
KEY WORDS: Pilar sheath acanthoma

Pyoderma gangrenosum – a case report

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Pyoderma gangrenosum (PG) is one of the least common inflammatory ulcerative skin diseases. It is associated with IBD, RA and surgical sites. As a rare entity, often constitutes a diagnostic enigma. PG is characterized by progressive necrosis of the wound's margins. Starting as a small red bump on the skin, it can become a painful open sore. Exposure to new skin trauma (new incision/puncture wound) may trigger new ulcers.
62 y. o. male admitted to hospital, at vascular department, for surgical resolution of occlusion of left AIC, with fem-fem crossover bypass with application of vascular prosthesis. The patient had fever 72 hours postoperatively. Painful surgical wound, edema and diffuse erythema were present in both ilioinguinal regions. Microbiological swab results were negative on two occasions. Sterile pustular lesions were clearly present. Regular dressings were carried out. We decided not to debride the wound.
There was no presence of comorbidities and no other diseases.
Fever, painful surgical wound, secretion, surrounding edema and diffuse erythema were clearly present. Laboratory results showed high values of CRP, neutrophilia, thrombocytopenia. A negative wound culture result was also confirmed.
Triple antibiotic therapy was ordinated. Regular daily dressings were carried out two times a day using Aquacel Ag Extra. There was no improvement with these therapy modalities.
Cellulitis, fasciitis and surgical site infection were included as a differential diagnosis.
Diagnostic experience helped us confirm the diagnosis - Superficial granulomatous pyoderma (type of PG).
Corticosteroids, immunoglobulins, Dapsone, Infliximab and Tacrolimus were ordinated.
PG is classified as neutrophilic autoinflammatory dermatosis. It is not an infection, nor does it cause gangrene. Misdiagnosing and inappropriate therapy are common consequences. Therefore, complete clinical evaluation and timely treatment are of great importance.
Key words: pyoderma gangrenosum, Superficial granulomatous pyodermia, neutrophilic autoinflammatory dermatosis.

Appendiceal Adenocarcinoma Masquerading as Acute Appendicitis in older patient

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Primary adenocarcinoma of the appendix is a rare neoplasm, and a large number are found incidentally during abdominal imaging and operations with other indications.
We present a case of primary appendiceal adenocarcinoma discovered incidentally following a classical appendectomy for signs of acute appendicitis in a 78-year-old male Native computed tomography showed opacification around the ileocecal valve several enlarged lymph nodes as well as several hypodense changes in the liver suspicious for secondary deposits. The appendix did not stand out from its surroundings. A classical appendectomy was performed, standard procedures for histology were done.
Histological examination showed moderately differentiated, colonic-type invasive adenocarcinoma involving almost the entire appendiceal lumen with invasion through the muscularis propria, invading in the mesoappendix. The proximal resection margin was negative for carcinoma. As no other specimens were taken during the initial surgery, the pathologic stage was reported at pT3 pNx pMx, G2, NG3. There were no lymph nodes present in the mesoappendix. Right hemicolectomy was suggested to the patient.
When these older patients present for appendicitis, malignancy should always be on the differential. Though non-operative treatment is a growing modality for atypical appendicitis, it is important to take patient age and other risk factors for neoplasms into consideration when making this decision. Surgeons and emergency room physicians should be aware of malignancy as a potential etiology of appendicitis.
Keywords: appendectomy, appendiceal carcinoma, general surgery, appendicitis

Early diagnosis of musculoskeletal diseases

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Diseases of the musculoskeletal system are public health problems. They include the body's muscles, joints, tendons, ligaments, bones and nerves lead to partial or complete dysfunction.
A 60year-old man bicycle rider, complains of pain and swelling in the back right upper leg. He feels this for 3 months now but the swelling is increasing. On examination, there is painful palpatory sensitivity. The patient is sent for blood analysis and X-ray. RTG-right femur with orderly morphology and structure, but an impression of swelling of the soft tissues of the upper leg. The patient is sent to an Orthopedic specialist. It was forwarded to MRI - imaging shows an oval, lobulated mass (109 x 80 x >120 mm) with flat edges, homogeneous, clearly delimited. It suppresses them but does not infiltrate the surrounding muscles, in addition to Lipom. MRI with contrast- The tumor formation protrudes through the outer fascia, between the long and short heads and between the long heads of the biceps femoris and semitendinosus. Echo - at a depth of about 20 mm, a hyperechoic, vaguely demarcated, avascular change with dimensions of about 70x25 mm. Diagnosis is Tu regio femoris posterior lateris dextra and operative treatment is indicated. During the operative treatment, a huge tumorous lipoid tissue was removed and it was sent in pathohistology. After a 6-week follow-up examination, the patient feels well and on a follow-up MRI , after 3 months - Distal from the surgical incision, a more prominent lipomatous tissue popliteal compared to the contralateral side without a visible capsule is seen. After one year the result is the same.
As a result of the appointment of appropriate diagnostic procedures and timely diagnosis and appropriate treatment, the patient continued to actively ride a bicycle.

Neurodevelopmental and Psychiatric Challenges in Female Adolescents with Turner Syndrome

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Turner Syndrome (TS), a condition which affects females and the main concern are the X chromosomes- partially or completely missing. TS causes a variety of developmental difficulties presenting as ovarian dysfunction, heart defects, short height, specific physical features and psychiatric comorbidities [2],[3] such as anxiety, depression, difficulties with visual-spacial reasoning, motor skills, executive functioning, attention. One of the most recognisable characteristics is growth impairment [1], [3]. The aim of this case is to illustrate the complex clinical presentation, of the multidisciplinary treatment approach of TS in a psychiatric day hospital setting. A 37-year-old female patient, M.I with history of psychiatric difficulties dating from early childhood including social isolation and mood changes. Due to her atypical development she underwent a series of medical examinations and was diagnosed with Dg. Sy Turner at the age of 13. The patient suffered a polytraumatic injury at the age of 14, resulting in comatose state and prolongued hospital stay. Psychiatric treatment started at the age of 16 due to behavioral changes and depressive symptomatology, throughout the years she was diagnosed with the following diagnoses in compliance to ICD-10: F41.2, F21 and F33, F23.0, F23.01. Furthermore, the patient is diagnosed with epilepsy (G40) and recieves antiepileptic medication. Over the course of 6 months of day hospital stay she was treated with multidisiplinary approach including antipsychotic, mood stabilizer and melatonin as well and individual and group psychosocial treatment leading to noteworthy improvements in her physical health, psychological state, and overall functioning. This case highlights the importance of multidisciplinary treatment in women with TS which are at a higher risk to develop neurodevelopmental and psychiatric disorders. They require increased and lifelong psychiatric follow up because of higher prevalence of autism, ADHD, social isolation and intelectual disability.
Key words: Turner Syndrome, epilepsy, multidisciplinary, polytrauma.

The role of physical therapy in the treatment of carpal tunnel syndrome

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Carpal tunnel syndrome is the most common peripheral mononeuropathy that occurs due to compression on the n.medianus in the carpal tunnel. The carpal tunnel is a fibro-bony tunnel located on the palmar side of the root of the hand, which is composed of the the carpal bones and retinaculum flexorum. N.medianus passes through it together with the tendons of the finger flexors. The cause of nerve compression may be unknown (idiopathic) or due to thickening of the connective tissue and an increase of internal pressure in the canal itself correlated with certain conditions or diseases (pregnancy, obesity, diabetes mellitus, hypothyroidism, rheumatoid arthritis, scleroderma, injuries). The clinical picture is dominated by sensitive outbursts in the innervation area of the n.medianus. Motor outbursts occur after long-term and intense compressions of the nerve. Anamnesis, clinical examination and EMG are sufficient to make a diagnosis. Treatment is conservative or surgical.
Case report - A 64-year-old female patient presents for examination due to expressed subjective sensations - tingling, burning in the three fingers of the right hand that spread to the hand and forearm, especially pronounced during the night. As a result, the last month has insomnia and impaired quality of life. Conservative treatment with physical therapy and drug therapy was carried out. Ultrasound therapy, electrotherapy and laser therapy were carried out for 15 days. At the follow-up examination 3 weeks after the completion of the physical procedures, there was a significant reduction in subjective disconformities.
Conclusion - Appropriate and timely started conservative treatment of carpal tunnel syndrome leads to a significant improvement in the quality of life of patients.
Key words - carpal tunnel syndrome, physical therapy, quality of life

Deep vein thrombosis following total knee arthroplasty

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This case involves a 70-year-old female with uncontrolled hypertension, diabetes and obesity that was referred to the transfusion medicine department with 3-days history of swelling, pain and erythema in the right lower extremity. She underwent total knee arthroplasty of the right knee 5 weeks before the onset of the symptoms. Five weeks postoperatively, the patient received a low weight molecular heparin (Enoxaparin sodium anti-Xa IU/0.4 ml once daily) as thromboprophylaxis. Patient was slowly starting to restore her walking pattern with axillary crutches. On physical examination, the patient had visible swelling and erythema in the right shin and pain on palpation in the right calf. Deep vein thrombosis (DVT) diagnostic procedures were done based on relevant clinical practice guidelines and the findings showed significantly elevated D-dimer levels (5150 ng/ml). Venous doppler ultrasonography of the deep veins showed that the superficial femoral vein (SFV) is compressible with transmitted cardiac pulsations that strongly indicate decompensated cardiomyopathy as well as presence of partially recanalized thrombus of the popliteal vein. Immediately after diagnosis, treatment with therapeutic subcutaneous nadroparin calcium 5700 anti-Xa/0.6 ml twice daily was initiated. On follow up, 3 weeks after the start of treatment we noted a significant improvement of DVT symptoms. Anticoagulation was continued with DOAC - Rivaroxaban with a dose of 20 mg once daily.
In summary, DVT is considered as one of the most serious and potentially life-threatening complications following total knee arthroplasty and this case shows that it can occur in patients with multiple comorbidities such as diabetes, obesity and heart failure despite all the appropriate measures that have been taken to prevent DVT such as prophylactic administration of LMWH.
Keywords: deep vein thrombosis, total knee arthroplasty, low weight molecular heparin

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Every physician matters, each patient counts.

Integrative and Lifestyle Medicine: Transforming Healthcare in Contemporary Society

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In recent years, healthcare has shifted significantly towards a holistic approach, embracing Lifestyle Medicine (LM), Integrative Medicine (IM), and planetary well-being. While prevention has long been central in conventional medicine, LM and IM have emerged as indispensable disciplines, particularly in managing chronic diseases and advancing patient-centered care. IM integrates conventional medicine with complementary therapies, considering the interplay of mind, body, and spirit, along with lifestyle factors, genetics, microbiota, and environment. This approach empowers individuals to actively engage in their well-being. Similarly, LM emphasizes lifestyle factors such as diet, exercise, sleep, stress management, and social connections in preventing and managing chronic diseases by targeting root causes and promoting sustainable behavioral changes.

The integration of evidence-based complementary therapies and lifestyle modifications underscores the commitment of IM and LM to comprehensive patient care. Medical professionals in these fields serve as facilitators of holistic health, guiding patients towards personalized, integrative

approaches that prioritize overall well-being. With over 80% of U.S. healthcare spending attributed to conditions rooted in unhealthy lifestyle choices, it's imperative for medical students to familiarize themselves with evidence-based guidelines in lifestyle medicine practices.
Furthermore, medical professionals are instrumental in advancing research and evidence-based practices within IM and LM. Through participation in clinical trials, outcomes research, and translational studies, clinicians contribute to the growing body of evidence supporting integrative and lifestyle interventions' efficacy and safety. By disseminating research findings and best practices, medical professionals facilitate the integration of IM and LM into mainstream healthcare, driving paradigm shifts towards prevention-oriented, patient-centered care models.

In conclusion, IM and LM represent transformative paradigms within modern healthcare, addressing individuals' multifaceted health needs through holistic, patient-centered approaches. Medical professionals play integral roles in championing these disciplines, serving as educators, advocates, and collaborators in the pursuit of optimal health and wellness for all.

Keywords: healthcare paradigm shift, lifestyle medicine, integrative health, chronic disease management, patient-centered care, holistic approach, evidence-based practices, planetary health

Northeastern University

Closing Note

As we come to the end of this abstract book for the Case Report Congress, we would like to express our gratitude to all the authors who submitted their work, as well as to the reviewers who took the time to provide valuable feedback.

The case reports presented in this book showcase the diversity and complexity of clinical practice, and serve as a reminder of the importance of careful observation, meticulous documentation, and thoughtful analysis. They also demonstrate the power of collaboration, as healthcare professionals work together to provide the best possible care for their patients.

We hope that this book will inspire further research, discussion, and collaboration, and that the knowledge gained from these case reports will ultimately lead to better outcomes for patients around the world.

Once again, we would like to thank all the authors and reviewers for their contributions, and we look forward to continued progress in the field of clinical medicine.

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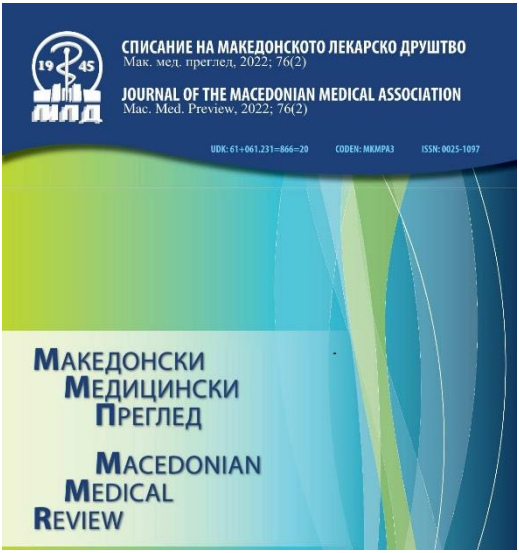

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