44th INTERNATIONAL MEDICAL SCIENTIFIC CONGRESS

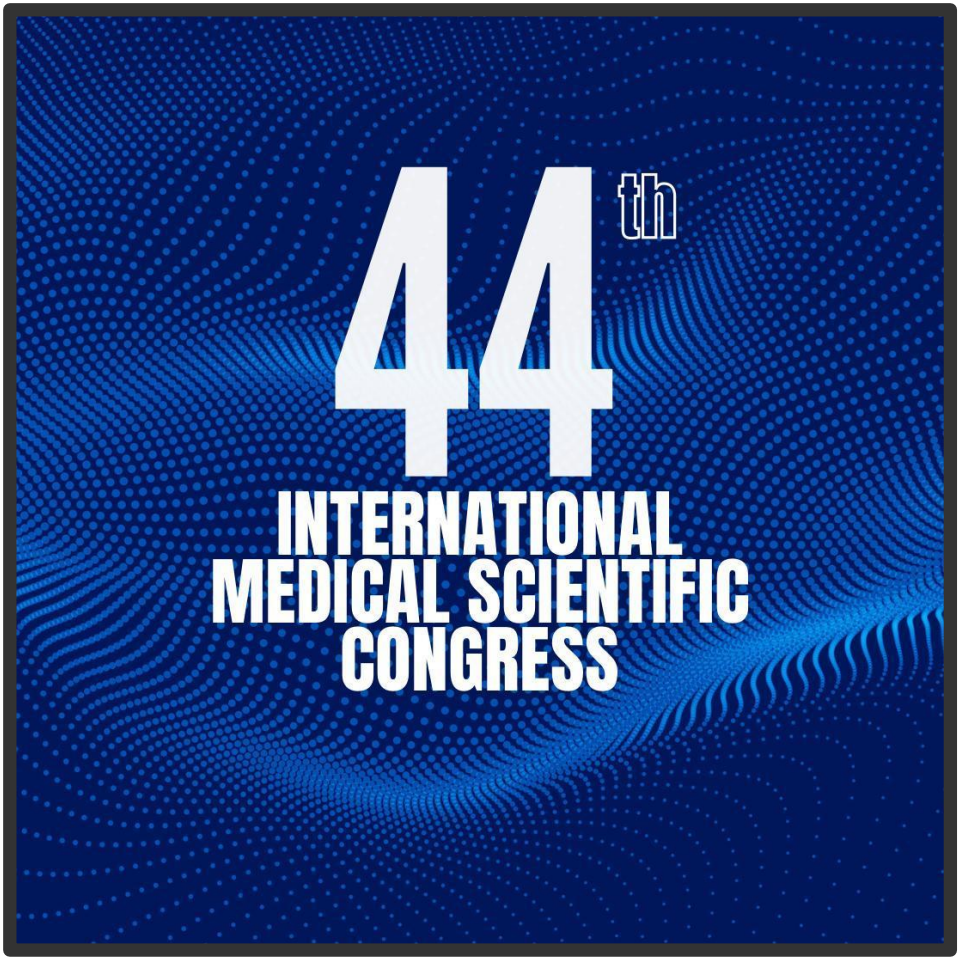




BOOK OF ABSTRACTS

#HealWithHeart

12 - 15 May Struga, North Macedonia


44th
INTERNATIONAL
MEDICAL SCIENTIFIC
CONGRESS

PUBLISHER: Medical Faculty –Skopje

Edition:1

Print: СТРАДУН ДООЕЛ увоз – извоз Скопје

Editor: Ana Timovska

Circulation: 200

CIP - Каталогизација во публикација
Национална и универзитетска библиотека "Св. Климент Охридски", Скопје

61(062)(048.3)

INTERNATIONAL medical scientific congress for students and young doctors (44 ; 2023 ; Struga)

Book of abstracts / 44th International medical scientific congress for students and young doctors 12th-15th May 2023 Struga, North

Macedonia ; [editor Ana Timovska]. - Skopje : Medical faculty, 2023. - 105 стр. : илустр. ; 21 см

ISBN 978-608-4840-90-9

а) Медицина -- Собири – Апстракти

COBISS.MK-ID 60325381

CONTENT

Welcoming notes.....6

Scientific Advisory Board & Scientific Jury.....9

Organizing Committee.....14

Awards.....16

Agenda.....18

Oral session.....21

Lectures.....53

Workshops Part I.....57

Workshops Part II.....66

Workshops Part III.....74

Workshops Part IV.....81

Sponsors.....87

About.....95

Index Abstracts & Index Authors.....100

WELCOMING NOTES



History. For some of us, it has been one of our favorite subjects during our education, and for some the least favourite. But knowing that you are going to be a big part of someone's history, we are sure that it makes you feel fulfilled and brings caring about those moments higher on the ladder.

This year, on the 12th of May, the Macedonian Medical Students' Association will once again, be honored to welcome you to write the history of the International Medical Scientific Congresses. MMSA- Macedonia was founded in 1947, it exists for 76 years now, as long as the Medical Faculty in Skopje. This year, it is our pleasure to announce to you the 44th International Medical Scientific Congress, as one of the biggest projects for MMSA - Macedonia.

We are medical students, all of us, just like you present here, striving for knowledge, pushing hard to achieve higher level of education, trying to improve our practical skills, digging to discover the core of science, mastering how to learn, how to research, how to be part of a team, becoming aware of how to be better and do better for our community, and use wisely all of the resources to provide the knowledge we need for our improvement. For us to be the best versions of ourselves.

We have an enormous message for all of you, a message that is strong enough to change a life - Encourage yourself to be the best version of you, to feel vibrant and alive, inside and out, to be fearless, to be better than yesterday, to be better friend and colleague, to be a better doctor and a better person. And always strive for greatness. We did that for you, now it's your turn to do it for yourself.

Welcome to the 44th International Medical Scientific Congress! Enjoy these days full of education, entertainment, assembling friendships that will last a lifetime, and discover a whole new world that is thrilled to have you in it! Greetings from the Organizing Committee of the 44th International Medical Scientific Congress.

Yours faithfully,

MMSA

Dear students, respected guests, dear colleagues,



It is my great honor and pleasure as Dean of the Faculty of medicine at the University "Ss. Cyril and Methodius" on behalf of all employees to extend my greetings to the participants of the 44th International Medical Scientific Congress for students and young doctors that traditionally takes place at the coast of the wonderful Ohrid lake.

The faculty of medicine at the University "Ss. Cyril and Methodius" has a long history from 1947 when on 17th March the decision was announced for the beginning of the studies of medicine in Socialist Republic of Macedonia.

The first lecture was on 3d November 1947, we are aware of the 76 years old tradition of the oldest, largest and owing to our nuptial permanent endeavor, the best faculty of medicine in our country.

The center for continuous medical education has been founded to allow continuous education for young doctors and doctors specialized in different disciplines. I would like to point out that it is a great pleasure to be a member of this big medical family, to belong to the most humane and respectful profession, at the same time it is a great challenge to follow the permanent development and achievements in contemporary medicine.

If you would like to be good students, and especially to be good doctors, you have to work very hard. On this congress there will be many presentations, workshops and seminars, and all these activities will be of great importance for your future professional development and for most of you I hope in the scientific research career. At the end, I would like to wish you successful work, to express my gratitude to the invited speakers and all the guests wishing them a pleasant stay in our beautiful country, and to all of you a wonderful event that will stay in good memories for the years ahead.

Regards,
Prof. Sonja Topuzovska MD
Dean of the Faculty of Medicine in Skopje,
University "Ss. Cyril and Methodius"

SCIENTIFIC ADVISORY BOARD AND SCIENTIFIC JURY



SCIENTIFIC ADVISORY BOARD

Prof. d-r Violeta Klisarovska

Prof. d-r Rubens Jovanovic

Prof. d-r Zlate Stojanoski

Prof. d-r Kristina Skeparovska

Prof. d-r Kadri Hadzihamza

Doc. d-r Natasha Trpevska Shekerinov

Doc.d-r Nevena Manevska

Ass.d-r Aleksandar Savevski

SCIENTIFIC JURY

Prof. d-r Sonja Bojadzieva

Prof. d-r Slavica Hadzi-Angelovska

Prof. d-r Biljana Janevska

Prof. d-r Aleksandar Stankov

Prof.d-r Venjamin Majstorov

Prof. d-r Sinisa Stojanovski

Asst.Prof. d-r Igor Isjanovski

ORGANIZING COMMITTEE



44th INTERNATIONAL MEDICAL SCIENTIFIC CONGRESS



Vesa Sedaliu
Vice Head of OC



Betim Kamberi
Head of OC



Vegim Bilali
Secretary General



Vasil Shikov
SC Member



Ana Timovska
Head of SC



Mirjana Georgievska
SC Member



Teodora Andonovska
Fundraising



Drin Ukmata
Fundraising



Nikolina Trajanoska
Registrations



Darko Timovski
Registrations



Rita Ajdaraga
Head of PR



Ersa Perolli
PR Member



Kristina Pavloski
Logistics



Nikola Trajanoski
Social Agenda

AWARDS



AWARDS

The best oral, best case report and best poster presentation will be rewarded with the following prizes sponsored by Scientific Foundation SPIROSKI and MEDizzy:

#1 Place oral presentation – 600€ & Publication in the Open Access Macedonian Journal of Medical Sciences

#2 Place oral presentation – 300€ & Publication in the Open Access Macedonian Journal of Medical Sciences

#3 Place oral presentation – 150€ & Publication in the Open Access Macedonian Journal of Medical Sciences

The presentations are to be assessed both on the Scientific merit of the research and on the ability of the student to convey their work to the audience. The marks given by the Scientific Jury at the Congress and the marks received from the expert's review of the abstract will determine the winners of these awards.

These awards are given to acknowledge the contribution that medical students make to society and to encourage excellence in student research and presentation. We extend our sincerest gratitude to Scientific Foundation SPIROSKI for their initiative and inspiration for medical students to take an active interest in scientific work, enhancing and broadening their knowledge, getting involved and presenting their scientific work. We hope these awards will motivate medical students to strive to realize their fullest potential which could, in turn, be beneficial to the medical field as a whole.

AGENDA



IMSC 2023 AGENDA				
Hour	**Friday, May 12**	**Saturday, May 13**	**Sunday, May 14**	**Monday, May 15**
07.00		**Breakfast**	**Breakfast**	**Breakfast**
10.00		**Workshops I**	**Case Report Session**	
11.00				
12.00 12:15		**Coffee Break**	**Coffee Break**	
12.30	**Arrival Day & Registration**	**Lectures**	**Workshops III**	
14.00		**Lunch**	**Lunch**	
15.00		**Workshops II**	**Beach Games**	
16.00				
17.00			**Workshops IV**	
18.00				
18:30	**Opening Ceremony**			
19.30	**Dinner**	**Dinner**	**Dinner**	
21.00	**Social Program**	**Social Program**	**Social Program**	
00.00				

ORAL SESSION



Treatment Management of Juvenile Bone Cysts

Abstract ID: 44-1/01

Authors: ALEKSANDRA GJORGIEVSKA[1], Milan Samardjiski[2], Daniel Gjorgjioski[2], Teodora Todorova[2], Anda Kasapi[1], Despina Kochova[1], Ana Timovska[1]

Institution: [1] Ss. Cyril and Methodius University, Medical faculty; Skopje, North Macedonia [2] University Clinic for Orthopaedics; Skopje, North Macedonia

Background: Juvenile (unicameral, simple) bone cysts are benign bone lesions, which are mostly seen in children and adolescents. The optimal management of juvenile bone cysts remains controversial, with conservative and surgical treatment options available, however, a standard protocol of approach has not been provided yet.

Objective: The aim of this study is to review and analyze the available evidence on the management of, and to determine the effectiveness of the various approaches and modalities in cases with juvenile bone cysts, as well as try and define the most applicable use for each of the conservative and surgical options.

Materials and methods: Through comprehensive literature search and review by using electronic databases such as PubMed and Cochrane, as well as consulting the treatment management of patients from the University Clinic for Orthopaedics in Skopje, North Macedonia, we conducted a study containing information on each available treatment, and the pertinence of their use in different cases of juvenile bone cysts.

Results: We obtained information on both conservative and surgical options through the literature search and review. Conservative treatments are observation and watchful waiting, vitamin D3 supplement therapy, and activity restraint with cast immobilization in children with pathological fractures. Surgical, both minimally invasive and invasive treatments are injection treatments, curettage and grafting, decompression, use of bone substitutes, internal fixation, as well as combinations of all methods.

Conclusion: The treatment of juvenile bone cysts depends on their condition at the moment of diagnosis, as well as location, size, and the calculated risks of developing a pathological fracture. The next step in the direction of establishing a standard protocol would be conducting prospective trials comparing the success of the available modalities.

Key words: Unicameral bone cysts, conservative treatment, surgical treatment, observation, steroid injection, curettage, decompression, bone substitutes

Coexistence of two extremely rare conditions: Struma ovarii with Papillary thyroid carcinoma

Abstract ID: 44-1/02

Authors: BOBAN TASEVSKI, Daniela Pop Gjorceva, Iskra Bitoska

Institution: Institute of Pathophysiology and Nuclear Medicine (IPNM), Accad "Isak S. Tadzer", University Clinic of Endocrinology and metabolism, Medical Faculty, Skopje, R.N. Macedonia

Introduction: Struma ovarii is defined as monodermal cystic teratoma and it is extremely rare condition - it comprises 1% of all ovarian tumors and 2,7% of ovarian teratomas. Being histologically equal to the thyroid gland tissue, it can succumb to every pathological change seen in the thyroid tissue.

Case presentation: A 34 year old female patient underwent elective laparoscopic exploration followed with right adnexectomy due to an ovarian cystic formation seen on ultrasound. Pathohistological evaluation of the specimens showed multifocal differentiated papillary thyroid carcinoma in struma ovarii, the size of the change cannot be determined. With a finding of normal thyroid morphology (on US) and function the patient was sent by an endocrinologist, to the IPNM for further management. Concerning the main task of Nuclear medicine in this case - to monitor and treat potential metastases with measurement of specific tumor marker thyroglobulin (TG) and radioiodine (RI-131) diagnosis and therapy, the complete removal of the thyroid tissue with thyroidectomy and ablation of the residual tissue with radioactive iodine was done. 4 weeks after the two modalities, iatrogenic hypothyroidism was achieved, TG became equal to zero and whole body scan with I-131 showed a minor thyroid residual tissue in the neck, without local or distant metastasis. Suppressive doses of levothyroxine were prescribed to oppose hypothyroid symptoms and to achieved TSH levels below 0,4 mIU/L. This clinical condition "known as low risk patient" allows us to follow the state of the patient every 3 months by measuring the TG when even a slight elevation of TG will indicate formation of metastases.

Conclusion: Thyroid carcinoma in struma ovarii is an extremely rare condition which can be efficiently treated and followed up with: adnexectomy, thyroidectomy, radioactive iodine ablation and measurement of the TG.

Key words: Struma ovarii, Papillary thyroid carcinoma, thyroidectomy, radioactive iodine ablation.

Acute myocardial infarction with ST-segment elevation in pregnancy: A case report

Abstract ID: 44-1/03

Authors:TRAJKOVA MARIJA[2], Jovanoski Mario[1, 2]

Institution: 1. University Clinic of Cardiology, University "Ss. Cyril and Methodius" 2.Faculty of Medicine, Skopje, Republic of North Macedonia[1] Faculty of Medicine, University Ss. Cyril and Methodius, Skopje, Republic of North Macedonia[2]

Introduction: Acute myocardial infarction with ST-segment elevation, one of the three entities of the acute coronary syndrome, is a life-threatening condition. Accordingly, it requires an immediate approach and adequate therapy. When caught early, the therapeutic protocol is quite clear, but when the patient is pregnant ethical and moral challenge occurs.

Case presentation: A 30-year-old female patient in severe general condition was brought by an ambulance from Bitola with chest pain that radiates to both arms and lower jaw and does not subside for 2 hours. In the ED in Bitola, an ECG recording was made and a diagnosis was established – An inferoposterolateral acute myocardial infarction. After the husband's hetero-anamnestic information that the patient is pregnant, a gynecologist was called and confirmed the pregnancy in the third week of gestation. The gynecologist suggested classical treatment regardless of the pregnancy due to the urgency of the situation, after which therapy was prescribed according to the AMI protocol. On one occasion, V-fib occurred, after which the patient was defibrillated. On admission, she is normotensive and with an accelerated heart rate HR=120, non-contactable and disoriented, after which she was admitted to ICU. An episode of non-sustain VT occurred and spontaneously went back to sinus rhythm, after which PCI (percutaneous coronary intervention) was performed. The PCI showed 99% occlusion of the circumflex artery, which corresponded to the findings of ECG and Echocardiography. Troponin level was also elevated-50000. After the intervention, the patient's condition improved,

although she showed signs of pneumonia- highly suspicious of aspirational pneumonia, treated with antibiotics. The patient was followed up for 2 weeks, with an improved general condition. Due to the contraindications of AMI therapy in pregnancy, a committee was called to decide on the course of the pregnancy.

Conclusion: Since acute myocardial infarction is the leading cause of death, immediate access and treatment are necessary, regardless of other medical conditions. Contraindications of the therapy in pregnancy raise moral and ethical questions for clinicians, to make the best decision.

Keywords: acute myocardial infarction, pregnancy, contraindications, therapy

Multiple primary malignancies related to smoking: Challenges in implementation of adequate tobacco dependency treatment.

Abstract ID: 44-1/04

Authors: KIRA ILIEVA[1], Ivana Pavlova [1], Aleksandra Ilieva [1], Gordana Petkovska [1,2]

Institution:[1]. "St. Cyril and Methodius" University, Faculty of Medicine[2]. University clinic for radiotherapy and oncology, Skopje

Introduction: The presence of a prolonged history of tobacco smoking suggests an increased risk of developing multiple synchronous or metachronous cancers, which underscores the importance of heightened vigilance in their diagnosis and treatment. In North Macedonia more than half of the adult population currently uses tobacco products, thus highlighting the importance of taking an active approach towards the treatment of tobacco dependency and preventing the development of different types of malignancies. In this case report we present a metachronus occurrence of two separate malignancies and a potential third cancer related to tobacco smoking.

Case presentation: In the present study, we report a case of a 67-year-old male with a smoking history of 50 pack years, initially diagnosed with stage I infiltrative papillary bladder cancer in 2020 treated with surgery. In January 2022, after experiencing symptoms of dysphagia, odynophagia and dysphonia, the patient underwent extensive examination. An endoscopy of the oropharynx and hypopharynx with a consecutive biopsy was performed followed by CT evaluation. The presence of an inoperable invasive squamous cell carcinoma of the oropharynx and hypopharynx was discovered, which marked the patient's second malignancy. Concurrent chemo radiotherapy to TTD of 70Gy was performed and complete response was noted on the first evaluation after treatment. In July 2022 a follow-up computed tomography revealed a 7 mm solitary pulmonary nodule located posteriorly in the right upper lobe and 4 months later a consecutive scan detected a 2 mm increase of the size of the solitary nodule. As a new question has arisen, additional evaluation is required. The patient is still an active smoker with 20 cigarettes per day.

Conclusion: The present report highlights the risks of developing multiple primary cancers related to tobacco use and the clinical importance of treating tobacco dependency.

Key words: Bladder cancer, oropharyngeal cancer, tobacco smoking.

Neoadjuvant chemotherapy in TNBC with peau d'orange- Case report

Abstract ID: 44-1/05

Authors: ELENA RISTEVSKA [1], Gordana Petkovska [1,2]

Institution: [1]. "St. Cyril and Methodius" University, Faculty of Medicine [2]. University clinic for radiotherapy and oncology, Skopje

Introduction: Breast cancer is the most common malignant disease in women and is the second most common cause of cancer death in women. Currently breast cancer is divided into 4 basic subtypes: luminal A, luminal B, Her2 and basal like subtype (triple negative). Basal like or triple negative (TNBC) represent only 15% of all cases and it has the worst prognosis with 40% mortality rate in the first 5 years.

Case description: 70-year-old patient presents with evident swealing in the left breast, inflammation, thickened skin (peau d'orange) and enlarged lymph nodes in her left axilla. Mammography, core biopsy and additional CT of the thorax and abdomen was done and triple negative invasive ductal breast cancer was diagnosed cT4b cN2 M0 Stage IIIB. Neo adjuvant chemotherapy AC60 x4+ Doc90 x4 protocol (doxorubicin, cyclophosphamide, docetaxel) was planed but due to excellent respond after 3 cycles it was continued as AC60x6 protocol. Radical mastectomy with axillar dissection followed and no macroscopic tumor was identified in the breast or axilla but in samples taken from the breast malignant focuses were discovered ypT1c. Adjuvant chemotherapy with capacitabine followed in the next 6 months. Regular follow ups are scheduled.

Conclusion: The prognosis for TNBC is already bad and a detailed and multidisciplinary approach into the treatment should be taken for surely. Neoadjuvant chemotherapy should be considered as an option in triple-negative breast cancer, along with response assessment and switching to adjuvant chemotherapy to complete the treatment especially in tumors larger than 2sm and/or nodal involvement. It is proven that it can decrease the tumor burden which may enable more patients to undergo potentially curative surgical resection, and diminish the risk of recurrence. According to the new protocols, even platina agents like carboplatin and immunotherapy to stimulate the patient's immune system are included as an option in order to achieve better results.

Key words: TNBC, neoadjuvant chemotherapy, complete response.

Anomalies of the anterior abdominal wall in the fetus

Abstract ID: 44-1/06

Authors:ELENA VLASHEVA, Daniela Jovanova

Institution: University Clinic of Gynecology & Obstetrics

Introduction: The two most common congenital abdominal wall defects are gastroschisis and omphalocele. Both are commonly diagnosed prenatally. Gastroschisis occurs to the right side of the umbilicus and is lacking a protective covering over the herniated abdominal contents. On the other side, the omphalocele defect occurs at the abdominal midline that involves the umbilical ring and sac encasing the herniated abdominal contents.

Case report: A 29 year old woman, pregnant for the first time, was found to have an abnormality in the anterior abdominal wall of her fetus during a routine 19 week examination. A subsequent screening at 21 weeks at the UCGO confirmed the anomaly. The patient was informed of the fetal outcome, but chose to undergo a medical abortion, which was allowed up to 22 weeks. The patient's medical history included regular check-ups and negative Pap tests, normal Prisca 1, and negative microbiological smears. She had regular menstrual cycles but suffered from anemia and had not used contraception three months before and during pregnancy, also she did not consume alcohol.

Blood tests were carried out and upon ultrasound examination a defect in the anterior abdominal wall was revealed. An absence of membrane covering the small intestine in the amniotic fluid confirmed the diagnosis of Gastroschisis. Fetal biometry was consistent with the gestational week, and Doppler's results are within reference values for the feto-placental unit. Medical termination of the pregnancy was completed and the patient was discharged in good overall condition and given therapy and medical advice.

Conclusion: Both clinical entities can be detected during an ultrasound examination, at an earlier gestational age on a more sophisticated ultrasound device.

Keywords: Gastroschisis, Omphalocele, Pregnancy, Ultrasound.

Diagnostic challenge in a comatose patient: Ischemic stroke in a young woman on methadone maintenance treatment (MMT)

Abstract ID: 44-1/07

Authors: IVANA GACOVA[1], MD Natasha Simonovska[2]

Institution: University of "Ss. Cyril and Methodius", Medical faculty – Skopje[1], University Clinic for Toxicology[2]

Introduction: Increase in drug abuse, especially among the younger generation, constitutes a major social and medical problem. Opiates take a notable percentage of total overdoses and merit particular attention because of the potential mortality they cause when unrecognized and untreated. Moreover, opioid dependance may be considered an independent risk factor for stroke, especially in younger individuals. Drug users, between 15 and 50 years old, were 6.5 times more likely to have a stroke compared with age-matched non-users. The aim of this case report is to emphasize the diagnostic challenges the clinicians encounter when dealing with a comatose patient and the importance of keeping a broad differential diagnostic panel in mind.

Case presentation: A 47-year-old female patient was brought to the University Clinic for Toxicology in an unconscious state for unknown reasons. One day before, she was taken by her family in a hospital in her hometown, where they treated her for methadone and alcohol overdose. In our clinic the patient was started on a coma cocktail, which failed to improve the patient's condition. Toxicology analyses came negative, with mildly elevated methadone values (the patient was on MMT the last 7 years). On physical examination a flexion/withdrawal reflex on the left side of the body with apparent right sided hemiplegia was noted. An urgent brain CT scan showed an ischemic stroke with a compressive effect on the left lateral chamber. Although an immediate aggressive treatment was started, after 11 days the condition of the patient deteriorated and resulted in death.

Conclusion: The notable prevalence of opioids, 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. However, given the spectrum of clinical diagnoses, a thorough examination of a comatose patient is always essential.

Key words: drugs, abuse, opioids, ischemic, stroke

Intrathyroid thymic carcinoma with papillary carcinoma of thyroid: an extremely rare coincidence and a diagnostic challenge

Abstract ID: 44-1/08

Authors: LJUBICA BATKOSKA, Slavica Kostadinova Kunovska[1], Daniela Pop Gjorcheva[2]
Institution:[1]Ss. Cyril and Methodius University, Faculty of Medicine, Institute of Pathology, Skopje, North Macedonia [2]Ss. Cyril and Methodius University, Faculty of Medicine, Institute of Nuclear Medicine and Pathophysiology, Acad. "Isak S. Tadzer", Skopje, North Macedonia

Introduction: Intrathyroid thymic carcinoma (ITTC) is a rare malignant tumor, which occurs in the thyroid gland or the soft tissue of the neck. It comes with certain difficulties in the diagnosis, as it is hard to distinguish from other thyroid tumors and there are no specific clinical manifestations and imaging. The occurrence of ITTC combined with papillary thyroid carcinoma (PTC) is extremely rare, with just a few cases reported globally.

Case presentation: We report a 46-year-old female admitted to the Institute of Pathophysiology and Nuclear Medicine after total thyroidectomy. The pathohistological evaluation of the specimens from the "right lobe" showed atypical round cells with hyperchromatic nuclei and focal keratinization (characteristics of poorly differentiated squamous carcinoma) arranged in nests separated by branched fibrous septae. On immunohistochemical staining, the malignant cells were positive for CK19, CK7, CK5/6, p63, bcl2, CEA, as well as CD5 and CD117, which finally confirmed the diagnosis of ITTC. The operative material declared as "left lobe" showed specific pathological characteristics for Hashimoto thyroiditis, with a nodule within the lobe with morphology of PTC. Radioiodine ablation and levothyroxine TSH suppression were performed. Seven months later, a suspicious lymph node on the right median quadrant of the neck was seen on ultrasonography. A fine needle biopsy was performed which showed low values of thyroglobulin in the aspirate and the pathological evaluation was metastatic malignant neoplasm of epithelial origin. The patient was referred to an oncologist for further evaluation and treatment of the recurrence.

Conclusions: The identification of ITTC and other malignant tumors of the thyroid needs to rely on a broad panel of immunohistochemical stainings, and CD5 and CD117 are important immune markers. Although ITTC and PTC are less invasive than other thyroid carcinomas, the possibility of recurrence must be considered, therefore patients should be followed up and reviewed regularly.

Key words: intrathyroid thymic carcinoma (ITTC), papillary thyroid carcinoma (PTC), pathological features, immunophenotype

Ovarian abscess and actinomycosis of the uterus in 65-year-old woman

Abstract ID: 44-1/09

Authors:JOVANA KORDOSKA, Drage Dabeski, Ana Dabeski, Stefana Stambolieva, Aleksandra Tanasoska

Institution: University Clinic of Gynecology & Obstetrics

Introduction: Actinomycosis is rare, chronic granulomatosus disease caused by filamentous, gram-positive anaerobic or microaerophilic bacteria whereby Actinomyces Israelii is the most common human pathogen. Actinomycetes are commensal inhabitants of the oral cavity and intestinal tract but acquire pathogenicity through invasion of breached or necrotic tissue. Its symptomatology may imitate some malignant tumors or tuberculosis causing abscesses and fistulas.

Case report: A 65-year-old female patient presented to the Clinic of Gynecology and Obstetrics in Skopje with symptoms of lower abdominal pain and anemia. The patient had a history of 6 previous spontaneous deliveries and irregular gynecological check-ups. After admission, laboratory and clinical tests were conducted, revealing elevated levels of Ca125(66 U/ml) ,leukocytosis ($25x10^9$),CRP (120mg/L) and decreased hemoglobin (92g/L). Vaginal ultrasound showed tumor formation in the left adnexa and uterus, along with a small amount of free fluid in the Douglas space. Based on the decision of the oncology council, the patient underwent a surgical procedure involving access to the abdomen through a medial incision. Multiple adhesions were encountered on the small intestine, bladder and uterus which were meticulously separated. Due to pathological changes and enlargement the uterus was removed along with the left adnexa. The vagina was thoroughly cleaned and closed, and biopsies were taken from the omentum and parietal peritoneum. An abdominal drain was placed and the surgical wound was closed after confirming hemostasis and performing lavage.

Conclusion: Actinomycosis is frequently diagnosed in patients with an intrauterine device, but it can also occur in other individuals. Lower abdominal pain accompanied by anemia should raise suspicion for the possible presence of actinomycosis, regardless of the presence of an intrauterine device. Timely hysterectomy can be life-saving for affected women.

Key words: actinomycosis, lower abdominal pain, hysterectomy, anemia

Unraveling the Enigma: A case report of Schizoaffective Disorder with Mood and Psychotic Symptoms

Abstract ID: 44-1/10

Authors: ALEKSANDRA TANASOSKA, Jovana Kordoska, Stojan Bajraktarov

Institution: University clinic of Psychiatry, University of „St. Cyril and Methodius", Medical Faculty- Skopje, N. Macedonia

Introduction: Schizoaffective disorder, a psychiatric illness, manifests with concurrent symptoms of schizophrenia (delusions, hallucinations, disorganized speech) and mood disorders (depression, mania). With a lifetime prevalence of 0.3%, it is often misdiagnosed owing to overlapping diagnostic criteria with other disorders. Challenges in diagnosis arise from the disorder's position within the complex spectrum of psychiatric conditions. The multi-professional team plays a pivotal role in providing comprehensive care for patients with psychiatric disorders.

Case presentation: The case of a 54-year-old male with a psychiatric presentation unveils the intricate interplay of symptoms and challenges in diagnosis. His history of conflicts at work and in his marriage, coupled with a positive family history of mental disorders, paints a compelling clinical picture. Hospitalization follows an escalation of psychological difficulties, including tension, anxiety, and panic attacks, along with symptoms of suspicious behavior, auditory hallucinations, and delusions of being monitored. The patient's alcohol misuse, psychomotor agitation, rambling speech, paranoid ideation, and hypervigilant attention further complicated his condition. The lack of insight and disharmonious volitional dynamics adds to the complexity. The patient's wife reported additional concerns regarding erratic behavior and isolating tendencies at home. Medication interventions, including Risperidone, Mendilex, and Diazepam, followed by adjustments with Sertraline and Lamal were accompanied by daily psychosocial therapy sessions. These multifaceted approaches collectively contributed to improvements in mood, social functioning, and reduction in gambling behavior, emphasizing the pivotal role of multi-professional care in patient recovery.

Conclusion: Drug therapy is the first-choice treatment for schizoaffective disorder. Nevertheless, psychotherapy has emerged as a valuable intervention for individuals

with schizoaffective disorders. By normalizing thought patterns and reducing symptoms, building a trusting therapeutic relationship, and focusing on real-life plans, problems, relationships, and coping strategies, effective sessions facilitate greater understanding and regulation of emotions and thoughts.

Keywords: schizoaffective disorder, psychosis, mood disorder, diagnostic challenges, multi-professional care, psychotherapy

Case report: Stevens Johnson Syndrome in a patient with lung cancer

Abstract ID: 44-1/11

Authors: ELENA DUBROVSKA [1], Gordana Petkovska [1,2]

Institutions: [1]. "St. Cyril and Methodius" University, Faculty of Medicine[2]. University clinic for radiotherapy and oncology, Skopje

Introduction: Stevens Johnson Syndrome (SJS) and toxic epidermal necrolysis (TEN) are severe cutaneous drug reactions that predominantly involve the skin and mucous membranes. They are rare but are considered medical emergencies as they are potentially fatal. They are characterized by mucocutaneous tenderness typically hemorrhagic erosions erythema and severe epidermal detachment presenting as blisters and areas of denuded skin. Diagnosis relies mainly on clinical signs and symptoms. Histological analysis of a skin biopsy is showing typical full-thickness epidermal necrolysis due to extensive keratinocyte apoptosis.

Case presentation: 60-year-old patient is initially presenting with central nervous system symptomatology. CT scan of the brain shows multiple metastasis. In addition, CT of the thorax and abdomen shows tumor mass in the left lung and hilar, mediastinal and retroperitoneal lymphadenopathy. Bronchoscopy wit biopsy was done and NSCLC was diagnosed. Palliative whole brain radiotherapy was performed (30Gy/ 10fx) with addition of anti-edematous and prophylactic antiepileptic therapy (carbamazepine), after which it was continued with first-line chemotherapy CAP protocol (cyclophosphamide, doxorubicin and carboplatin). After the first cycle the patient presented with a severe maculopapular erythema on the capillitium, trunk and oral mucosa. The patient was admitted in the Dermatology clinic, ICU unit and was treated for SJS. After the treatment the skin process has completely resolved. The patient continued his treatment with second cycle of chemotherapy with reduced dose, no adverse reactions occurred. Carbamazepine was discontinued permanently.

Conclusion: Patients with lung malignancies are being treated with various medications including chemotherapy, immunotherapy and extensive symptomatic treatments. Health care providers should be aware of the potential SJS and closely monitor patients for symptoms no matter how rare they are. Early recognition and prompt treatment are crucial to prevent severe complications.

Key word: Stevens Johnson Syndrome (SJS), carbamazepine, lung cancer

An unusual presentation of sarcoidosis with renal involvement – a case report

Abstract ID: 44-1/12

Authors: SABRI LIKA, Pavlina Džekova-Vidimliski

Institution: PHI University Clinic for Nephrology-Skopje

Introduction: Sarcoidosis is a multisystemic, chronic and granulomatous disease with unknown etiology. Manifested with lymphadenopathy, pulmonary infiltrates and possible affection of other organs.

Case presentation: Patient (39 years old) with malaise, polyuria, polydipsia, palpable lymph nodes in the axillary regions and an erythematous rash on the left upper arm was referred to Nephrology clinic due to serum creatinine from 160 to 210 µmol/l during the last 12 months. A kidney biopsy was performed with findings of tubulointerstitial nephritis with nephrocalcinosis. The laboratory tests showed hypercalcemia of 3.2 mmol/l, ionized calcium 1.67 mmol/l and hypercalciuria of 9.3 mmol/l(1,3-10). Diagnostic investigations were indicated in order to find the etiology of hypercalcemia. With sternum biopsy, craniogram and edited ratio of kappa/lambda light chains ruled out multiple myeloma. Vitamin D intoxication (12.9 ng/ml), hyperparathyroidism (iPTH 12.3 ng/ml) and hypothyroidism were also ruled out. An increase in the level of angiotensin converting enzyme (ACE) was detected in the patient value 141 U/L (0-70). Significantly enlarged lymph nodes were detected on lung CT mediastinal-paraaortic and paratracheal in conglomerates, in both axillary fossae and infraclavicular left. A biopsy of a lymph node from the neck region and skin changes was performed with finding of epithelioid accumulations of histiocytes with single giant cells in addition to chronic granulomatous inflammation - sarcoidosis. The patient started therapy with tbl. Decortin 30 mg daily with a gradual dose reduction to 10 mg daily.
After 2 months, during the control examination of the patient by a pulmonologist,the patient was presented with withdrawal of complaints and finding of normocalcemia of 2.56 mmol/l, reduction of ACE to 65 U/L and creatinine to 103 µmol/l.

Conclusion: Renal involvement is detected in 5-20% of patients with sarcoidosis and is most often

associated with the disorder of calcium metabolism caused by sarcoidosis.

Key words: Sarcoidosis, renal involvement, hypercalcemia, hypercreatininemia

Feel the Pressure: Migraine or Acute Angle Closure Glaucoma?

Abstract ID: 44-1/13

Authors:DAVID DAMJANOSKI[1], Andrijana Petrushevska[1][2]

Institution:[1] Ss. Cyril and Methodius University, Medical Faculty; Skopje, North Macedonia [2] University Clinic for Eye Diseases; Skopje, North Macedonia

Introduction: Angle-closure glaucoma is glaucoma associated with a physically obstructed anterior chamber angle, which may be chronic or, rarely, acute. Risk factors include hypermetropia and microphthalmia. Symptoms like hemicrania and vision disturbances, can overlap in patients with migraine with visual aura.

Case presentation: A 33-year-old female patient presented to the neurologist's office with right-sided severe periorbital pain, decreased vision, redness and a watery right eye. The patient reports a history of headaches since she was 16 years old and hypothyroidism. The headaches have always been right-sided including the right eye with occasional short-lasting blurred vision and typically occur 1-2 times per year. She has been previously evaluated by an ophthalmologist and her eye exams have never shown abnormalities. After recovering from COVID-19, hours-long migraines with visual aura (rainbows and zig-zag lines) and nausea have been present daily. Ergotamine was started 2 months ago, but hasn't shown significant improvement.

At neurology, head MRI scan excluded neurological abnormalities. Next, ophthalmology consult was called and confirmed that the patient was suffering from glaucoma with acute angle closure with typical clinical findings. Our patient has hypermetropia - a major risk factor for developing this type of glaucoma. Anterior segment optic coherent tomography, perimetry and posterior segment optic coherent tomography were done. Topical and systemic treatment followed: beta antagonists, carbonic anhydrase inhibitors and a parasympathomimetic. After treatment, the patient showed significant improvement.

Conclusion: Prompt diagnosis of angle-closure glaucoma over migraine with visual aura is crucial. Immediate treatment with multiple topical and systemic drugs is required to reduce the intraocular pressure and prevent permanent vision loss.

Keywords: Acute angle closure glaucoma, migraine, hypermetropia, intraocular pressure

Bloodless Medicine: Challenges in Major Abdominal Surgery for Jehovah's Witnesses

Abstract ID: 44-1/14

Authors: NIKOLINA TRAJANOSKA[1], Nikola Trajanoski[1],Ana Timovska[1], Aleksandra Gavrilovska-Brzanov[1][2], Darko Dzambaz [1][3]

Institution:[1]Ss. Cyril and Methodius University, Medical Faculty; Skopje, North Macedonia;[2]University Clinic for Traumatology,Orthopaedic Diseases,Anaesthesia,Reanimation,Intensive care and Emergency center-TOARICEC;[3]University Clinic of Digestive Surgery, Skopje, N. Macedonia,

Introduction: As medical doctors, we are committed to providing the highest level of care and attention to our most urgent patients, with their well-being as our utmost priority. However, what happens when a patient declines a recommended treatment or prohibits it based on religious beliefs? This ethical dilemma becomes even more critical when the procedure involves a high risk of bleeding,and the patient refuses blood transfusions as a treatment option.

Aim: On the one hand, to present the moral and ethical dilemma, and on the other hand, to present our surgical experience with this group of patients.

Case presentation:A female patient, a Jehovah's Witness, was admitted to the Clinical Center „Mother Theresa" in Skopje as an emergency case, transferred from another clinic due to anemia (Hemoglobin = 63) and suspected gastrointestinal tract issues. Gastroscopy and a CT scan confirmed a neoplastic process with penetration into the duodenum. After necessary preoperative examinations, the patient underwent a median laparotomy and a right hemicolectomy with ileocolic anastomosis, and Whipple procedure, followed by the formation of multiple anastomoses. The medical team did not decide to transfuse the patient. The surgery was successful, and the patient was discharged from the hospital on the 17th postoperative day.

Conclusion: In conclusion, the management of major abdominal surgery in Jehovah's Witnesses presents significant clinical, ethical, and legal challenges for healthcare providers. Despite these challenges, medical doctors must prioritize patient safety while respecting their religious beliefs. The use of alternative blood conservation strategies and careful preoperative planning can help minimize the risk of complications. However, emergency situations remain

unresolved, and medical doctors must make difficult decisions to save the patient's life while balancing their religious beliefs.

Keywords: Jehovah's Witness, blood transfusion, ethical/moral conflict, Whipple procedure

Bacterial infections with Streptococcus pyogenes in kindergartens and schools and their prevention

Abstract ID: 44-1/15

Authors: ANA TIMOVSKA[1],Sanja Toshevska[1],Darko Timovski[1],Nikolina Trajanoska[1],Aleksandra Gjorgievska[1],Martin Stojanoski[1], Ilija Timovski[2]

Institution:[1] Ss. Cyril and Methodius University, Medical Faculty; Skopje, North Macedonia;[2]PHI Dr.Angelovska and Dr.Timovski-Skopje

Aim: The aim of this article is to point out the efforts in primary health care related to early detection of streptococcal infections in kindergartens and schools. In addition, adequate treatment was to prevent the occurrence of the Febris rheumatica and acute post streptococcal glomerulonephritis as possible complications.

Materials and methods: Health records of preschool and schoolchildren regular patients at the PHI Dr. Angelovska and Dr. Timovski- Skopje, for a period of 2 years (2021-2022) have been processed. Diagnosis based on the anamnesis, clinical picture (situation, throat and nose swab and lab. biochemistry analysis. Analytical and Method of comparison have been used for analysis.

Results: Out of 42275 medical examinations completed, 27730 were confirmed with upper respiratory infections. Throat and nose swab was taken from 4130 children. Positive findings were obtained from 1570 samples (38.01%). The most frequently isolated bacteria were: Streptococcus pneumoniae in 410 (26,12%), Haemophilus influenzae in 317(20.19 %) Branhamella catarrhalis-Moraxella in 279 (17,77%), and Streptococcus pyogenes in 237 (15.10%) of the samples. The remaining 327 (20.82%) were caused by other causes. Streptococcus pyogenes was isolated in 237 children . Season for such occurrences has mostly been autumn-winter. 73 children were with elevated values of AST (ASO).163 children had leukocytosis and elevated CRP. 203 children were treated with Benzathine phenoxymethylpenicillin (85,65% per os.), while 34 with other antibiotics. Extended prevention with Benzathine phenoxymethylpenicillin was established for 10 children over a period of 1-3 months. A scarlatiniform rash was also observed in 19 children. All the children had outpatient treatment.

CONCLUSION: Early detection and adequate treatment of streptococcal infections reduces the number of possible complications and reduces the number of hospital treated children.

Key words: bacterial infections, prevention, Streptococcus pyogenes, kindergartens,schools

Roche

Придружете ни се да го прославиме животот заедно

Рош е глобален пионер во фармацевтската индустрија и дијагностиката, лидер во персонализираната медицина. Компанија која постои 125 години во светот и 22 години во Македонија. Обединетите сили на фармацијата и дијагностиката под еден покрив го направија „Рош“ лидер во персонализираната медицина – стратегија чија цел е лекувањето да се приспособи кон секој пациент на најдобар можен начин. „Рош“ е најголемата биотехнолошка компанија во светот, со вистински диференцирани производи во областа на онкологијата, имунологијата, заразните болести, офталмологијата и болестите на централниот нервен систем. Компанијата е насочена кон подобрување на пристапот на пациентите до медицински иновации, преку соработка со сите релевантни чинители. Лидер во ин- витро дијагностика, терапии за тумори и во контролата/мерењето на шеќер во крвта. Како на глобално ниво, така и во Македонија нашите активности се насочени кон обезбедување на најсовремени иновативни тераписки решенија за доброто на пациентите. Прецизната дијагностика и персонализираната медицина е клуч за успешен третман. Рош исто така работи на идентификување на генетски и туморски биомаркери кои овозможуваат персонализиран пристап во третманот за секој пациент поединечно. Оваа информација ќе им помогне на лекарите да започнат таргетиран и ефикасен третман без одложување, а со тоа подобрување на благосостојбата на пациентите и намалување на трошокот на здравствениот систем. Тоа е главната причина зошто Рош е автентичен и препознатлив за разлика од останатите.



125 YEARS
Celebrate Life

LECTURES



First transplantation of the liver in our country

Lecturer: Svetozar Antovic MD,PhD

University Clinic for Digestive Surgery, Skopje, North Macedonia

Date: 13.05.2023, Saturday

A liver transplant is a surgery that removes a liver that no longer functions properly (liver failure) and replaces it with a healthy liver from a deceased donor or a portion of a healthy liver from a living donor. There are so many liver diseases that need transplantation, some of them, when the liver loses its function rapidly need urgent transplantation, and some are chronic progressive hepatic diseases that through many years lead to definitive death of hepatic cells, and the process of transplantation can be postponed. Most frequent conditions that require transplantation are alcoholic liver disease, liver neoplasms, cholestatic diseases and HCV infections. The number of liver transplants worldwide shows extreme regional variation. In the Republic of North Macedonia the first one was performed in 2022 by a team of surgeons and anesthesiologists at the Clinic for digestive surgery in Skopje. In these lectures the audience could hear about the experience of our doctors with performing this surgical procedure, the necessity of continuous improvement in this field, the indications, contraindications and risks that may occur doing something special like liver transplantation.

Forensic anthropology

Lecturer: Aleksandar Stankov MD, PhD
Date: 13.05.2023, Saturday

Bones are a sort of a book that only an expert in the area of physical or forensic anthropology can interpret. The application of these sciences allow creating a picture of the human life in the past in a particular area. It involves interpretation of the physical appearance, height, gender, age, profession, nutrition, illnesses, cause of death, etc. At the same time, bones are a time capsule and can help in creating an open window of the living in the 'life' of the dead. The forensic anthropology is a multidisciplinary scientific branch, one of the youngest, which utilizes the scientific knowledge of physical anthropology, archaeology, taphonomy, forensic dentistry, forensic medicine and criminalistics. It is usually applied in the investigation of criminal cases linked with skeletal remains of human origin. Each forensic anthropology expertise tries to answer three basic questions: the identity of the departed, the cause and time of death.

In the lecture, we want to present our experiences in the field of forensic anthropology in the analysis of bones recovered from the mass grave of the Archaeological Site in Skupi and the bones recovered from the Skull Cave. During the analysis of the bones recovered from the archeological site of Skupi, at least 200 bodies were found buried in a common grave. Anthropologically they belong to local population and all of them are men aged 20-40. Age, gender, ante mortem injuries and signs of carrying heavy weight suggest that they were soldiers. Most of them are killed with decapitation suggesting possible execution. Location of the mass grave and way of burial suggest that the group was excommunicated from the local community. During analyzes of bones from cave skull we encountered an interesting finding – trepanation of the left parietal bone, and the skull has more than a 100 years postmortem period.

WORKSHOPS
PART I



Basic suturing skills and surgical knots

Workshop Leader: Svetozar Antovic MD, PhD
Workshop Assistants: Vilijam Kitevski MD ,Kristijan Andonovski MD

Date: 13.05.2023, Saturday

These two surgical techniques are essential for every doctor's practice and knowledge. That's the reason why we made a decision about this workshop – to give an opportunity to our participants to understand the wound healing processes, the dynamics of healing, principles of wound closure and wound management. In the first part of the workshop the participants will be able to learn about types of wounds, phases of wound healing, factors which are connected to wound healing, types of wound closure and prevention of wound infection.

After this theoretical part we continue practicing techniques of basic suture. Lecturers will expose simple interrupted suture, continuous suture and mattress suture. Also, focus will be placed on knotting techniques such as one-handed knot, two-handed knot and instrument knot. After the correctly sutured wound our job isn't finished yet. We must know how to correctly care about this healing wound. For that we will learn about wound care, dressing of the wound, suture removal, complications that may occur and also alternative wound healing methods are going to be mentioned.

Airway management: basic and advanced

Workshop Leader: Asst. Biljana Andonovska MD

Date: 13.05.2023, Saturday

Airway management is a primary consideration in the fields of cardiopulmonary resuscitation, anesthesia, emergency medicine, intensive care medicine, neonatology, and first aid. Lack of airway management in situations where it may be required can lead to reduced blood oxygen levels in individuals and can be life-threatening. Airway management is the practice of evaluating, planning, and using a wide array of medical procedures and devices for the purpose of maintaining or restoring a safe, effective pathway for oxygenation and ventilation. These procedures are indicated in patients with airway obstruction, respiratory failure, or a need for airway protection (e.g., for general anesthesia or due to an aspiration risk) Airway management is commonly divided into two categories: basic and advanced. Basic airway maneuvers are the most important first step, generally non-invasive and do not require specialized medical equipment or advanced training. These include head and neck maneuvers to optimize ventilation, supplemental oxygen, and bag-mask, abdominal thrusts, and back blows. Patients with serious or persistent airway compromise typically require advanced airway techniques which include specialized medical training and equipment. Advanced airway management is the assessment and protection of a compromised airway via the use of techniques such as patient positioning, suction, oropharyngeal, supraglottic (such as laryngeal mask), infraglottic techniques (such as tracheal intubation) and surgical airway methods (such as cricothyrotomy and tracheostomy). Complications during airway management can lead to severe morbidity and mortality. The aim of the Airway Management classes is to increase global patient safety during airway management.

The workshop is designed to give a student a structured approach to management of airway. At the beginning of the workshop it will be a short lecture, then the main focus will be the skill stations, to develop hands-on expertise in clinically identifying patients with airway compromise, consider foreign bodiesand removal steps, airway evaluation, decision-making in a crisis situation, responding with simple airway maneuvers, selecting and introducing airway adjuncts appropriately, recognizing the need for ventilation and delivering this effectively, intubation planning and intubation.



Интестиналниот микробиом и ХМО
Што е ХМО и од што се состои?
ХМО се олигосахариди најчесто со сложена структура. До сега се идентификувани околу 200 различни ХМО структури. Истите се составени од петте основни градбени блокови прости шекери, glukoza, galaktoza, N-acetilglukozamin, sijalna kiselina N-acetilneuraminska kiselina и fukoza а се формираат во млечните жлезди. Шекерите меѓусебно се поврзани на различни начини при формирање разгранети и неразгранети олигосахариди. Наједноставен фуколизиран ХМО е 2-фукозилактозата. Од сите ХМО, 2-фукозилактозата е најчеста во мајчиното млеко и е застапена со околу 30% во вкупното количество на произведени ХМО.
ХМО суплементација
Истражувањата покажаа дека ХМО 2-фукозилактоза(2FL), е многу повеќе од пребиотик и го подобрува имунолошкиот, цревниот и когнитивниот развој. До скоро присутни само во мајчиното млеко, сега, најчестите ХМО-2-FL, се синтетизираат во структурен облик идентичен на 2-FL-от кој се наоѓа во мајчиното млеко.
-Заеднички наод на голем број студии е дека додадениот 2-FL во млечните формули е безбеден, се толерира, абсорбира и излачува слично како и од мајчиното млеко.
-Формулите обогатени со 2-FL го поддржуваат имунолошкиот систем и цревата.
-При употреба на 2-FL формули-појава на помалку респираторни инфекции и подобрени симтоми при интолеранција на храна.
-По состав и функција 2-FL формулите-најблиску до мајчиното млеко.
Др. Весна Пецов, MD,
Nestle Infant Nutrition, Македонија
ДОЕЊЕТО Е НАЈДОБАР ИЗБОР ЗА ДЕЦАТА

Bone tumors - multidisciplinary approach

Workshop Leaders: Milan Samardziski MD, PhD,Slavica Kostadinova-Kunovska MD,PhD, Violeta Vasilevska Nikodinovska MD,PhD

Date: 13.05.2023, Saturday

Bone tumors are one of the rarer neoplasms of the locomotory system. Primary tumors are even rarer than metastases, and primary malignant bone tumors are so infrequent. For example, the incidence of osteosarcoma is around 2 to 3 new cases per 1 000 000 people, yearly. But, even the incidence of these tumors is so rare they show such a large percentage of morbidity and mortality. Because of their rareness, lack of informed patients (and sadly, less levels of education among medical doctors), a large amount of time is lost before the patient goes to the doctor and before giving the definitive diagnosis.

That is the basic motif of our workshop in which we will recall the most frequent and important histopathologic and radiologic characteristic, the multidisciplinary approach to the diagnosis and especially the treatment of the tumors. Real attention will be focused on the primary bone tumors the multidisciplinary approach to their diagnosis and treatment. If the basic principles and rules of the daily medical practice are followed, the most frequent mistakes can be diminished.

Mastering Tracheotomy and Cricothyroidotomy: Techniques for Life-Saving Airway Management

Workshop Leaders: Jane Netkovski MD, PhD; Marjan Marolov MD

Date: 13.05.2023, Saturday

Tracheostomy is a surgical procedure that involves creating an opening in the neck and inserting a tube into the trachea (windpipe) to help a patient breathe. This procedure is often performed on patients who have a blockage or narrowing of the upper airway, or who require prolonged mechanical ventilation. These procedures are among the most commonly performed life-saving procedures in emergency medicine.

On this course you'll learn the ins and outs of emergency airway management, from understanding the anatomy of the neck to recognizing the indications for performing a tracheotomy or cricothyroidotomy. And best of all, you'll be able to practice these techniques yourself on animal model (Pig Carcasses) during our HANDS-ON course.

Every young doctor should recognize the need for urgent reaction when faced with suffocating patient and the proper way to manage it.

Becoming a Good Doctor

Workshop Leader: Biljana Janevska MD, PhD

Date: 13.05.2023, Saturday

Medical students are recognized as most dedicated, hard studying students trying to accomplish enormous corpus of knowledge and skills that are necessary to accomplish their ideal of providing competent medical care and help others. But, medical practice is an inherently moral profession in which trust, care and meaningful relations are foundation of being a good doctor. There are no universal answers to all ethical dilemmas, but we have to recognized them, think and talk about them, to find our path of solving new ethical questions arising from the growth of medical science. It is not possible to be a good doctor without being familiarised whit the basic ethical principles.

WORKSHOPS
PART II



Human Semen Evaluation - Spermogram

Workshop Leader: Irena Kostadinova Petrova MD, PhD, MSc
Workshop Assistants: Ljubica Tasheva MD, Natasha Stojkovska MD

Date: 13.05.2023, Saturday

Examination of the fertile potential of the ejaculate gives solid results in assessing the fertility of the man and the chances of getting pregnant. In marital infertility, the man participates just like the woman, with 50%. The analysis of human ejaculate is a fairly simple procedure recommended by gynecologists in the treatment of marital infertility. Also, this analysis, spermogram, is performed in conditions of varicocele, testicular injuries, after vasectomy and after some infectious diseases.

The spermogram involves microscopic analysis of several parameters of the human ejaculate, such as the concentration of sperm in the ejaculate, the motility of the sperm and their morphological structure. Also there is macroscopic assessment of the volume, color, viscosity, liquefaction and pH of the semen. The analyzes are performed macroscopically and microscopically, in order to obtain a comprehensive insight into the fertile potential of the ejaculate.

At this workshop, participants will be able to learn how the analysis of certain parameters of the spermogram is performed, as well as to try to perform the analysis themselves. There will be an interpretation of the obtained results and analysis and discussion of the same.

Advanced Life Support (ALS)

Workshop Leader: Asst. Darko Angjushev MD

Date: 13.05.2023, Saturday

Advanced Life Support (ALS) is a set of life-saving protocols and skills that extend beyond Basic Life Support (BLS). It is used to provide urgent treatment to cardiac emergencies such as cardiac arrest, stroke, myocardial infarction, and other conditions.

BLS is a level of medical skill used to treat victims experiencing life-threatening illnesses or injuries until they can be given full medical care at a hospital, or until the time ALS can be provided. BLS requires knowledge and skills related to CPR, use of AED's, and relieving airway obstructions. Emergency medical technicians, paramedics, or even qualified bystanders can perform BLS. ALS can only be provided by certified professional medical staff or trained paramedics. It can be performed at the scene of an emergency or in a hospital environment. Healthcare providers who receive ALS training are expected to keep up with the latest procedures and research while periodically getting recertified in ALS.

The ALS treatment algorithm provides a framework for the assessment and treatment of cardiac arrest. The algorithm splits treatments according to whether the initial rhythm is shockable or non-shockable. Whilst the person remains in a shockable rhythm, the priority is high quality CPR and attempted defibrillation. It is important to minimize interruptions in CPR, particularly before and after delivering a shock. For non-shockable rhythms, high quality CPR with minimal interruptions remains a key priority alongside drug therapy and seeking to identify and treat reversible causes.High-quality cardiopulmonary resuscitation (CPR) and early defibrillation should be performed within the first 3-4 minutes of a sudden cardiac arrest. The European Resuscitation Council (ERC) recommends ALS to be performed within the first 8 minutes of a sudden cardiac arrest or another cardiac emergency for the patient's best chance of survival.

ALS procedure includes invasive interventions, such as endotracheal intubation for airway management, and intravenous catheters for drug and fluid delivery. Therefore,the required equipment needed for ALS consists of: airway management tools, i.v. as well as central venous cannulation, drug supplies, defibrillators, wound dressing, bleed control and diagnostic equipment.

Artificial Intelligence and Scientific Publishing

Workshop Leaders: Igor Spiroski MD, Mirko Spiroski MD,PhD

Date: 13.05.2023, Saturday

Artificial intelligence (AI) is a rapidly growing field that has the potential to revolutionize many industries, including scientific publishing. In recent years, there has been a growing interest in using AI techniques to assist with various aspects of the scientific publishing process. This paper provides an overview of the current state of AI in scientific publishing, including the use of natural language processing (NLP) to extract and analyze data from scientific publications, the use of machine learning (ML) algorithms to assist with peer review and plagiarism detection, and the use of AI-powered recommendation systems to help researchers discover relevant publications. We also discuss the potential benefits and challenges of using AI in scientific publishing, including concerns around data privacy and bias. Overall, AI has the potential to greatly improve the efficiency and accuracy of the scientific publishing process, but careful consideration must be given to the ethical and societal implications of its use.

Keywords: Artificial intelligence (AI), scientific publishing, natural language processing (NLP), machine learning (ML) algorithms

The Process of Microbiological Diagnosis From Start to Finish- The Big Picture

Workshop Leaders: : Kiril Mihajlov MD PhD, Marko Kostovski MD PhD, Liljana Labachevska Gjatovska MD PhD, Radomir Jovchevski MD

Date: 13.05.2023, Saturday

Introduction : Considering the importance of correct microbiological diagnosis, the first and one of the most important steps is taking a sample for microbiological analysis.

This procedure usually is performed outside the microbiological laboratories and is not under the supervision of a doctor – specialist in medical microbiology.

Sampling errors that could arise from incorrect sample collection could contribute to both, false both false positive and false negative results.

However, it is often possible to detect these sampling errors during the interpretation of the results, when it is necessary to reject such a sample as unsuitable and request a new one.

Objective:

Basic introduction for the entire process of microbiological analysis for making correct microbiological (bacteriological) diagnosis: from correct sample collection, through adequate sample processing, followed by correct results interpretation and making an accurate microbiological diagnosis.

Scenario:

The workshop will consist of three different stations each of them specific for preanalytical phase (sample collection), analytical phase (sample processing &

inoculation of the samples with subsequent incubation) and postanalytical phase (results interpretation).

In the first station, several different samples, each of them taken in different ways, will be demonstrated.

In the second station, there will be working sheets specifying sample processing procedures for each sample from the first station: inoculation technique, type of nutrient media, time and temperature for incubation, etc.

In the third station, agar plates that were inoculated with the samples from the first step, according to the procedures described in the second station, will be interpreted according to the presence of bacterial growth.

After a short introduction by the moderators, the students will be divided in several groups, and will be challenged to match the corresponding samples from the first station with the corresponding procedures and agar plates from the other two stations.

In the final step of the workshop, matched samples from the three different stations would be reviewed and discussed with the moderator for each corresponding student group.

Expected results and conclusion: Students would get a complete picture of the process of microbiological (bacteriological) diagnosis. The importance of proper sampling and how it can negatively affect the process of microbiological analysis will be emphasized.

Imaging of peripheral and axial skeletal trauma with imaging of brain trauma

Workshop Leader: Violeta Vasilevska Nikodinovska MD PhD MSc

Date: 13.05.2023, Saturday

Initial imaging modality of skeletal trauma is plain film. It is important to be recognized and to be properly classified the traumatic injury. Normal radiological anatomy, epiphyseal ossification, skeletal varieties and their importance in diagnosis of skeletal trauma will be emphasized. The definition of fracture is complete or incomplete disruption of the bone continuity, caused by force that exceeds natural boundaries of bone elasticity. Different types of fractures according to the mechanism and its imaging presentation with their radiological classification, and complications will be presented.

From spine trauma the imaging of cervical spine trauma will be discussed. It is important to follow the role in the approach to modality selection. In suspected cervical spine trauma first step of imaging is C – spine plain films where should be analyzed 4 basic parallel lines in order to evaluate alignment. Those are anterior vertebral body line, posterior vertebral body line, spinolaminar line and posterior spinous process line. Cervical spine trauma according to the mechanism of trauma are classified on flexion injuries, rotational injuries, extension injuries, and vertical compression injuries. Their characteristic imaging presentations will be systematically analyzed.

In trauma patient a traumatic brain injury are very often associated with. On time recognition is important for good patient management. Closed head trauma with traumatic brain injury can be presented as extra-axial hemorrhage and intra axial injury which have characteristic imaging presentation on computed tomography as modality of choice. Secondary brain injury are supratentorial herniation and infratentorial herniations. Their imaging presentation are important to be recognized in order to plan the proper treatment.

WORKSHOPS
PART III



Preparing enteral diet for pediatric patients

Workshop Leader: Sonja Bojadzieva MD, PhD

Date: 14.05.2023, Sunday

Pediatric patients need specialized attention and have diverse demands for proper growth and development, and thus need a different approach and interest in nutritional assessment and supply. Enteral nutrition is the most basic and important method of nutritional intervention, and its indications should be identified. Also, the sites, modes, types, and timing of nutritional intervention according to the patient's condition should be determined. In addition, various complications associated with enteral nutrition supply should be identified, and prevention and treatment are required. This approach to enteral nutrition and proper administration can help in the proper growth and recovery of pediatric patients with nutritional imbalances or nutritional needs.

On our workshop we are going to use different types of enteral food for pediatric patients that we are going to prepare previously. Participants of the workshop could use a variety of different basic foods and liquids which they should combine to make final product proper for for enteral use. The product should contain all necessary ingredients (vitamins, glycose, lipids, proteins, oligoelements, etc.) symbiotically fused together so they could be given to specific profiles of pediatric patients. Participants will be divided into groups and after finishing the end product, a commission will be formed to degustate the combinations done by participants. The commission would grade the enteral diets not just about the taste, but also the correspondence between the products, interactions among them and their biochemical structure according to the needs of the child. At the end the commission will state which of the groups has done best job.



За добар почеток!

Со хранливи материи што го поддржуваат имунолошкиот систем*

*Витаминот Д придонесува за нормална функција на имунолошкиот систем кај децата
Разновидна и балансирана исхрана и здрав начин на живот се важни за здравјето на вашето дете.



од 1-вата година натаму

од 2-рата година натаму

ВАЖНА ЗАБЕЛЕШКА. Сметаме дека доењето е идеален почеток на исхрана за вашето бебе и сосема ја поддржуваме препораката на Светската здравствена организација за ексклузивно доење во првите шест месеци од животот на бебето после кои се воведуваат соодветни хранливи додатоци во исхраната со продолжување на доењето до две години на детето. Нашите производи NAN OPTIPRO 3 и NAN OPTIPRO 4 не се замени за мајчиното млеко. Ви препорачуваме да се консултирате со вашиот здравствен работник за исхраната на вашето бебе како и да побарате совет за тоа кога е најдобро време за воведување на овие производи.

ПРЕКУ 155 ГОДИНИ ЛИДЕР ВО НАУКАТА

www.nestle.mk

Nestlé Baby & me
ЗДРАВ ПОЧЕТОК, ЗДРАВ ЖИВОТ

Emergency psychiatry

Workshop Leader: Slavica Arsova Hadzi-Angjelkovska MD, PhD

Date: 14.05.2023, Sunday

Emergency psychiatry is the clinical application of psychiatry in emergency settings. Psychiatric emergency services are rendered by professionals in the fields of medicine, nursing, social work.

Symptoms and conditions behind psychiatric emergencies may include attempted suicide, subst.dependence, alcohol intoxication, acute depression, acute psychosis, violence, panic attacks, and significant, rapid changes in behavior.

On this workshop, students could hear about the one of the most popular and wide spreading problems – suicide attempt (tentamen suicidi) and the suicide. We are going to discuss the reasons why a human would end his life and psychiatric diseases that can lead to suicide and its proper treatment. Also, other emergency psychiatric disorders will be mentioned, as psychosis, anxiety, eating and personality disorders. After explaining their pathogenesis and symptoms, a focus will be held on their treatment, like medication therapy, psychotherapy and observation and collateral information as very important aspect of emergency psychiatry.

Basic principles of myocardial perfusion scintigraphy and clinical cases presentation

Workshop Leaders: Marija Vavlukis MD, PhD, Venjamin Majstorov MD, PhD

Date: 14.05.2023, Sunday

Myocardial perfusion scintigraphy (MPS) is well validated and robust noninvasive method for detecting hemodynamic obstructive coronary artery disease (CAD) that can additionally quantify the extent of jeopardized myocardium and assess myocardial viability. Evaluation of ischemia with MPS has also shown superior prognostic value when compared with visually analysed invasive coronary angiography. Introduction of SPECT-CT has enabled detection of atherosclerosis and calculation of coronary artery calcium sore. In this workshop theoretically will be covered the basic principles of MPS: uptake mechanism and biology of the radiotracers used, indications and contra-indications, patient preparation and interpretation criteria with visual and quantitative analysis of myocardial perfusion and function. In the second part of the workshop several clinical cases will be presented and interactively discussed with the participants. It is expected that at the end of the workshop participants will be able to correctly indicate MPS in various clinical scenarios, know how to perform the study and interpret the results of the study.

Basic Thyroid Ultrasound Workshop

Workshop Leader: Sinisa Stojanovski MD, PhD

Date: 14.05.2023, Sunday

Ultrasound imaging is the first line, non invasive morphological thyroid investigation. It provides useful insight into the size, position and texture of the thyroid gland. Additionally, the neck lymph node status can be accessed and possible fine needle aspiration biopsy guidance can be performed.

The Basic Thyroid Ultrasound Workshop is designed to improve the participant's knowledge and competence to perform and/or interpret thyroid ultrasound examinations. Imaging fundamentals, thyroid anatomy, normal sonographic characteristics, evaluation of thyroid nodules, diffuse thyroid disorders and other neck pathology will be discussed and "hands on" training will be provided for each participant.
During the workshop all participants will aquire the following knowledge:
- Ultrasound features of the thyroid gland;
- Ultrasound features of the benign and malignant thyroid disorders;
- Basic thyroid gland ultrasound course;

ZAN MITREV
CLINIC

- Медицината ја поврзавме со најсовремената технологија
- Добивме брза и прецизна дијагностика
- Создадовме врвна хирургија и резултати кои им ја враќаат вербата и насмевката на пациентите
- Вложивме храброст, стручност и посветеност за извршување на најкомплексните операции
- Испишавме историја во македонската кардиохирургија
- И што е најважно, изградивме партнерство со нашите пациенти.

НИЕ СМЕ ЖАН МИТРЕВ КЛИНИКА
ТУКА СМЕ ВЕЌЕ 22 ГОДИНИ

И ПРОДОЛЖУВАМЕ ДА СЕ ГРИЖИМЕ ЗА ВАШЕТО ЗДРАВЈЕ



ЖАН МИТРЕВ ДИЈАГНОСТИК
СТРУМИЦА
+389 34 320 302
+389 70 408 064

ЖАН МИТРЕВ КЛИНИКА
СКОПЈЕ
+389 2 3091 484
www.zmc.mk

ЖАН МИТРЕВ ДИЈАГНОСТИК
БИТОЛА
+389 47 266 633
+389 47 266 631

WORKSHOPS
PART IV



Basic Laparoscopic Skills

Workshop Leader: Ass. Nikola Brzanov MD

Date: 14.05.2023, Sunday

Laparoscopic simulation has become an integral part of surgical training as it provides a safe method of acquiring core and psychomotor skills, which may be transferable to the operating room. Becoming adept at laparoscopic surgery is particularly challenging as it requires working in a 3D field based on a 2D screen image; a skill that often only comes with practice. This workshop teaches fundamental knowledge and technical skills to perform laparoscopic surgery procedures. It includes didactic sessions and hands-on skills training. Such skills as ambidexterity, depth perception, object handling and manipulation, hand movement of instruments, are involved in all the exercises.

The workshops consists of five specific simulation exercises incorporating most of the psychomotor skills necessary for basic laparoscopic surgery:
1. Ring Transfer - Lifting the six objects with a grasper with non-dominant hand and transferring the object midair to your dominant hand.
2. The Pipe Cleaner - Exercise consists of passing the pipe cleaner through the loops at different angles and heights.
3. Beads - Segregating beads by color and placing them into containers, an entry-level exercise for developing visuomotor coordination.
4. Numbers - Arranging numbered color blocks in the correct order. The blocks need to be rotated in order to be properly placed, which requires the involvement of both hands. 5. Ligature Knot - The module assists with practicing tying surgical knots and applying ligatures on a blood vessel like model.

Venous thromboembolism from diagnosis to treatment

Workshop Leader: Marijan Boshevski MD, PhD

Date: 14.05.2023, Sunday

Venous thromboembolism as a clinical entity contains two clinical conditions – pulmonary thromboembolism and deep vein thrombosis. The same entity is the third reason for cardiovascular death, after the coronary artery disease and the cerebral insult.

While, there is no significant change of mortality in patients with venous thromboembolism, there is decreasing trend of the short-term mortality due to modernizing of diagnostic criteria, but also the therapeutic evolution of this condition.

This workshop contains some case reports and it's made according to evidence based medicine for the diagnosis, risk stratification and treatment of this popular disease.

The binocular indirect ophthalmoscope

Workshop Leader: Igor Isjanovski MD, PhD

Date: 14.05.2023, Sunday

The binocular indirect ophthalmoscope, or indirect ophthalmoscope, is an optical instrument worn on the examiner's head, and sometimes attached to spectacles, that is used to inspect the fundus or back of the eye. It produces a stereoscopic image with between 2x and 5x magnification. It is valuable for diagnosis and treatment of retinal tears, holes, detachments, retinopathy of prematurity, diabetic retinopathy. The pupils must be fully dilated for it to work well.

Treatment of precancerous lesions of the cervix

Workshop Leader: Goran Dimitrov MD, PhD
Workshop Assistants: Onur Dika MD

Date: 14.05.2023, Sunday

Cervical cancer is the fourth most common cancer in the world among women. It usually has a slow progression from the condition of precancerous lesions, i.e. dysplasia. If cervical cancer is diagnosed, the type of treatment depends on the extent of the disease.

In dysplasia and non-invasive cancers operative treatments include:

- Conization - a surgical procedure in which an excision of a cone-shaped portion of the cervix is performed to remove a cervical lesion (either with a surgical or electric knife). This procedure is diagnostic and therapeutic.

- LLETZ and LLEP - in this procedure a wire in the shape of a loop with low voltage is used, which cuts the part that requires to be removed and prevents the bleeding at the same time.

- Laser ablation - malignantly altered parts of the cervix are destroyed through laser beam

SPONSORS



or students and young doctors

h Macedonia



Научна фондација СПИРОСКИ

Scientific Foundation SPIROSKI


Albiz
Foundation


Roche


ZAN MITREV
CLINIC


KRKA


Bi-MEK
HEALTHCARE TECHNOLOGIES

Nestlé

ПИВАРА СКОПЈЕ
Најдобро од Македонија
19 24

Ladna

SUPPORTED BY

Medical Faculty
SKOPJE

УНИВЕРЗИТЕТ „СВ. КИРИЛ и МЕТОДИЈ" - СКОПЈЕ

Република Северна Македонија

Министерство за здравство

МАКЕДОНСКО ЛЕКАРСКО ДРУШТВО
Професионална организација на докторите по медицина

MACEDONIAN MEDICAL ASSOCIATION
Professional organization of the medical doctors

ABOUT



Macedonian Medical Students' Association

(MMSA)

The Macedonian Medical Students' Association is the oldest-dating student organization of the medical faculty, created in the dawn of its formation. It is a member of IFMSA – International Federation of Medical Students Association, which is the biggest medical student body, acknowledged and endorsed by the United Nations, the World Health Organization, UNESCO, UNICEF and various other organizations.

We actively fight for improving the quality of the medical education in Macedonia – organizing educational and explorative activities, as well as realizing professional and explorative exchanges among member countries of IFMSA. We also contribute to improving the quality of students' professional knowledge, and fuel public awareness of medical and health problems that affect the community.

Our vision encapsulates a medical student, aspiring to the highest European educational standards – a future doctor, accountable, in accordance with the established ethical principles and the firmly configured morals, for his/her individual career and their colleagues.



REPUBLIC OF MACEDONIA



Macedonia (Macedonian: Македонија), officially Republic of Macedonia (Република Македонија), is an independent country on the Balkan peninsula in the heart of southeastern Europe. The country borders Albania to the west, Bulgaria to the east, Greece to the south and Serbia and Kosovo to the north. In 2005, the Republic of Macedonia received official candidate status for the European Union. The capital is Skopje with more than 500,000 inhabitants. It also has a number of other significant cities, notably Bitola, Prilep, Tetovo, Gostivar, Kumanovo, Ohrid, Veles, Štip, and Strumica. The Republic of Macedonia is often called a land of lakes and mountains. There are more than 50 natural and artificial lakes and sixteen mountain ranges higher than 2,000 m (6,562 ft) above sea level.

Macedonia has a rich cultural heritage in art, architecture, poetry and music. It has many ancient, protected religious sites. Poetry, film and music festivals are held each year.

Macedonian music styles developed under the strong influence of Byzantine church music. Macedonia belongs to the countries with the best preserved frescoes, many of which date from the period between the 11th and 16th centuries. There are several thousand square meters of preserved frescoes, most of which are in very good condition and are masterpieces of the Macedonian School of ecclesiastical painting.

In Macedonia the past meets the present. Its age-old architecture and monasteries and churches of exquisite beauty make an interesting contrast with the super modern new architecture. Almost all Macedonian monasteries, built in different periods, particularly those built between the 11th and 15th-16th century, is now completely preserved. Macedonian collection of icons, especially Ohrid is one of the most valuable collections in the world today. After Sinai and the Moscow collection of icons, is third in importance within Orthodoxy.



The Byzantine aspect, it is unique. The most important cultural events in the country are the Ohrid summer festival of classical music and drama, the Struga poetry evenings which gather poets from more than 50 countries around the world, Skopje May opera evenings, International camera festival in Bitola, open Youth theatre, Skopje jazz festival and many others.

STRUGA

Located in the south western region of the country and lying on the shore of Lake Ohrid, Struga is another town that enriches the unique Macedonian experience. Lots of places to visit, culture to absorb, and scenery to enjoy. Followed by traditional food, nice and relaxing coffee shops and restaurants, offering a beautiful view of the lake. Struga will make for the perfect weekend trip.



Described as vivid and vibrant by merchants and travelers throughout the centuries, Struga haven't lost any of its charm. Home to old architecture and number of churches that date far back, there is quite a lot to see around.

In ancient time the city was known as Enchalon, which means eel (fishing eels in Drim river used to be very popular in Struga). The Via Egnatia road that connected Rome with Thesaloniki and Constantinople passed through Struga. The name Struga was used for the first time in a document in the 11th c, but it originates from the 7th c. The Byzantine travel writer Ana Komnina visited Struga in the 11th century and named it "City of 100 bridges".



While the nearby Ohrid was always cultural and religious centre, Struga played the role of trading centre of the region.

The town is small in terms of absolute size, and home to about 16, 000 people. Ethnically colorful, it is a place where you can experience the full scope of Macedonian culture.

What gives Struga its recognizable face though is the river Black Drin that flows from the lake and through the city. Along the river bed, is what you'd consider the center of the town. A nice place where you can have your coffee, and very enjoyable evening walks. The bridges along the river only add towards the poetic scenery.

Struga is a place where natural beauty meets centuries old tradition, and where you can experience a very diverse cultural offer, combined with relaxing beaches and traditional Macedonian cuisine. About 14km near Ohrid, it is a place worth visiting and spending a day or two at the exchange of discovering a palate of unforgettable and unique experiences. Discovering North Macedonia is impossible without spending at least one day in Struga.





INDEX ABSTRACTS & INDEX AUTHORS



Abstract ID:#44-1/01……22
Abstract ID:#44-1/02……24
Abstract ID:#44-1/03. ……..…26
Abstract ID:#44-1/04……28
Abstract ID:#44-1/05……30
Abstract ID:#44-1/06……31
Abstract ID:#44-1/07……33
Abstract ID:#44-1/08……35
Abstract ID:#44-1/09……36
Abstract ID:#44-1/10……37
Abstract ID:#44-1/11……39
Abstract ID:#44-1/12……40
Abstract ID:#44-1/13……42
Abstract ID:#44-1/14……44
Abstract ID:#44-1/15……46

1. Andonovska B……..……..……..……58
2.Andonovski K ……..……..……57
3.Antovic S ……..……..…..……53,57
4.Angjushev D ……..……..……..65
5.Arsova S……..……..…….....12,74
6.Bajraktarov S……..……..……...37
7.Batkoska Lj ……..……..……35
8.Bitoska I ……..……..……24
9.Bojadzieva S ……..……..…..…12,73
10.Boshevski M ……..……80
11.Brzanov N ……...……..……12,79
12.Vasilevska-Nikodinovska V…….……...……....60,70
13.Vavlukis M……..……..……..……75
14.Vlasheva E ……..……...31
15.Gacova I ……...……..……33
16.Gavriloska-Brzanova A ……..……44
17. Dabeski A……..……..36
18. Dabeski D……36
19.Damjanoski D ……..……...……..42,
20.Dzambaz D……..……..44
21.Dika O……..……82
22.Dimitrov G……...82
23.Dubrovska E……..……....39
24.Gjorgievska A……22,46
25.Gjorgjioski D ……..……..…….22
26.Džekova-Vidimliski P ……..……..……40
27.Ilieva A ……..…..28
28.Ilieva K ……..…..... 28
29.Isjanovski I …….....12,81
30.Janevska B……..…12,62

31.Jovanova D……..……..……31
32.Jovanoski M ……...……26
33.Jovanovic R……..……11

34.Jovchevski R……68
35.Kasapi A ……22
36.Kitevski V ……..…...57

37.Klisarovska V……...11

38. Kostadinova Petrova I ……..……..…64
39.Kostadinova Kunovska S……..……..35,60
40. Kostovski M ……..…….68

41..Kordoska J…….……....36,37
42..Kochova D……..22
43.Labachevska-Gjatovska Lj ……..……...68
44.Lika S……..40
45.Majstorov V ……...……...…….12,75
46.Manevska N…….11

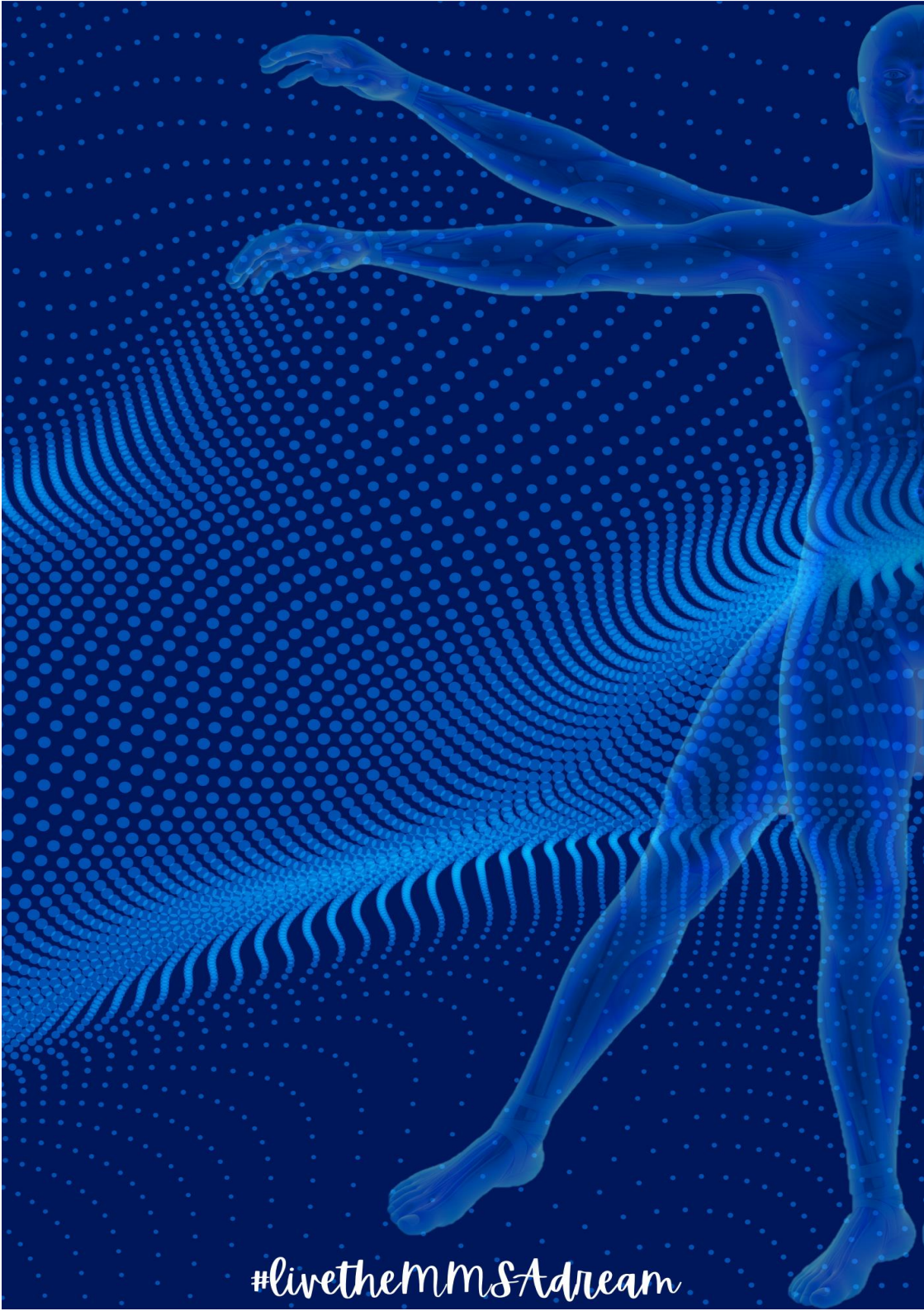
47.Marolov M …….…….....61
48.Mihajlov K.……...……...……68
49.Netkovski J ……...……...61
50.Pavlova I ……..……...28
51.PopGjorcheva D ……24,35
52.Petkovska G……..……28,30,39
53.Petrushevska A ……42
54.Ristevska E……..…….30
55.Savevski A ……..……11

56.Samardziski M ……..22,60
57.Simonovska N …….33
58.Stambolieva S……..……36
59.Stankov A ……..……12,54
60.Skeparovska K……11
61.Stojanoski M ……..46
62.Stojanoski Z……..……...11
63.Stojanovski S ……....12,76
64.Stojkovska N……...……..……..64
65.Spiroski I …….67

66.Spiroski M ……..……..……67
67.Tanasoska A……..……..36,37
68.Tasevski B……...…….24
69.Tasheva Lj…….....64
70.Timovska A ……...22,44,46
71.Timovski D…….…….46
72.Timovski I……..…….46
73.Todorova T ……..……...22
74.Toshevska S…….……46
75.Trajanoska N……..…….44,46
76.Trajanoski N……44,46
77.Trajkova M…….....26

78.Trpevska-Shekerinov N…...……11

79.Hadzihamza K.……...……..11


#livetheMMSAdream